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No. 4

**THE
INTERNATIONAL LABOUR ORGANISATION
AND
THE WASHINGTON CONFERENCE**

EDITED BY

A. G. CLOW,

**I.C.S., Controller, Labour Bureau,
Government of India**



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BULLETINS

OF

INDIAN INDUSTRIES AND LABOUR

No. 4 1921 February

THE INTERNATIONAL LABOUR ORGANISATION AND THE WASHINGTON CONFERENCE

I. INTRODUCTION

THIS bulletin is intended to give a brief account of the foundation of the International Labour Organisation of the League of Nations and its activities up to and including the first meeting of the International Labour Conference at Washington. The following papers should make it clear that in the fulfilment of its duties towards International Labour, the League is already functioning. The International Labour Organisation has begun to affect the life of the people in many countries and its influence on conditions in India and elsewhere appears likely to increase considerably in the near future. This short statement of its methods and objects will, it is hoped, stimulate public interest in a striking venture in international politics.

The Editor is indebted for the articles on pages 2 to 7 and 39 to 71 to the Hon'ble Sir A. R. Murray, C.B.E., President of the Bengal Chamber of Commerce.

LABOUR BUREAU; Delhi, 3rd January 1921.

II.—STEPS LEADING TO THE ESTABLISHMENT OF THE INTERNATIONAL LABOUR ORGANISATION.

The first attempt to secure international consideration of labour legislation dates back to the year 1881, when the Swiss Government endeavoured without success to enlist the sympathies of other Governments, but it was not until 1890 that fourteen out of fifteen European States—Russia alone declining—accepted another invitation from the Swiss Government for an international conference which was held at Berlin. The next international conferences were unofficial ones attended by private persons interested in labour legislation, who met in 1897 at Zurich and at Brussels and in 1900 at Paris, where the Association for Labour Legislation was formed and held its first meeting. This Association is an organisation having for its object "the legal protection of labour" and is now partially maintained by subsidies from twenty-two different countries. It held meetings at Basle in 1901, at Cologne in 1902 and at Basle in 1904 and was largely responsible for the Swiss Government in 1905 calling together at Berne an official International Conference which formulated conventions respecting the use of white phosphorus in the match industry and the employment of women in night work. These international conventions were formally signed at another official conference held in Berne in 1906. They form landmarks in international labour legislation and deserve more than passing notice for the reason that "the extension and application of the international conventions adopted at Berne in 1906 on the prohibition of night work for women employed in industry and the prohibition of the use of white phosphorus in the manufacture of matches" formed item No. 5 of the agenda drawn up by the Peace Conference for the first meeting of the International Labour Organisation under the League of Nations held at Washington in 1919. These conventions will be referred to in detail when dealing with the draft conventions and recommendations of the Washington Conference.

The Association for Labour Legislation held its fourth congress at Geneva in 1906 and its next at Lucerne in 1908 when seventeen different states, including the United States of America and the Holy See, sent official delegates to participate in the deliberations

on various subjects, including the prohibition of night work for young persons, home work, insurance of foreign workmen, lead and other industrial poisoning, legal limitation of the workday, regulation of work by children and the execution of protective labour laws. It will be seen that the biennial conferences of the Association for Labour Legislation were increasing in importance and its congresses at Lugano in 1910 and at Zurich in 1912 led up to another official International Conference which was held at Berne in 1913. This Conference decided upon drafts of international agreements to prohibit night work for young persons under sixteen employed in industry, and to establish a maximum working day of ten hours for women and young persons. It was intended to hold another conference in September 1914 to prepare the formal conventions, but before then the great war had begun. Subsequent developments created a demand for an eight hours day in industrial undertakings, but the Berne Draft Convention of 1913, containing the proposals for an international convention on the prohibition of night work for young persons employed in industry, was submitted to the International Labour Conference at Washington and formed the basis of Draft Conventions regarding night work.

Hitherto organised labour had taken very little part in the proceedings of the International Association for Labour Legislation or of the official International Conferences, but the war had not lasted long before trade unions and other workers' organisations became important factors in the adjustment of labour conditions in the belligerent countries. In the early months of the war the demand for increased production was so great, that not only men but also women, young persons and children worked for long periods and during hours that were not permissible under normal conditions. Night work and Sunday work became general and the safeguards provided by the Berne Convention of 1906 regarding night work, by national legislation and by trade union agreements for the protection of labour fell into abeyance, until ultimately it became necessary in Great Britain for the Government to enter into negotiations with representatives of organised labour respecting the conditions under which work was to be carried on and as to what classes of men should be exempted from military service in order to maintain a maximum production of munitions of war and other necessaries. In this and other ways trade unions and associations of organised labour attained prominence and received

recognition which entitled their representatives to high places in the Councils of State. Similar influences were at work in other countries, and in 1916 and 1917 labour organisations held international conferences to formulate their own "peace demands" to be ready for discussion when the war ended. At a Conference at Berns in October 1917 there were present representatives of the national federations of labour of enemy as well as of neutral countries who were unanimously of the opinion that provision should be made in the Peace Treaty for the promotion and enforcement of international protective labour legislation.

In December 1917 a special Conference of British Labour voted a Memorandum on War Aims expressing views on post-war policy that had much in common with Mr. Lloyd George's and President Wilson's famous speeches made in January 1918, both of which contained the substance of the fourteen points on which peace negotiations were ultimately based. The United States Government had also been in negotiation with the American Federation of Labour respecting the provision of men and the conditions of labour in war industries and the President of the Federation, Mr. Samuel Gompers, was present at an inter-allied labour and socialist conference held at London in September 1918 to advocate the proposal that an international labour conference should be held in connection with the Peace Conference.

The armistice with Germany was signed in November, 1918, and the Peace Conference opened at Paris on 18th January, 1919. At the second plenary session held on 20th January the following was passed:

That a Commission composed of two representatives apiece from the five Great Powers, and five representatives to be elected by the other powers represented at the Peace Conference be appointed to enquire into conditions of employment from the international aspect, and to consider the international means necessary to secure common action on matters affecting conditions of employment, and to recommend the form of a permanent agency to continue such enquiry and consideration in co-operation with and under the direction of the League of Nations.

The early attention thus given to the question of international labour conditions is evidence of the importance attached by those present at the Conference to the solution of a problem which was becoming of increasing difficulty as time went on. At a meeting of the States concerned on 27th January it was agreed that Belgium,

Servia, Cuba for the South American group, Poland and the Czechoslovak Republic should each appoint one representative to the Commission, but the Servian delegates gave up their seat to Belgium who thus became entitled to two representatives along with each of the five Great Powers, viz.—the United States of America, the British Empire, France, Italy and Japan, and it was on this basis that the Commission was appointed by the Peace Conference on 31st January 1919, with Mr. Samuel Gompers as President and The Right Hon'ble G. N. Barnes, M.P., as one of the Vice-Presidents.

This Commission on International Labour Legislation held thirty-five meetings, and on 24th March, 1919 prepared its report, which was in two parts. The first was a draft convention based on a draft presented by the British Delegation, containing provisions for the establishment of a permanent organisation for international labour legislation. The second part took the form of a series of declarations of principles regarding labour which the Commission suggested should be included in the Treaty of Peace. A feature of the proposed draft convention, so far as India was concerned, was that while it provided that the British Dominions and India should have the same rights and obligations under the convention as if they were separate contracting parties, it was at the same time decided that the whole of the British Empire including the Dominions, Colonies and India could not have more than one seat on the proposed governing body of twenty-four members. This provision was not retained in the Treaty, but it is of interest to refer to its existence in the draft convention as originally proposed, for the reason that the constitution of the Governing Body of the International Labour Conference caused considerable discussion at Washington.

The Report of the Commission* on International Labour Legislation was submitted at the fourth plenary session of the Peace Conference on 11th April 1919 when Mr. Barnes explained the provisions of the proposed convention creating a permanent organisation for the promotion of the international regulation of labour conditions and proposed an amendment to the original draft which had special reference to India and other countries where labour conditions differed from those of Western countries. This amend-

* The Report is printed on pages 8 to 18.

ment which was agreed to (and appears in Article 405 of the Peace Treaty) is as follows:—

In framing any recommendation or draft convention of general application, the Conference shall have due regard to those countries in which climatic conditions, the imperfect development of industrial organisation or other special circumstances make the industrial conditions substantially different and shall suggest the modifications, if any, which it considers may be required to meet the case of such countries.

With this amendment Lord Sinha accepted the convention on behalf of India, while the Maharaja of Bikanir made it clear that any legislation enacted for British India would not apply to the territories of Indian Ruling Princes which lay outside British India.

Sir Robert Borden moved a further amendment to the effect that it be arranged to have the Labour Conference conform to the Covenant of the League of Nations in the character of its membership, which was agreed to and the Peace Conference thereafter approved of the draft convention as amended.

The second part of the Report of the Commission on International Labour Legislation contained a series of nine resolutions, regarding methods and principles for regulating labour conditions which all industrial communities should endeavour to apply. Difficulties arose as to the wording of these clauses which were eventually re-drafted and approved by the Peace Conference at its fifth plenary session on the 19th April 1919 in the form in which they appear as general principles in Article 427 of the Treaty of Peace.*

It was originally intended that the Labour Convention should be contained in a separate document and it was drafted in that form but the Peace Conference ultimately decided that the labour provisions should be incorporated in the Treaty itself. The Convention, therefore, now appears in Part XIII of the Treaty as presented to the German Delegation on 7th May and as signed by it on the 28th June 1919. Section I of Part XIII deals with organisation of Labour and Section II with General Principles. In addition to the formal Labour section (Part XIII) of the Treaty, Part I which contains the Covenant of the League of Nations also deals with labour in article twenty-three as follows:—

Subject to and in accordance with the provisions of international conventions existing or hereafter to be agreed upon, the members of the League will endeavour to secure and maintain fair and humane conditions of labour for men, women and children, both in their own countries and in all countries to which their commercial

* See page 35.

and industrial relations extend, and for that purpose will establish and maintain the necessary international organisations.

The Labour Convention as approved by the Peace Conference at its plenary sitting on the 11th April 1919 provided for the institution of an international organisation, to which all the members of the League of Nations would belong, and which consists of an International Labour Conference and an International Labour Office, as part of the machinery of the League of Nations. It further provided for the first meeting of the International Labour Conference being held at Washington in October 1919 and for the appointment of an International Organising Committee to assist the Government of the United States of America in making the necessary arrangements. At its sitting on 11th April 1919, the Peace Conference approved of the immediate appointment of the Organising Committee which, in terms of the Convention, consisted of representatives from the United States of America, Great Britain, France, Italy, Japan, Belgium and Switzerland.

A. R. MURRAY.

III.—REPORT OF THE COMMISSION ON INTERNATIONAL LABOUR LEGISLATION.

The circumstances in which this Commission was appointed have been explained in the preceding article. The Report is valuable as explaining the form which the Peace Treaty eventually took, and as justifying the chief decisions embodied in it. A number of alterations were made in the draft articles prepared by the Commission but none of these affected their general character. The labour clauses which are now embodied in Article 427 of the Peace Treaty were modified considerably.

The numbering of the articles in the Report has been altered so as to conform with the final numbering of the clauses of the Peace Treaty.

Report of the Commission.

The Commission has held thirty-five meetings, and has drawn up its conclusions in two parts. The first is a draft convention containing provisions for the establishment of a permanent organisation for international labour legislation. This convention, which was based on a draft presented by the British Delegation, has been the subject of the most careful examination and discussion. The first part of this report may conveniently take the form of a commentary thereon. The second part of the Commission's conclusions is in the form of clauses containing declarations of principle in regard to a number of matters which are of vital importance to the labour world. At the opening sittings, the various Delegations agreed on the need for such declarations, which the Commission suggests should be included in the Treaty of Peace, in order that it may mark not only the close of the period which culminated in the world-war, but also the beginning of a better social order and the birth of a new civilisation.

PART I.—PERMANENT ORGANISATION.

Preamble.

The main idea underlying the scheme embodied in the Convention is that the constitution of the League of Nations will not pro-

vide a real solution of the troubles which have beset the world in the past, and will not even be able to eliminate the seeds of international strife, unless it provides a remedy for the industrial evils and injustices which mar the present state of society. In proposing, therefore, to establish a permanent organisation in order to adjust labour conditions by international action, the Commission felt that it was taking an indispensable step towards the achievement of the objects of the League of Nations and has given expression to this idea in the Preamble, which defines the objects and scope of the proposed organisation.

CHAPTER I.

Chapter I provides the machinery of the permanent organisation proposed. In the first place, it is stipulated (Article 387) that participation in this organisation shall be a condition of membership of the League of Nations, since every State Member of the League is morally bound to accept the principles set forth in the Preamble, if it has really at heart the promotion of the cause of justice and humanity.

The organisation itself is divided into two parts: (1) The International Labour Conference; (2) The International Labour Office controlled by a Governing Body (Article 388).

I. International Labour Conference.

This Conference will meet at least annually and will consist of delegates nominated by each of the High Contracting Parties, two of whom will be directly appointed by the Governments, and the other two will be chosen in agreement with the industrial organisations representative of their employers and workpeople respectively (Article 389).

Each delegate will vote individually (Article 390). It was strongly felt by the Commission that if the Conference was really to be representative of all those concerned with industry and to command their confidence, the employers and workpeople must be allowed to express their views with complete frankness and freedom, and that a departure from the traditional procedure of voting by national units was, therefore, necessary. It was accordingly thought that the employers' and workpeople's delegates should be entitled to speak and vote independently of their Governments.

Some difference of opinion made itself felt on the Commission as to the relative numbers of the delegates representing the Governments, the employers and the workpeople respectively. The French, American, Italian and Cuban Delegations contended that each of these three parties should have equal voting power. They maintained that the working classes would never be satisfied with a representation which left the Government and the employers combined in a majority of three to their one. In other words, the proposal amounted to giving the States a veto on the proceedings of the Conference which would create so much distrust of it among the workers that its influence would be seriously prejudiced from the start. This view was contested by the British, Belgian and other Delegations, who pointed out that as the Conference was not simply an assembly for the purpose of passing resolutions, but would draw up draft conventions which the States would have to present to their legislative authorities, it was essential that the Governments should have at least an equal voice. Otherwise, it might often happen that conventions adopted by a two-thirds majority of the Conference would be rejected by the legislatures of the various States, which would have the effect of rendering the proceedings of the Conference nugatory and would quickly destroy its influence and prestige. The adoption of a proposal to which the majority of the Governments were opposed would not lead to any practical result, as the legislative authorities of the Governments whose delegates were in the minority would in all probability refuse to accept it. Moreover, it was likely, especially in the future, that the Government delegates would vote more often with the workers than against them. If this were so, it was obviously to the advantage of the latter that the Governments should have two votes instead of one, as it would render it easier for them to obtain a two-thirds majority, which under the Franco-American proposal would be practically impossible if the employers voted in a body against them.

The Commission finally decided by a narrow majority to maintain the proposal that each Government should have two delegates.

The Italian Delegation, which united with the French Delegation in urging the importance of securing representation for agricultural interests, were to some extent reconciled to the above decision by the consideration that, as the Governments would have two

delegates, it would be easier to secure such representation. It should also be observed that as different technical advisers may be appointed for each subject of discussion, agricultural advisers may be selected when necessary.

2. International Labour Office (Articles 392 to 399).

This Office will be established at the seat of the League of Nations, as part of its administrative organisation. It will be controlled by a Governing Body of 24 members, the composition of which is provided for in the Protocol to Article 393. Like the Conference, the Governing Body will consist of representatives of the Governments, employers and workpeople. It will include 12 representatives of the Governments, 8 of whom will be nominated by the States of chief industrial importance, and the remaining 12 will consist of six members nominated by the employers' delegates to the Conference, and six nominated by the workers' delegates. The objects and functions of the Office are sufficiently explained in the articles referred to.

CHAPTER II.

1. Procedure (Articles 400 to 407).

This portion of the Convention contains one article of vital importance, namely, Article 19, which treats of the obligations of the States concerned in regard to the adoption and ratification of draft conventions agreed upon by the International Conference.

The original draft proposed that any draft convention adopted by the Conference by a two-thirds majority must be ratified by every State participating, unless within one year the national legislature should have expressed its disapproval of the draft convention. This implied an obligation on every State to submit any draft convention approved by the Conference to its national legislature within one year, whether its own Government representatives had voted in favour of its adoption or not. This provision was inspired by the belief that, although the time had not yet come when anything in the nature of an international legislature whose decisions should be binding on the different States was possible, yet it was essential for the progress of international labour legislation to require the Governments to give their national legislatures the

opportunity of expressing their opinion on the measures favoured by a two-thirds majority of the Labour Conference.

The French and Italian Delegations, on the other hand, desired that States should be under an obligation to ratify conventions so adopted, whether their legislative authorities approved them or not, subject to a right of appeal to the Executive Council of the League of Nations. The Council might invite the Conference to reconsider its decision, and in the event of its being reaffirmed there would be no further right of appeal.

Other Delegations, though not unsympathetic to the hope expressed in the first resolution* printed at the end of the draft convention, that in course of time the Labour Conference might, through the growth of the spirit of internationality, acquire the powers of a truly legislative international assembly, felt that the time for such a development was not yet ripe. If an attempt were made at this stage to deprive States of a large measure of their sovereignty in regard to labour legislation, the result would be that a considerable number of States would either refuse to accept the present convention altogether, or, if they accepted it, would subsequently denounce it, and might even prefer to resign their membership of the League of Nations rather than jeopardise their national economic position by being obliged to carry out the decisions of the International Labour Conference. The majority of the Commission therefore decided in favour of making ratification of a convention subject to the approval of the national legislatures or other competent authorities.

The American Delegation, however, found themselves unable to accept the obligations implied in the British draft on account of the limitations imposed on the central executive and legislative powers by the constitution of certain federal States, and notably of the United States themselves. They pointed out that the Federal Government could not accept the obligation to ratify conventions dealing with matters within the competence of the forty-eight States of the Union, with which the power of Labour legislation for the most part rested. Further, the Federal Government could not guarantee that the constituent States, even if they passed the necessary legislation to give effect to a convention, would put it

* See page 19.

into effective operation, nor could it provide against the possibility of such legislation being declared unconstitutional by the Supreme Judicial Authorities. The Government could not therefore engage to do something which was not within their power to perform, and the non-performance of which would render them liable to complaint.

The Commission felt that they were here faced by a serious dilemma, which threatened to make the establishment of any real system of international labour legislation impossible. On the one hand, its range and effectiveness would be almost fatally limited if a country of such industrial importance as the United States did not participate. On the other hand, if the scheme were so weakened as to impose no obligation on States to give effect to, or even to bring before their legislative authorities, the decisions of the Labour Conference, it was clear that its work would tend to be confined to the mere passage of resolutions instead of resulting in the promotion of social reforms with the sanction of law behind them.

The Commission spent a considerable amount of time in attempting to devise a way out of this dilemma, and is glad to be able to record that it ultimately succeeded in doing so. Article 405 as now drafted represents a solution found by a Sub-Commission consisting of representatives of the American, British and Belgian Delegations specially appointed to consider the question. It provides that the decisions of the Labour Conference may take the form either of recommendations or of draft conventions. Either must be deposited with the Secretary-General of the League of Nations and each State undertakes to bring it within one year before its competent authorities for the enactment of legislation or other action. If no legislation or other action to make a recommendation effective follows, or if a draft convention fails to obtain the consent of the competent authorities concerned, no further obligation will rest on the State in question. In the case of a Federal State, however, whose power to enter into conventions on labour matters is subject to limitations, its Government may treat a draft convention to which such limitations apply as a recommendation only.

The Commission felt that there might in any event be instances in which the form of a recommendation affirming a principle would

be more suitable than that of a draft convention, which must necessarily provide for the detailed application of principles in a form which would be generally applicable by every State concerned. Subjects will probably come before the Conference which, owing to their complexity and the wide differences in the circumstances of different countries, will be incapable of being reduced to any universal and uniform mode of application. In such cases a convention might prove impossible, but a recommendation of principles in more or less detail which left the individual States freedom to apply them in the manner best suited to their conditions would undoubtedly have considerable value.

The exception in the case of Federal States is of greater importance. It places the United States and States which are in a similar position under a less degree of obligation than other States in regard to draft conventions. But it will be observed that the exception extends only to those Federal States which are subject to limitations in respect of their treaty-making powers on labour matters, and further that it only extends in so far as those limitations apply in any particular case. It will not apply in the case of a convention to which the limitations do not apply, or after any such limitations as may at present exist have been removed. Though reluctant to contemplate an arrangement under which all States would not be under identical obligations, the Commission felt that it was impossible not to recognize the constitutional difficulties which undoubtedly existed in the case of certain Federal States, and therefore proposed the above solution as the best possible in the circumstances.

Attention should be drawn to the protocol* to Article 405. The fear was expressed that the article might be interpreted as implying that a State would be required to diminish the protection already afforded to the workers by its legislation as a result of the adoption of a recommendation or draft convention by the Conference; and in consequence, the protocol was added in order to make it quite clear that such an interpretation was inadmissible.

It should be added that the Japanese Delegation abstained from voting on Article 405 as they had not yet received instructions from their Government in the matter. The Italian Delegation also abstained on the ground of the inadequacy of the powers given to the Conference.

* Now embodied in the article itself.

2. *Enforcement (Articles 408 to 420).*

These articles provide machinery whereby a State which fails to carry out its obligations arising under Article 405 or which fails to enforce a convention which it has ratified, may be made subject to economic measures. This machinery is briefly as follows:—

An industrial association of employers and workpeople may make representations to the International Labour Office which the Governing Body may at its discretion communicate to the State complained of for its observations (Article 409). If no satisfactory reply is received, the Governing Body may publish the correspondence (Article 410) which in most cases will probably create sufficient pressure by public opinion to cause the complaint to be remedied.

The Governing Body also has the power, either on its own motion or on receipt of a complaint from a Government or from a delegate to the Conference, to apply to the Secretary-General of the League of Nations to nominate a commission of enquiry. For the purpose of such enquiries, each High Contracting Party undertakes to nominate one employer, one workman and one person of independent standing, and each commission shall consist of one person drawn from each of these three categories (Articles 411 and 412). The Commission will report on the facts, recommend the steps which should be taken to meet the complaint, and indicate the economic measures, if any, which it considers would be appropriate in the event of the condition complained of not being remedied (Article 414).

Appeal may be made to the Permanent Court of International Justice of the League of Nations, which shall have power to review the findings of the Commission (Articles 415 to 418). If the defaulting State fails to carry out the recommendations of the Commission or the Permanent Court, as the case may be, within the specified time, it will then be open to the other States to take the economic measures indicated against it (Article 419).

It will be seen that the above procedure has been carefully devised in order to avoid the imposition of penalties, except in the last resort, when a State has flagrantly and persistently refused to carry out its obligations under a convention. It can hardly be doubted that it will seldom, if ever, be necessary to bring these powers into operation, but the Commission consider that the fact

of their existence is nevertheless a matter of almost vital importance to the success of the scheme.

The representatives of the working classes in some countries have pressed their delegates to urge more drastic provisions in regard to penalties. The Commission, while taking the view that it will in the long run be preferable as well as more effective to rely on the pressure of international public opinion rather than on economic measures, nevertheless considers it necessary to retain the possibility of the latter in the background. If all form of sanction were removed, the effectiveness of the scheme, and what is almost equally important, the belief in its effectiveness would be in a great measure destroyed.

CHAPTER III.

General.

This chapter does not call for much comment, but attention should perhaps be drawn to the provisions of Article 421 which provide that the *British Dominions and India, and any colonies or possessions of any State which may hereafter be recognised as fully self-governing by the Executive Council of the League of Nations, shall have the same rights and obligations under the convention as if they were separate High Contracting Parties. It seemed evident to the Commission that Colonies which were fully self-governing, not only as regards labour legislation but generally, must be regarded as separate entities for the purposes of the Labour Conference, but it was decided that a State and its self-governing colonies should not have more than one seat in the Governing Body.† In the case of colonies which are not fully self-governing, the mother country undertakes the obligation to apply labour conventions to them, unless local conditions render it impossible to apply them either wholly or in part.

CHAPTER IV.

Transitory Provisions.

This chapter provides, *inter alia*, for the holding of the first Conference in October 1919.

* The revised wording of Article I makes special provision as regards the Dominions unnecessary.

† This provision has not been retained in the Treaty.

The Commission felt it was essential that the Conference should meet at the earliest possible moment, but that, if it was to do its work effectively some time must be allowed for the collection of information and for the different countries to prepare their views on the various subjects for discussion. The Conference could, therefore, hardly meet earlier than October. In the schedule* to Article 424, it is proposed that the arrangements for this Conference should be made by an international committee consisting of representatives of the States named, with power to invite other States to send representatives, if necessary. It is suggested that the United States Government might be willing to convene the Conference at Washington, and the Commission much hopes that they will be willing to undertake this task. It is also suggested that the Peace Conference should approve the agenda set out in the same schedule.

The Italian Delegation proposed that all Nations should be admitted to the Conference immediately after the signature of the Peace Treaty but the Commission confined itself to passing the second resolution† attached to the draft convention.

In conclusion, it should be remarked that after a long discussion on the question of adopting certain measures in the interest of seamen, the Commission thought that "the very special questions concerning the minimum conditions to be accorded to seamen might be dealt with at a special meeting of the International Labour Conference devoted exclusively to the affairs of seamen," at which the delegates and technical advisers could accordingly be chosen from the shipping community. (See resolution‡ attached to the Convention.)

PART II.—LABOUR CLAUSES.

The Commission were unanimous in thinking that their work would not be complete if it were simply confined to setting up a permanent machinery for International Labour Legislation. It was not within their competence or within their terms of reference to deal with specific questions relating to industrial conditions and to work them out with the detail necessary for the framing of proposals which could be accepted in a binding form. So impressed were they, however, with the urgent need for recognising explicitly

* Now the Annex; see page 34.

† See page 19.

‡ See page 19.

certain fundamental principles as necessary to social progress, that they decided to submit a series of declarations for insertion in the Peace Treaty. They did not feel called upon, however, to draw up a Charter containing all the reforms which may be hoped for in a more or less distant future, but confined themselves to principles, the realisation of which may be contemplated in the near future.

It will be seen that the High Contracting Parties are not asked to give immediate effect to them, but only to endorse them generally. It will be the duty of the International Labour Conference to examine them thoroughly and to put them in the form of recommendations or draft conventions elaborated with the detail necessary for their practical application.

Proposals were placed before the Commission by the Italian, French, American, Belgian and British Delegations as to the declarations which should be made. The Commission decided that no declaration should be submitted to the Peace Conference, unless it were adopted by a two-thirds majority, and it now has the honour of submitting nine declarations, all of which obtained such a majority and some of which were adopted unanimously.

It should be added, in conclusion, that a majority, but not a two-thirds majority, was obtained for a proposal couched in very general terms which suggested the application to agriculture of the general principles of labour legislation, and which arose out of an Italian proposal in regard to the limitation of the hours of work in agriculture. The delegates who voted against this proposal were, as they explained, by no means hostile to its general idea, but they thought that a proposal in such wide terms was not suitable for inclusion among the declarations to be put forward.

SAMUEL GOMPERS,

President.

ARTHUR FONTAINE,

General Secretary.

HAROLD BUTLER,

Assistant General Secretary.

Paris, March 24th, 1919.

IV.—RESOLUTIONS ADOPTED BY THE COMMISSION ON INTERNATIONAL LABOUR LEGISLATION.**Resolution proposed by the Belgian, French and Italian Delegations.**

The Commission expresses the hope that, as soon as it may be possible, an agreement will be arrived at between the High Contracting Parties with a view to endowing the International Labour Conference under the auspices of the League of Nations with power to take, under conditions to be determined, resolutions possessing the force of international law.

Resolution proposed by the Belgian, French and Italian Delegations.

The Commission, being of opinion that an international code of Labour legislation which will be really effective cannot be secured without the co-operation of all industrial countries, expresses the wish that pending the signature of the Treaty of Peace, which will permit all such countries to be approached, the Peace Conference will communicate the present draft Convention to the neutral powers for their information before finally adopting it.

Resolution proposed by the French Delegation.

The Commission considers that the very special question concerning the minimum conditions to be accorded to seamen might be dealt with at a special meeting of the International Labour Conference devoted exclusively to the affairs of seamen.

[The special meeting was held at Genoa in May 1920.]

V.—THE COVENANT OF THE LEAGUE OF NATIONS.

This is embodied in Part I of the Peace Treaty. Article 23 which relates to Labour is as follows:—

Subject to and in accordance with the provisions of international conventions existing or hereafter to be agreed upon, the Members of the League—

- (a) will endeavour to secure and maintain fair and humane conditions of labour for men, women and children, both in their own countries and in all countries to which their commercial and industrial relations extend; and for that purpose will establish and maintain the necessary international organisations;
- (b) undertake to secure just treatment of the native inhabitants of territories under their control;
- (c) will entrust the League with the general supervision over the execution of agreements with regard to the traffic in women and children, and the traffic in opium and other dangerous drugs;
- (d) will entrust the League with the general supervision of the trade in arms and ammunition with the countries in which the control of this traffic is necessary in the common interest;
- (e) will make provision to secure and maintain freedom of communications and of transit and equitable treatment for the commerce of all Members of the League. In this connection, the special necessities of the regions devastated during the war of 1914—1918 shall be borne in mind;
- (f) will endeavour to take steps in matters of international concern for the prevention and control of disease.

VI.—PART XIII OF THE PEACE TREATY.

Labour.

SECTION I.

ORGANISATION OF LABOUR.

Whereas the League of Nations has for its object the establishment of universal peace, and such a peace can be established only if it is based upon social justice;

And whereas conditions of labour exist involving such injustice, hardship and privation to large numbers of people as to produce unrest so great that the peace and harmony of the world are imperilled; and an improvement of those conditions is urgently required: as, for example, by the regulation of the hours of work, including the establishment of a maximum working day and week, the regulation of the labour supply, the prevention of unemployment, the provision of an adequate living wage, the protection of the worker against sickness, disease and injury arising out of his employment, the protection of children, young persons and women, provision for old age and injury, protection of the interests of workers when employed in countries other than their own, recognition of the principle of freedom of association, the organisation of vocational and technical education and other measures;

Whereas also the failure of any nation to adopt humane conditions of labour is an obstacle in the way of other nations which desire to improve the conditions in their own countries:

The High Contracting Parties, moved by sentiments of justice and humanity, as well as by the desire to secure the permanent peace of the world, agree to the following:—

CHAPTER I.

ORGANISATION.

Article 387.

A permanent organisation is hereby established for the promotion of the objects set forth in the Preamble.

The original Members of the League of Nations shall be the original Members of this organisation, and hereafter membership of the League of Nations shall carry with it membership of the said organisation.

Article 388.

The permanent organisation shall consist of —

- (1) a General Conference of Representatives of the Members and
- (2) an International Labour Office controlled by the Governing Body described in Article 393.

Article 389.

The meetings of the General Conference of Representatives of the Members shall be held from time to time as occasion may require, and at least once in every year. It shall be composed of four Representatives of each of the Members, of whom two shall be Government Delegates and the two others shall be Delegates representing respectively the employers and the workpeople of each of the Members.

Each Delegate may be accompanied by advisers, who shall not exceed two in number for each item on the agenda of the meeting. When questions specially affecting women are to be considered by the Conference, one at least of the advisers should be a woman.

The Members undertake to nominate non-Government Delegates and advisers chosen in agreement with the industrial organisations, if such organisations exist, which are most representative of employers or workpeople, as the case may be, in their respective countries.

Advisers shall not speak except on a request made by the Delegate whom they accompany and by the special authorisation of the President of the Conference, and may not vote.

A Delegate may by notice in writing addressed to the President appoint one of his advisers to act as his deputy, and the adviser, while so acting, shall be allowed to speak and vote.

The names of the Delegates and their advisers will be communicated to the International Labour Office by the Government of each of the Members.

The credentials of Delegates and their advisers shall be subject to scrutiny by the Conference, which may, by two-thirds of the

votes cast by the Delegates present, refuse to admit any Delegate or adviser whom it deems not to have been nominated in accordance with this Article.

Article 390.

Every Delegate shall be entitled to vote individually on all matters which are taken into consideration by the Conference.

If one of the Members fails to nominate one of the non-Government Delegates whom it is entitled to nominate, the other non-Government Delegate shall be allowed to sit and speak at the Conference, but not to vote.

If in accordance with Article 389 the Conference refuses admission to a Delegate of one of the Members, the provisions of the present Article shall apply as if that Delegate had not been nominated.

Article 391.

The meetings of the Conference shall be held at the seat of the League of Nations, or at such other place as may be decided by the Conference at a previous meeting by two-thirds of the votes cast by the Delegates present.

Article 392.

The International Labour Office shall be established at the seat of the League of Nations as part of the organisation of the League.

Article 393.

The International Labour Office shall be under the control of a Governing Body consisting of twenty-four persons appointed in accordance with the following provisions:—

The Governing Body of the International Labour Office shall be constituted as follows:—

Twelve persons representing the Governments;

Six persons elected by the Delegates to the Conference representing the employers;

Six persons elected by the Delegates to the Conference representing the workers.

Of the twelve persons representing the Governments, eight shall be nominated by the Members which are of the chief industrial

importance, and four shall be nominated by the Members selected for the purpose by the Government Delegates to the Conference, excluding the Delegates of the eight Members mentioned above.

Any questions as to which are the Members of the chief industrial importance shall be decided by the Council of the League of Nations.

The period of office of the Members of the Governing Body will be three years. The method of filling vacancies and other similar questions may be determined by the Governing Body subject to the approval of the Conference.

The Governing Body shall, from time to time, elect one of its members to act as its Chairman, shall regulate its own procedure, and shall fix its own times of meeting. A special meeting shall be held if a written request to that effect is made by at least ten members of the Governing Body.

Article 394.

There shall be a Director of the International Labour Office, who shall be appointed by the Governing Body, and, subject to the instructions of the Governing Body, shall be responsible for the efficient conduct of the International Labour Office and for such other duties as may be assigned to him.

The Director or his deputy shall attend all meetings of the Governing Body.

Article 395.

The staff of the International Labour Office shall be appointed by the Director, who shall, so far as is possible with due regard to the efficiency of the work of the Office, select persons of different nationalities. A certain number of these persons shall be women.

Article 396.

The functions of the International Labour Office shall include the collection and distribution of information on all subjects relating to the international adjustment of conditions of industrial life and labour, and particularly the examination of subjects which it is proposed to bring before the Conference with a view to the conclusion of international conventions, and the conduct of such special investigations as may be ordered by the Conference.

It will prepare the agenda for the meetings of the Conference.

It will carry out the duties required of it by the provisions of this Part of the present Treaty in connection with international disputes.

It will edit and publish in French and English, and in such other languages as the Governing Body may think desirable, a periodical paper dealing with problems of industry and employment of international interest.

Generally, in addition to the functions set out in this Article, it shall have such other powers and duties as may be assigned to it by the Conference.

Article 397.

The Government Departments of any of the Members which deal with questions of industry and employment may communicate directly with the Director through the Representative of their Government on the Governing Body of the International Labour Office, or failing any such Representative, through such other qualified official as the Government may nominate for the purpose.

Article 398.

The International Labour Office shall be entitled to the assistance of the Secretary-General of the League of Nations in any matter in which it can be given.

Article 399.

Each of the Members will pay the travelling and subsistence expenses of its Delegates and their advisers and of its Representatives attending the meetings of the Conference or Governing Body, as the case may be.

All the other expenses of the International Labour Office and of the meetings of the Conference or Governing Body shall be paid to the Director by the Secretary-General of the League of Nations out of the general funds of the League.

The Director shall be responsible to the Secretary-General of the League for the proper expenditure of all moneys paid to him in pursuance of this Article.

CHAPTER II.

PROCEDURE.

Article 400.

The agenda for all meetings of the Conference will be settled by the Governing Body, who shall consider any suggestion as to the agenda that may be made by the Government of any of the Members or by any representative organisation recognized for the purpose of Article 389.

Article 401.

The Director shall act as the Secretary of the Conference, and shall transmit the agenda so as to reach the Members four months before the meeting of the Conference, and, through them, the non-Government Delegates when appointed.

Article 402.

Any of the Governments of the Members may formally object to the inclusion of any item or items in the agenda. The grounds for such objection shall be set forth in a reasoned statement addressed to the Director, who shall circulate it to all the Members of the Permanent Organisation.

Items to which such objection has been made shall not, however, be excluded from the agenda, if at the Conference a majority of two-thirds of the votes cast by the Delegates present is in favour of considering them.

If the Conference decides (otherwise than under the preceding paragraph) by two-thirds of the votes cast by the Delegates present that any subject shall be considered by the Conference, that subject shall be included in the agenda for the following meeting.

Article 403.

The Conference shall regulate its own procedure, shall elect its own President, and may appoint committees to consider and report on any matter.

Except as otherwise expressly provided in this Part of the present Treaty, all matters shall be decided by a simple majority of the votes cast by the Delegates present,

The voting is void unless the total number of votes cast is equal to half the number of the Delegates attending the Conference.

Article 404.

The Conference may add to any committees which it appoints technical experts, who shall be assessors without power to vote.

Article 405.

When the Conference has decided on the adoption of proposals with regard to an item in the agenda, it will rest with the Conference to determine whether these proposals shall take the form: (a) of a recommendation to be submitted to the Members for consideration with a view to effect being given to it by national legislation or otherwise, or (b) of a draft international convention for ratification by the Members.

In either case a majority of two-thirds of the votes cast by the Delegates present shall be necessary on the final vote for the adoption of the recommendation or draft convention, as the case may be, by the Conference.

In framing any recommendation or draft convention of general application the Conference shall have due regard to those countries in which climatic conditions, the imperfect development of industrial organisation or other special circumstances make the industrial conditions substantially different and shall suggest the modifications, if any, which it considers may be required to meet the case of such countries.

A copy of the recommendation or draft convention shall be authenticated by the signature of the President of the Conference and of the Director and shall be deposited with the Secretary-General of the League of Nations. The Secretary-General will communicate a certified copy of the recommendation or draft convention to each of the Members.

Each of the Members undertakes that it will, within the period of one year at most from the closing of the session of the Conference, or if it is impossible owing to exceptional circumstances to do so within the period of one year, then at the earliest practicable moment and in no case later than eighteen months from the closing of the session of the Conference, bring the recommendation or draft con-

vention before the authority or authorities within whose competence the matter lies, for the enactment of legislation or other action.

In the case of a recommendation, the Members will inform the Secretary-General of the action taken.

In the case of a draft convention, the Member will, if it obtains the consent of the authority or authorities within whose competence the matter lies, communicate the formal ratification of the convention to the Secretary-General and will take such action as may be necessary to make effective the provisions of such convention.

If on a recommendation no legislative or other action is taken to make a recommendation effective, or if the draft convention fails to obtain the consent of the authority or authorities within whose competence the matter lies, no further obligation shall rest upon the Member.

In the case of a federal State, the power of which to enter into conventions on labour matters is subject to limitations, it shall be in the discretion of that Government to treat a draft convention to which such limitations apply as a recommendation only, and the provisions of this Article with respect to recommendations shall apply in such case.

The above Article shall be interpreted in accordance with the following principle:

In no case shall any Member be asked or required, as a result of the adoption of any recommendation or draft convention by the Conference, to lessen the protection afforded by its existing legislation to the workers concerned.

Article 406.

Any convention so ratified shall be registered by the Secretary-General of the League of Nations, but shall only be binding upon the Members which ratify it.

Article 407.

If any convention coming before the Conference for final consideration fails to secure the support of two-thirds of the votes cast by the Delegates present, it shall nevertheless be within the right of any of the Members of the Permanent Organisation to agree to such convention among themselves.

Any convention so agreed to shall be communicated by the Governments concerned to the Secretary-General of the League of Nations, who shall register it.

Article 408.

Each of the Members agrees to make an annual report to the International Labour Office on the measures which it has taken to give effect to the provisions of conventions to which it is a party. These reports shall be made in such form and shall contain such particulars as the Governing Body may request. The Director shall lay a summary of these reports before the next meeting of the Conference.

Article 409.

In the event of any representation being made to the International Labour Office by an industrial association of employers or of workers that any of the Members has failed to secure in any respect the effective observance within its jurisdiction of any convention to which it is a party, the Governing Body may communicate this representation to the Government against which it is made and may invite that Government to make such statement on the subject as it may think fit.

Article 410.

If no statement is received within a reasonable time from the Government in question, or if the statement when received is not deemed to be satisfactory by the Governing Body, the latter shall have the right to publish the representation and the statement, if any, made in reply to it.

Article 411.

Any of the Members shall have the right to file a complaint with the International Labour Office if it is not satisfied that any other Member is securing the effective observance of any convention which both have ratified in accordance with the foregoing Articles.

The Governing Body may, if it thinks fit, before referring such a complaint to a Commission of Enquiry, as hereinafter provided for, communicate with the Government in question in the manner described in Article 409.

If the Governing Body does not think it necessary to communicate the complaint to the Government in question, or if, when they have made such communication, no statement in reply has been received within a reasonable time which the Governing Body considers to be satisfactory, the Governing Body may apply for the appointment of a Commission of Enquiry to consider the complaint and to report thereon.

The Governing Body may adopt the same procedure either of its own motion or on receipt of a complaint from a Delegate to the Conference.

When any matter arising out of Articles 410 or 411 is being considered by the Governing Body, the Government in question shall, if not, already represented thereon, be entitled to send a representative to take part in the proceedings of the Governing Body while the matter is under consideration. Adequate notice of the date on which the matter will be considered shall be given to the Government in question.

Article 412.

The Commission of Enquiry shall be constituted in accordance with the following provisions:

Each of the Members agrees to nominate within six months of the date on which the present Treaty comes into force three persons of industrial experience, of whom one shall be a representative of employers, one a representative of workers, and one a person of independent standing, who shall together form a panel from which the Members of the Commission of Enquiry shall be drawn.

The qualifications of the persons so nominated shall be subject to scrutiny by the Governing Body, which may by two-thirds of the votes cast by the representatives present refuse to accept the nomination of any person whose qualifications do not in its opinion comply with the requirements of the present Article.

Upon the application of the Governing Body, the Secretary-General of the League of Nations shall nominate three persons, one from each section of this panel, to constitute the Commission of Enquiry, and shall designate one of them as the President of the Commission. None of these three persons shall be a person nominated to the panel by any Member directly concerned in the complaint.

Article 413.

The Members agree that, in the event of the reference of a complaint to a Commission of Enquiry under Article 411, they will each, whether directly concerned in the complaint or not, place at the disposal of the Commission all the information in their possession which bears upon the subject-matter of the complaint.

Article 414.

When the Commission of Enquiry has fully considered the complaint, it shall prepare a report embodying its findings on all questions of fact relevant to determining the issue between the parties and containing such recommendations as it may think proper as to the steps which should be taken to meet the complaint and the time within which they should be taken.

It shall also indicate in this report the measures, if any, of an economic character against a defaulting Government which it considers to be appropriate, and which it considers other Governments would be justified in adopting.

Article 415.

The Secretary-General of the League of Nations shall communicate the report of the Commission of Enquiry to each of the Governments concerned in the complaint, and shall cause it to be published.

Each of these Governments shall within one month inform the Secretary-General of the League of Nations whether or not it accepts the recommendations contained in the report of the Commission; and if not, whether it proposes to refer the complaint to the Permanent Court of International Justice of the League of Nations.

Article 416.

In the event of any Member failing to take the action required by Article 405, with regard to a recommendation or draft Convention, any other Member shall be entitled to refer the matter to the Permanent Court of International Justice.

Article 417.

The decision of the Permanent Court of International Justice in regard to a complaint or matter which has been referred to it in pursuance of Article 415 or Article 416 shall be final.

Article 418.

The Permanent Court of International Justice may affirm, vary or reverse any of the findings or recommendations of the Commission of Enquiry, if any, and shall in its decision indicate the measures, if any, of an economic character which it considers to be appropriate, and which other Governments would be justified in adopting against a defaulting Government.

Article 419.

In the event of any Member failing to carry out within the time specified the recommendations, if any, contained in the report of the Commission of Enquiry, or in the decision of the Permanent Court of International Justice, as the case may be, any other Member may take against that Member the measures of an economic character indicated in the report of the Commission or in the decision of the Court as appropriate to the case.

Article 420.

The defaulting Government may at any time inform the Governing Body that it has taken the steps necessary to comply with the recommendations of the Commission of Enquiry or with those in the decision of the Permanent Court of International Justice, as the case may be, and may request it to apply to the Secretary-General of the League to constitute a Commission of Enquiry to verify its contention. In this case the provisions of Articles 412, 413, 414, 415, 417 and 418 shall apply, and if the report of the Commission of Enquiry or the decision of the Permanent Court of International Justice is in favour of the defaulting Government, the other Governments shall forthwith discontinue the measures of an economic character that they have taken against the defaulting Government.

CHAPTER III.

GENERAL.

Article 421.

The Members engaged to apply conventions which they have ratified in accordance with the provisions of this Part of the present

Treaty to their colonies, protectorates and possessions which are not fully self-governing :—

- (1) Except where owing to the local conditions the convention is inapplicable, or,
- (2) Subject to such modifications as may be necessary to adapt the convention to local conditions.

And each of the Members shall notify to the International Labour Office the action taken in respect of each of its colonies, protectorates, and possessions which are not fully self-governing.

Article 422.

Amendments to this Part of the present Treaty which are adopted by the Conference by a majority of two-thirds of the votes cast by the Delegates present shall take effect when ratified by the States whose representatives compose the Council of the League of Nations and by three-fourths of the Members.

Article 423.

Any question or dispute relating to the interpretation of this Part of the present Treaty or of any subsequent convention concluded by the Members in pursuance of the provisions of this Part of the present Treaty shall be referred for decision to the Permanent Court of International Justice.

CHAPTER IV.

TRANSITORY PROVISIONS.

Article 424.

The first meeting of the Conference shall take place in October 1919. The place and agenda for this meeting shall be as specified in the Annex hereto.

Arrangements for the convening and the organisation of the first meeting of the Conference will be made by the Government designated for the purpose in the said Annex. That Government shall be assisted in the preparation of the documents for submission to the Conference by an International Committee constituted as provided in the said Annex.

The expenses of the first meeting and of all subsequent meetings held before the League of Nations has been able to establish a general fund, other than the expenses of Delegates and their advisers, will be borne by the Members in accordance with the apportionment of the expenses of the International Bureau of the Universal Postal Union.

Article 425.

Until the League of Nations has been constituted all communications which under the provisions of the foregoing Articles should be addressed to the Secretary-General of the League will be preserved by the Director of the International Labour Office, who will transmit them to the Secretary-General of the League.

Article 426.

Pending the creation of a Permanent Court of International Justice, disputes which in accordance with this Part of the present Treaty would be submitted to it for decision will be referred to a tribunal of three persons appointed by the Council of the League of Nations.

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ANNEX.

FIRST MEETING OF ANNUAL LABOUR CONFERENCE, 1919.

The place of meeting will be Washington.

The Government of the United States of America is requested to convene the Conference.

The International Organising Committee will consist of seven Members, appointed by the United States of America, Great Britain, France, Italy, Japan, Belgium and Switzerland.

The Committee may, if it thinks necessary, invite other Members to appoint representatives.

Agenda :

- (1) Application of principle of the 8-hours day or of the 48-hours week.
- (2) Question of preventing or providing against unemployment.
- (3) Women's employment :
 - (a) Before and after child-birth, including the question of maternity benefit ;

- (b) During the night ;
- (c) In unhealthy processes.
- (4) Employment of children :
 - (a) Minimum age of employment ;
 - (b) During the night ;
 - (c) In unhealthy processes.
- (5) Extension and application of the International Conventions adopted at Berne in 1906 on the prohibition of night work for women employed in industry and the prohibition of the use of white phosphorus in the manufacture of matches.

SECTION II.

GENERAL PRINCIPLES.

Article 427.

The High Contracting Parties, recognising that the well-being, physical, moral and intellectual, of industrial wage-earners is of supreme international importance, have framed, in order to further this great end, the permanent machinery provided for in Section I and associated with that of the League of Nations.

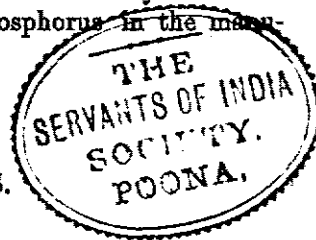
They recognise that differences of climate, habits and customs, of economic opportunity and industrial tradition, make strict uniformity in the conditions of labour difficult of immediate attainment. But, holding as they do that labour should not be regarded merely as an article of commerce, they think that there are methods and principles for regulating labour conditions which all industrial communities should endeavour to apply, so far as their special circumstances will permit.

Among these methods and principles, the following seem to the High Contracting Parties to be of special and urgent importance :

First.—The guiding principle above enunciated that labour should not be regarded merely as a commodity or article of commerce.

Second.—The right of association for all lawful purposes by the employed as well as by the employers.

Third.—The payment to the employed of a wage adequate to maintain a reasonable standard of life as this is understood in their time and country.



Fourth.—The adoption of an eight hours day or a forty-eight hours week as the standard to be aimed at where it has not already been attained.

Fifth.—The adoption of a weekly rest of at least twenty-four hours, which should include Sunday wherever practicable.

Sixth.—The abolition of child labour and the imposition of such limitations on the labour of young persons as shall permit the continuation of their education and assure their proper physical development.

Seventh.—The principle that men and women should receive equal remuneration for work of equal value.

Eighth.—The standard set by law in each country with respect to the conditions of labour should have due regard to the equitable economic treatment of all workers lawfully resident therein.

Ninth.—Each State should make provision for a system of inspection in which women should take part, in order to ensure the enforcement of the laws and regulations for the protection of the employed.

Without claiming that these methods and principles are either complete or final, the High Contracting Parties are of opinion that they are well fitted to guide the policy of the League of Nations; and that, if adopted by the industrial communities who are Members of the League, and safeguarded in practice by an adequate system of such inspection, they will confer lasting benefits upon the wage-earners of the world.

VII.—THE INDIAN DELEGATION TO WASHINGTON.

The Government of India was informed on 21st May 1919 that the first meeting of the International Labour Conference would commence at Washington in October of that year. By Article 389 of the Peace Treaty all delegates are nominated by the Governments of their respective countries. In nominating the employers' and workers' delegates and advisers, the Governments have to act "in agreement with the industrial organisations, if such organisations exist, which are most representative of employers or work people, as the case may be, in their respective countries." Most of the leading employers of labour in India belonged to organisations of some kind, but there was no federation formed. The great majority of the workpeople belonged to no organisation whatever and such organisations as existed had little cohesion and were not federated in any way. There was no organisation that could be described as representative of the workpeople of India and the leading employers' organisations were representative only of particular districts or provinces. The Government of India nominated Mr. Joshi of Bombay as delegate for the workpeople with Mr. Wadia of Madras as adviser and asked the Bengal Chamber of Commerce to suggest a nomination for employers. On their recommendation Mr. Murray, Chairman of the Indian Jute Mills Association, was nominated. Three of the leading provinces of India were thus represented in the non-Government part of the delegation.

The complete delegation from India was as follows :—

I.—Government Delegates :

MR. L. J. KERSHAW, C.S.I., C.I.E., Secretary, Revenue and Statistics Department, India Office, London.

MR. A. C. CHATTERJEE, C.I.E., I.C.S., Chief Secretary to the Government of the United Provinces.

Adviser :

MR. J. D. F. ENGEL, Chief Inspector of Factories, Bombay Presidency.

II.—Employers' Delegate :

Mr. A. R. MURRAY, C.B.E., Chairman of the Indian Jute Mills Association.

III.—Workers' Delegate :

Mr. N. M. JOSHI, Secretary, Social Service League, Bombay.

Adviser :

Mr. B. P. WADIA, President, Madras Labour Union.

They arrived at Washington on 27th October 1919.

VIII.—AN ACCOUNT OF THE WASHINGTON CONFERENCE.

When we reached Washington the United States Senate was still discussing the terms of the Peace Treaty and the atmosphere in the capital was by no means conducive to calm and ordered deliberations of the particular subjects specified for consideration in the labour section of the Peace Treaty. It will be remembered that the Treaty specially provided for the first meeting of the Annual Labour Conference being held at Washington and the Government of the United States of America was requested to convene the Conference. In this connection it is interesting to note the terms of the Joint Resolution passed by Congress on 2nd August, *viz.*—

Resolved, etc.—That the President of the United States be, and he hereby is, authorised to convene and to make arrangements for the organisation of a general International Labour Conference, to be held in Washington D. C.; Provided, however, that nothing herein shall be held to authorise the President to appoint any delegates to represent the United States of America at such Conference or to authorise the United States of America to participate therein unless and until the Senate shall have ratified the provisions of the proposed Treaty of Peace with Germany with reference to a general International Labour Conference.

President Wilson's invitation, cabled on 11th August 1919 to thirty-four countries, may also be quoted as follows:—

The President of the United States, in accordance with the provisions of Part XIII of the Treaty of Peace between the Allied and Associated Powers and Germany signed at Versailles on June 28th, 1919, and under authority vested in him by Congress, hereby convenes the first meeting of the Annual Labour Conference therein decided to assemble in Washington, at noon on the 29th day of October, 1919. The Government of the United States extends to each nation which is or which, prior to the said meeting, shall become, a member of the International Labour Organisation as defined in Article 387, an invitation to send its delegates and other representatives to Washington for the purpose of attending such Conference.

During the whole of the time the Conference was in session, President Wilson was ill and confined to bed. The delegates were welcomed by the Secretary of Labour, Mr. W. B. Wilson, who was appointed President of the Conference and was present at nearly all its plenary sittings in the hall of the Pan-American Union. On the 7th November the Vice-President of the United States visited the Conference and addressed the delegates who, along with their advisers and friends, the following day on the invitation of Secretary

of the Navy, Mr. Daniels, sailed up the Potomac on board the President's steam yacht, the *Mayflower*, and visited Mount Vernon, the home and burial place of George Washington. On the evening of the 11th November, too, the delegates had the honour of being invited to a reception given by the Vice-President of the United States and Mrs. Marshall to Washington society in the Congressional Library on the occasion of the visit of the Prince of Wales to the capital. Rooms in the new Navy Department Building were set aside as Committee rooms and offices for delegates and staff who were also invited to make use of the Library of the U. S. Department of Labour Statistics, but apart from these courtesies there was little official or public notice taken of the International Labour Conference in Washington, and even the press devoted very little attention to its proceedings. This apparent lack of interest on the part of the United States Government and people is not easy to explain. The Senate was busy discussing proposed reservations during the greater part of our stay in Washington and ultimately adjourned without ratifying the Treaty of Peace. No delegates from the United States Government or employers were nominated to the Conference and Mr. Samuel Gompers, the President of the American Federation of Labour, was present at only one of the plenary sittings. At the same time we had reason to believe that the proceedings of the Conference were closely followed in many quarters and that there was a good deal of concern as to the results of our deliberations and their effect on the labour situation in America. Strained relations exist between Capital and Labour in many parts of the United States, and the Government has been finding it difficult to bring together conflicting interests for an amicable adjustment of differences. On 6th October 1919, President Wilson had convened an Industrial Conference of leading representatives of employers, employees and the public "for the purpose of consulting together on the great and vital questions affecting our (i.e., United States) industrial life and their consequent effect upon all our people." At this Industrial Conference, which was also held at Washington, the Labour group endeavoured to pass a resolution calling for arbitration, by a Committee of the Conference, of the strike in the steel industry which had begun before we reached America and was still on when we left, but they were voted down by the Public group and the Employers' group on the ground that this particular issue was not germane to the purposes of the Conference. The

Labour group then introduced a resolution on collective bargaining, the essence of which was the right of wage-earners to organise in trade and labour unions only and to be represented by representatives of their own choosing in negotiations with employers. Both the Public and the Employers' groups took exception to the workers' right to organise being limited to trade and labour unions only. They were of opinion that workers should be permitted to join shop councils or other associations in individual establishments by means of which an employer could bargain collectively with his own workers. What the employers' group did object to was an employer being forced to bargain collectively with his employees through an agent of labour unions who is not one of his employees, is not really chosen by them but by the labour union and usually is not familiar with the circumstances of the issue and generally has primary interests other than those of the employees. Unable to carry a resolution on collective bargaining acceptable to them, the labour group, under Mr. Gompers' leadership, withdrew from the Conference, which broke up the week before we arrived in Washington, without having put through constructive work of any description. This failure on the part of representatives of three groups in one country to arrive at a common understanding as to labour conditions in their own country only, did not augur well for a conference of similar representatives of about forty different States from all the corners of the earth, and the American public would not have been surprised had the negotiations in the International Labour Conference been also barren of results. There was, however, this material difference between the two Conferences. No agenda had been prepared for the Industrial Conference, which therefore had no definite programme of work or method of procedure before it and broke down after consideration of two resolutions unduly pressed forward by the Labour group, one of which was an issue not really germane to the purposes of the Conference, and the other of which was a particular subject prematurely put up for discussion before general principles were agreed upon. The International Labour Conference, on the other hand, sat down to discuss a carefully prepared agenda of important subjects all capable of independent discussion by delegates who had travelled thousands of miles to attend the meetings and were anxious to have some tangible results to show for their labours. Through the failure of the Industrial Conference, too, each of the groups learned anew the lesson that

it is not by extreme measures, but by patient negotiations and mutual concessions, that a common understanding can be arrived at.

On the first day of the Conference, 29th October 1919, Mr. Arthur Fontaine (France), Chairman of the Organising Committee, submitted a report summing up the labours of that Committee from the date of its first meeting at Paris on 14th April 1919. The Committee had sat in London from 6th to 9th May and on 10th idem had issued a circular and questionnaire to the Governments of the various countries with a view to ascertaining all the information available regarding the protective labour legislation proposed for discussion at the International Labour Conference at Washington. (The agenda for the Washington Conference had been published* as an annex to the Labour Section of the Peace Treaty). Further meetings were held in Paris on 28th and 29th June and in London on 31st July and 5th August, after which on 20th August the Organising Committee summed up its work and its proposals in a circular addressed to all the Governments and through them to all the delegates already appointed. This circular contained information and referred to matters of importance to delegates, but I received no copy and did not know of its existence until Mr. Fontaine read an extract from it when submitting the Committee's report on 29th October. Nor did I know that the Organising Committee had drawn up a suggested programme of the proceedings at the Conference at Washington, copies of which they had asked the Governments to communicate to each of their delegates. Of course the circumstances of the first Conference were altogether exceptional, but no doubt the Indian Government in future will make a point of seeing that delegates from India are put in possession of all the circulars and information to which they are entitled so that they may be placed at as little disadvantage as possible when attending meetings of the International Labour Conference.†

In the discussion on the Organising Committee's report an interesting sidelight was thrown on the Constitution of the Conference by the request of a Government delegate from Ecuador that a Spanish translation should be made of the report, on the ground that there were present twenty-five persons belonging to and representing eighteen Spanish speaking nations. As a matter of fact, not only

* See page 34.

† These circulars did not reach India till after the delegation had sailed.

the report but also all the proceedings of the Conference were translated into Spanish, but a request by a Government delegate from Spain that Spanish should be one of the official languages of the Conference along with French and English was withdrawn on the understanding that it might be raised later before the Committee on Standing Orders. It should be explained that speeches in English had to be summarised in French and *vice versa* throughout the proceedings and when delegates from Spain, Italy, the Netherlands and other countries spoke in their own languages, the translation of their speeches into both English and French took up a good deal of the time of the Conference. It is not to be wondered at, therefore, that the Committee on Standing Orders came to the conclusion that the introduction of a third official language was impossible.

In the course of the first day's proceedings a resolution was unanimously adopted inviting the United States' Employers' and Workers' Organisations to send delegates to the Conference. So far as I am aware no reply was received from the Employers, but on the 31st October a letter was received intimating that Mr. Samuel Gompers had been nominated to represent the American Federation of Labour at the Conference. He, however, attended only one plenary sitting on the 5th November when the 8 hours day was under discussion.

It may be advisable to give here details as to the various countries represented at the Conference. The 32 original members of the League of Nations signatories of the Treaty of Peace were entitled to send delegates as also were the 13 States invited to accede to the Covenant. The names of these 45 states will be found in the Annex to the Covenant of the League of Nations which forms Part I of the Treaty of Peace. In addition to these states, Germany and Austria were admitted to membership of the International Labour Organisation at the plenary sittings of the Conference on 30th October, in anticipation of their admission to the League of Nations, and in view of their expressed willingness to co-operate in the work of the Labour Organisation, the only dissentient vote being that of Mr. Louis Guerin, the Employers' Delegate from France, who when the resolution was carried—for 71, against 1—abstention 1, remarked "It is splendid to be alone." Mr. Jules Carlier, the Employers' delegate from Belgium, abstained from voting. He explained that

the Belgian employers did not wish to vote against Germany's admission for economic reasons but neither did they wish to vote for the motion, because Germany had cynically violated all her engagements towards Belgium's entire industry. On the 4th November a telegram of the previous day's date was received from the General Federation of German Trade Unions, the Federation of Christian Trade Unions of Germany and the Federation of German Trade Unions, saying the German workers welcomed admission to the Conference and advising that as soon as passages were available the German representatives would be glad to co-operate in the important work of the Conference in the interests of the workers of all countries. On 17th November the Conference was advised of the receipt of a telegram from Berlin saying the German delegates and advisers were to sail on the 18th from Gothenburg and that the German Government hoped they would arrive in time, to which a reply was sent that they could not arrive in time as the Conference would likely end on 29th November. On the 18th another telegram was received from Berlin to the effect that in the circumstances the journey of the German delegates had unhappily to be abandoned. On the 13th a telegram was received from the Austrian delegation at Paris saying it would not be possible, for known reasons, for the Austrian Government to send representatives but they and the Commission of the Austrian Trade Union sent best wishes for the final success of the Conference.

On 12th November the Conference passed a resolution to the effect that having received no official application for admission to the Conference from the Governments of Luxemburg, San Domingo and Mexico it could make no recommendation as to their admission. At its meeting on 24th November, however, the Conference was advised of the receipt of a message from the Minister of State of Luxemburg asking that Luxemburg should be admitted to the Conference and this State was therefore admitted on the same terms as Finland, though too late of course to be represented at Washington. The question of admitting Finland took up two full sessions of the Conference on 12th and 13th November, but ultimately it was unanimously decided to invite that State's delegates who were actually in Washington to take part in the Conference.

In the Provisional List of the Members of the Delegations present at Washington, San Domingo is shown as represented by a Workers'

delegate, who, however, had no standing as his State had not applied for admittance to membership of the Conference. Bolivia is also in the list with a Government delegate but so far as I am aware he never put in an attendance. In view of discussions which took place regarding the constitution of the Governing Body and representation of Continents the following abstract is of interest:—

I. Original members of the League of Nations (32):—

EUROPE.	AMERICA.	ASIA.	AFRICA.	AUSTRALASIA.
Belgium	United States	India	South Africa	Australia.
France	Bolivia	China	Liberia	New Zealand.
Great Britain	Brazil	Hedjaz		
Greece	Canada	Japan		
Italy	Cuba	Siam		
Poland	Ecuador			
Portugal	Guatemala			
Roumania	Haiti			
Serb-Croat-Slovene	Honduras			
Czecho-Slovakia	Nicaragua			
	Panama			
	Peru			
	Uruguay			

II. States invited to accede to the Covenant (13):—

EUROPE.	AMERICA.	ASIA.
Denmark	Argentine	Persia
Netherlands	Chili	
Norway	Colombia	
Spain	Paraguay	
Sweden	Salvador	
Switzerland	Venezuela	

III. Other states admitted to Conference (4):—

EUROPE.

Germany, Austria, Finland and Luxemburg.

IV. States not admitted to Conference (2) :—

AMERICA.

Mexico and San Domingo.

TOTAL OF ABOVE STATES.	EUROPE. 20	AMERICA. 21	ASIA. 6	AFRICA. 2	AUSTRALASIA. 2	TOTAL 51
<i>Absent from Conference.</i>						
Germany	} 3					} 12
Austria						
Luxemburg						
Bolivia	}	5				
Mexico						
San Domingo						
United States						
Honduras						
Hedjaz			1			
Liberia				1		
Australia	}				2	
New Zealand						
<i>Represented at Conference</i>	17	16	5	1	...	39

Each State is entitled to send to the International Labour Conference four representatives, of whom two shall be Government delegates, the other two delegates representing respectively the employers and the workpeople. For various reasons many of the States were not fully represented and an abstract of the official list of delegates shows 72 representatives of Governments, 25 of Employers and 24 of Workers, making altogether 121 delegates present at the Conference at Washington. Fifteen States were represented by Government delegates only. Each delegate might be accompanied by advisers not exceeding two in number for each item on the agenda. The Delegates' Official Guide gives the names of 290 delegates and advisers recognized by the Conference, many of the delegations being of considerable size. Canada, for instance, came 30 strong, Belgium and Japan each with 23 and Great Britain with 21 delegates and advisers. Indeed, a feature of the Conference and of the Committee meetings was the number of Japanese present either as delegates, advisers, secretaries or interpreters, while editors and correspondents of Japanese newspapers were constantly in evidence. About half the total number of delegates and advisers

officially recognized were representing Governments, Employers being content with about 60 and Workers with about 80 representatives.

The credentials of delegates and their advisers were subject to scrutiny by the Conference, which might refuse to admit any person not properly nominated. No questions arose regarding Government delegates, but exception was taken to certain non-Government delegates, and one of the first things the Conference did was to nominate a Credentials Committee consisting of one representative from each of the three groups. Protests were laid before this Committee in regard to the constitution of the Delegations of France, South Africa, Japan, Cuba, Argentine and Guatemala. All these protests were made by, or on behalf of, Labour organisations in the countries named, which took exception to the nomination of the workers' delegates representing these countries. Under the Peace Treaty, non-Government delegates have to be chosen in agreement with the industrial organisations, if such organisations exist, which are most representative of employers or work-people, as the case may be, in their respective countries; and the objections to the workers' delegates were based on this provision of the Peace Treaty. The Credentials Committee, after careful enquiry, recommended that no action should be taken on the objections referred to them, and the workers' delegates from the countries mentioned were allowed to retain their seats in the Conference. At the same time the reports of the Organising Committee and the relative discussions in the Conference provide interesting reading and all go to indicate that, in the near future, the tendency will be to scrutinise strictly the credentials of non-Government delegates. In countries where organised labour does not exist, the responsibility of the selection of the labour delegate rests entirely with the Government.

On the third day of the Conference, Secretary of Labour Mr. Wilson was appointed President. Vice-Presidents were appointed from each of the three groups in the persons of the Right Honourable G. N. Barnes, M.P., one of the Government delegates from Great Britain, Mr. Jules Carlier, Employers' delegate from Belgium, and Mr. Leon Jouhaux, Workers' delegate from France. Mr. H. B. Butler from the office of the British Ministry of Labour, who had been acting as Secretary to the Organising Committee, was appointed Secretary-General to the Conference. After the appointment of these officers the Conference proceeded to set up the Committees

necessary for the conduct of work. These included a Commission of Selection composed of twelve Government delegates, six Employers' delegates, and six Workers' delegates, a Committee on Standing Orders, and a Committee on Admissions. Mr. Joshi took the place of Mr. Gompers on the last named Committee, while Mr. Kershaw was a member of the Committee which considered the draft Standing Orders and reported thereon to the Conference.

It was the fifth day of the Conference before the delegates settled down to consideration of the items of the agenda specified in the Peace Treaty. The first and most important item, namely, the application of the principle of the 8-hour day or of the 48-hour week, was introduced by Mr. Barnes who submitted the following resolution :—

“ That the Draft Convention [of the 48-hour week] prepared by the Organising Committee be adopted by the Conference as the basis for discussion, but that the question of its application to the tropical and other countries referred to in the third paragraph of Article 405 of the treaty be referred in the first instance for consideration by a special committee which shall report to the Conference.”

This was seconded by one of the Italian Government delegates, and caused a discussion extending over two full sessions of the Conference. On the second day of the debate Mr. Gompers was present and proposed that the whole subject be referred to a special Commission. Mr. Kershaw, on behalf of the Indian delegation, objected to this proposal on the ground that the case of the Eastern countries required a special committee for the consideration of their particular problems. Ultimately Mr. Barnes' motion was carried with the omission of the words “ of the 48-hour week ” shown in brackets above. These words were eliminated on the suggestion of one of the French Government delegates in order to meet the wishes chiefly of workers' delegates who took exception to the mention of the 48-hour week without a reference to the 8-hour day.

The general discussion on the question of the 8-hour day or 48-hour week continued until the ninth day of the Conference when, by a vote of 66 in favour and none against, the following resolution was carried :—

“ Resolved that the Draft Convention and the proposed amendments submitted by the employers, employees and

Governments be referred to a commission to be appointed for consideration and report."

On the same day the Committee of Selection proposed that the Committee to examine the conditions in tropical countries should consist of three representatives from each of India, Japan, South Africa and tropical America; one representative from each of China, Persia and Siam, together with one Government delegate from each of Great Britain, Italy and Switzerland, one Employers' delegate from each of Great Britain, France and Poland, and one Workers' delegate from each of Great Britain, Italy and the Netherlands. The Constitution of this Committee of 24 members was unanimously approved of by the Conference. It held its first meeting the following day, 11th November, and sat continuously until the 24th November. The main Committee on Hours of Work consisted of fifteen members, five delegates from each of the groups. The results of the deliberations of both Committees, as adopted by the Conference, are incorporated in the Draft Convention limiting the hours of work in industrial undertakings to eight in the day and forty-eight in the week.

On the fifth day of the Conference, Committees were appointed to consider the following items in the agenda, namely:—

- (1) The question of preventing or providing against unemployment.
- (2) The question of the employment of women and children in unhealthy processes.
- (3) The question of the employment of women (*a*) before and after childbirth, (*b*) during the night; and
- (4) The question of (*a*) the minimum age of the employment of children, (*b*) the employment of children during the night.

While some of the questions referred to these Committees were of greater interest than others to India it was desirable that India should be represented on all the Committees. Mr. Kershaw was already acting on the Committee on Standing Orders, and Mr. Joshi (for Mr. Gompers) on the Committee on applications for admission to the Conference. Both they and myself had put down our names for the Committee on special countries, the proceedings of which we knew would occupy a good deal of time. All the same it was desirable that India should be represented on the other committees

but owing to the small size of the Indian Delegation this could not be arranged. India, therefore, had no representatives either on the Committee on unemployment or on the Committee on unhealthy processes. Mr. Kershaw and Mr. Joshi acted on the Committee on the employment of women, and Mr. Joshi and myself on the Committee on employment of children. Mr. Chatterjee acted in conjunction with Mr. Kershaw on the various Committees on which India was represented by a Government delegate, while Mr. Joshi had Mr. Wadia to officiate for him. The Employers' delegate from India had no advisers and the scope of his activities was limited accordingly. In addition to Committee meetings there were also daily meetings of the Employers' group at which matters of interest to employers were discussed in detail. In the circumstances it was impossible for me, acting alone, to find time to attend to various meetings and matters deserving the attention of the Employers' delegate. I had therefore to depend to a considerable extent on fellow delegates or their advisers for information as to what was passing in the several Committees of which I was not a member. This was an unsatisfactory position to be in, and no doubt care will be taken to obviate this disadvantage at future conferences.

Six draft Conventions and six Recommendations were adopted by the Conference as the result of the deliberations of the various committees and of the discussions on their reports in the plenary sittings of the Conference. In order to arrive at a proper understanding of the decisions reached in the Conference regarding India, it is necessary to refer in detail to the proceedings leading up to the adoption of the several drafts.

Draft Convention limiting the hours of work in industrial undertakings to eight in the day and forty-eight in the week. [See page 76.]

At an early stage of the Conference we had expressions of opinion from delegates belonging to each of the groups which showed clearly the attitude of western nations towards India and other eastern countries. In discussing the question of the 8 hour day and the 48 hour week on the sixth day of the Conference, one of the Italian Government delegates remarked: "What is the purpose of this Conference? Its purpose is to come to international understandings so that it may be impossible for some country, by not adhering to

regulations of labour accepted in other countries, to exercise an unfair competition and react unfairly on those countries which have a labour legislation." On the same day, the Employers' group put forward as an alternative to, or for consideration along with, the draft convention prepared by the Organising Committee, proposals which included the following :—

"As regards the general exceptions granted on account of climatic conditions, incomplete development of industrial organisation or other special circumstances affecting the efficiency of the workers, as indicated in Article 405 of the Treaty of Versailles, such an exception may not be claimed in any legislation with reference to export industries."

On the eighth day of the Conference the Workers' group put forward an alternative draft Convention, Article 9 of which reads as follows :—

"In those countries in which climatic conditions render the industrial efficiency of the workers substantially different, the following modifications of the provisions of this Convention may take effect.

And it was explained by the spokesmen of the Workers' delegates that "we have deliberately excluded the words 'the imperfect development of industrial organisation.' Of course we consider that dangerous, because we consider that no one can determine properly what they mean and because in any case we are opposed to anything being done except in countries where obviously the physical circumstances are such as to make it necessary to have a deviation."

The following day the Japanese Employers' delegate rose to a point of order in the Conference and pointed out that the amendment of the Workers' group could not be accepted in that it was contrary to Article 405 of the Peace Treaty which was mandatory and not optional in character. From the appendices attached to the report of the Commission on Hours of Work, published in the Provisional Record of the 15th day, it appears that the Workers' amendments were brought up for discussion in the Commission, but the Employers' group revised their original proposals and reserved their amendment to Article 9 of the Organising Committee's Draft

Convention until the publication of the proposals of the Tropical Committee.

I have referred to the foregoing incidents of the Conference in order to indicate the spirit in which delegates from other countries approached consideration of the application of the principle of the 8-hour day and 48-hour week to the special countries, as specified in Article 405 of the Peace Treaty. At the same time, I have pleasure in putting on record an appreciation of the open-minded manner in which delegates from other countries listened to the arguments and weighed the evidence put before them in the Committee appointed to consider the case of the special countries. This Committee was fortunate in having as its Chairman Mr. Barnes, whose long experience and intimate knowledge of labour questions were invaluable when it came to considering the application of western methods to eastern conditions. All the delegates of the special countries submitted to the Committee statements of their views on the question of working hours which were supplemented by the oral evidence. Copies of the written statements put in by the delegates from India of Government, Employers and Workers respectively have already been sent out to India, and the contents need not be referred to here. A good deal of the time of the Committee was taken up in discussing the case of Japan. The Workers' delegate from that country pressed the view that no case could be made out for exceptional treatment of Japan in connection with the 8-hour day. He moved that Japan be excluded from the list of countries to which special concessions should be granted, but this proposal was defeated in Committee by nine votes to three. It was unanimously agreed that India, Persia, Siam and China were entitled to special treatment. The extent of this special treatment caused considerable discussion, but eventually the Committee agreed upon recommendations which are incorporated in two reports published in the Provisional records of the 16th and 17th days of the Conference. The second of these reports dealt with Greece and Roumania only. In the latter country a delay of three years was granted in the application of the 8-hour day Convention for special reasons in connection with the demobilisation of the army and the removal of machinery from occupied territory. Delays of two years and three years respectively were granted in the case of certain industries in Greece for several reasons applicable chiefly to new areas of territory brought under the jurisdiction of the Greek Govern-

ment where it would take some time to organise not only industry but efficient administrative services. The first report covered all the other countries for which special treatment was required and will well repay perusal.* As regards Tropical American countries all the delegates desired was an expression of opinion as to when agriculture ended and industry began in sugar plantations, etc. The Committee were of the opinion that the solution of this difficulty was entirely within the jurisdiction of the competent national authority whose duty it was, under the terms of the main Convention, to define the line of division which separates industry from commerce and agriculture.

The Committee recommended that no modifications of the Convention as regards South Africa should be made until the Government of that country should lay before next Conference a statement of the modifications (if any) which it thought desirable to suggest in connection with industries such as coal mining and sugar refining.

Article II of the Draft Convention as adopted by the Conference reads as follows:—

“The provisions of this Convention shall not apply to China, Persia and Siam, but provisions limiting the hours of work in these countries shall be considered at a future meeting of the General Conference.”

The Government of each of these countries is to be asked to accept the principle of the protection of labour by factory legislation, and to submit proposals to next Conference.

The modifications in the application of the Convention to Japan are set forth in Article 9 of the Draft Convention adopted by the Conference and include:—

- (a) Permission to work up to 60 hours per week in the raw silk industry, and up to 57 hours per week in other industries except mines, where miners engaged in underground work may work up to 48 hours only in the week.
- (b) Permission to treat persons of 15 years of age as full time workers until 1st July 1925, when the age shall be raised to 16.

* See page 72.

- (c) The alteration in the number of persons employed in a place to make it liable to factory legislation from 15 or more (as at present) to 10 or more, instead of as under the main Convention where the employment of only one person brings a place within the scope of factory legislation.
- (d) Permission to delay the application of the Convention until 1st July 1922 instead of 1st July 1921.

It was only after a spirited debate and in the face of a minority report from the Japanese Workers' delegate, that the Committee's Report suggesting the above modifications for Japan was carried in the General Conference. On behalf of the Workers' group a motion was brought forward to the effect that the industrial condition of Japan was such as to justify the applications of the 8-hour day and the 48-hour week to all its industries within two years. This motion was proposed by one of the Vice-Presidents of the Conference, Mr. Jouhaux, the Workers' delegate from France, who is the Secretary-General of the leading Confederation of Labour in that country and also First Vice-President of the International Federation of Trade Unions. It was seconded by the Workers' delegate from the Netherlands, Mr. Oudegeest, who is also Secretary of the International Federation of Trade Unions. At one stage of the proceedings it looked as if the influence of the labour leaders would prevail, but a telling speech from Mr. Barnes, who emphasised the necessity for treating the understanding arrived at in Committee as of the nature of bargains or treaties, turned the scale against the labour leaders' motion which was defeated by a vote of 45 to 42; and ultimately the Committee's report regarding Japan was adopted, the vote being 56 for and 5 against.

The recommendations of the Committee as regards India are incorporated in Article 10 of the Draft Convention adopted by the Conference which reads as follows:—

“In British India the principle of a sixty hour week shall be adopted for all workers in the industries at present covered by the Factory Acts administered by the Government of India, in mines, and in such branches of railway work as shall be specified for this purpose by the competent authority. Any modification of this limitation made by the competent authority shall be subject to the provisions of Articles 6 and 7 of this Convention. In other respects the provisions of this

Convention shall not apply to India, but further provisions limiting the hours of work in India shall be considered at a future meeting of the General Conference."

Under the existing Indian factory laws, adult males may work twelve hours per day in Indian textile industries, women 11 hours, and children (between the ages of 9 and 14) 6 hours. If the Draft Convention is ratified by the Indian Legislature, the effect of the foregoing article will be to limit the hours of work in Indian industries to 60 per week for both men and women. It will be observed that Article 10 applies to mines as well as other industries. The limitation of hours of work of adults in mines, will, if adopted, form a new departure in Indian mining legislation, and this question will require careful consideration by those interested. Indeed the Committee recommended that the Government of India should be asked to consider the possibility of limiting the hours of underground work in mines to 54 in the week. They also recommended that the Government of India should be asked to consider the possibility of adopting a modified definition of "Factory," which would reduce the number of workers required to bring a factory under the scope of the Act. Under the existing Indian factory laws, this number is fixed at 50, although in certain cases it may be, and has been, reduced to 20.

Mr. Joshi, the Workers' delegate from India, gave notice of a motion to add to the proposed Convention concerning India.

- (1) The word "Factory" in the Convention to be applied to India should mean "any industry worked with steam, water or any other mechanical power or electrical power and employing not less than ten persons."
- (2) The hours of work for women employed in factories shall not exceed 54 a week.
- (3) Children under 14 shall not be employed for more than 30 hours a week.

These particular proposals had all been fully discussed in Committee and were brought up in the General Conference by Mr. Joshi in the hope that he might be successful in getting them adopted there. On the second last day of the Conference, however, Mr. Joshi withdrew his proposed amendment in order to save time and contented himself by putting in a written statement which

appears in the Provisional Record of the 20th day of the Conference. He closes that statement by saying that he postpones consideration of the questions mentioned in his amendment to the next year's meeting of the Conference in the strong hope that they will then receive very sympathetic consideration. The Committee's Report regarding India and the other countries, except Japan, was adopted by the Conference by a vote of 67 to 1, the dissenting vote being that of the Workers' delegate from Belgium, Mr. Mertens, who is one of the Vice-Presidents of the International Federation of Trade Unions.

In addition to the Draft Convention limiting the hours of work in industrial undertakings to eight in the day and forty-eight in the week, two resolutions were passed by the main Committee on the Hours of Work. One had reference to work of re-construction in devastated areas, which it was agreed justified special consideration. The other was in the following terms :—

The provisions of this convention shall not interfere with any better conditions already in operation, or agreed upon, for all or part of the workers of any country, neither shall they interfere with any negotiations now proceeding in which the workers are asking for better conditions than the convention provides.

Both resolutions were adopted unanimously at the plenary sitting of the Conference on 25th November. Another resolution of importance was proposed by the Workers' delegates from France and Italy and was ultimately carried unanimously on the second last day of the Conference in the following form :—

The Conference hopes that in no case should the wages of workmen be reduced simply by reason of the introduction of the 8-hour day, and the 48-hour week, in order that the conditions which exist in certain industries and which the present convention allows to continue may not be aggravated by the imposition of lower wages on the workers.

Draft Convention concerning unemployment. [See page 85.]

Recommendation concerning unemployment. [See page 104.]

**Recommendation concerning reciprocity of treatment
of foreign workers. [See page 107.]**

On 3rd November the Conference referred to a Commission of 30 members, the consideration of the second question on the Agenda *viz.*:—"Preventing or providing against unemployment." The Indian delegation was not represented on this Commission. In the course of its deliberations, various questions of considerable magnitude and complexity arose and had to be investigated, and the Report of the Commission which was published in the Provisional Record of the 15th day of the Conference is of great interest although, at the moment, it has little direct bearing on the question of employment or unemployment in India. The report is in six chapters dealing respectively with the questions of:—

- (1) The collection and publication of information.
- (2) Employment.
- (3) Insurance against unemployment.
- (4) The distribution of public works.
- (5) Protection for unemployed foreign workers.
- (6) Reciprocity in the treatment of foreign workers.

The debate on the Report extended over three full sessions of the Conference, and gave delegates opportunities of bringing forward proposals of a somewhat original nature. In this connection particular reference might be made to the discussions relating to the Minority Report on a motion offered by the Italian Workers' delegate in the following terms:—

Considering that the question of unemployment is closely related to that of the distribution of raw materials and the means of maritime transport and freight rates, considering further that the question can only be effectively dealt with by the Council of the League of Nations, it is recommended that the Council should undertake to examine and solve the problem.

It was only natural that this motion should receive considerable support from countries which are short of raw materials, but the closeness of the voting came as a surprise, the actual figures being 40 in favour of and 43 against the motion, which was therefore lost.

Eventually the proposals of the Committee were adopted by the Conference and incorporated in the Draft Convention and the Draft Recommendation concerning unemployment, copies of which are given at pages 85 and 104. It will be seen that the Draft Convention

provides for periodical statistical information concerning unemployment, a system of free public employment agencies, and reciprocity of insurance benefits to the workers of different countries. The Recommendation concerning unemployment covers the prohibition of employment agencies for profit, the recruiting of workers by mutual agreement between countries, unemployment insurance, and the co-ordination of work undertaken under public authority, with a view to reserving such work, as far as practicable, for periods of unemployment and for districts most affected by it. The General Conference also adopted another Recommendation covering reciprocity of treatment of foreign workers as regards the benefit of laws and regulations for the protection of workers and the right of lawful organization enjoyed by them.

In addition to the foregoing Draft Convention and Recommendations, the Conference passed three Resolutions referring to unemployment. The first of these invites the Governing Body to form an International Commission empowered to formulate recommendations as to the best methods to be adopted in each State for collecting and publishing information regarding unemployment. The second Resolution provides for the establishment of a special section of the International Labour Office which will be charged with the consideration of all questions concerning the migration of all workers and the situation of foreign wage earners. The third Resolution provides for the appointment by the Governing Body of an International Commission to consider, and report to the next Conference, what measures can be adopted to regulate the migration of workers out of their own States, and to protect the interests of wage earners residing in a State other than their own; the representation of States in the European countries on this Commission being limited to one half of the total membership of the Commission. This last clause regarding representation was inserted in the Resolution at the instance of the Employers' delegate from South Africa, who voiced a general feeling of dissatisfaction regarding the constitution of the governing body with whom rested the appointment of the International Commission.

Draft Convention concerning the employment of women before and after childbirth. [See page 88.]

On 4th November the Conference appointed a Committee of 21 to consider the employment of women (a) before and after

childbirth, including the question of maternity benefit; (b) during the night, with special reference to the Report of the Organising Committee on this subject and the recommendations made on the report. Mr. Kershaw and Mr. Joshi represented India on this Committee, which included six ladies. Other women advisers not actually nominated had the right to be present at meetings of this Committee in their capacity as advisers. One of the advisers to the Government delegates from Great Britain, Miss Constance Smith, Senior Lady Inspector of Factories, was elected Chairman of the Committee and presented its Report to the Conference on 28th November. A good deal of discussion ensued before the terms of the Draft Convention concerning the employment of women before and after childbirth were finally adjusted. The Spanish Government delegates endeavoured to make the proposed convention applicable to commercial as well as industrial undertakings, but their motion was lost by a vote of 43 against 40. During the afternoon session of the same day, the French Workers' delegate made another effort in a similar direction but Mr. Barnes, who was in the chair, ruled against Mr. Jouhaux's motion. The subject, however, was brought up again on the last day of the Conference, and by a vote of 48 for and 41 against, it was decided to amend the Draft Convention so as to include commerce as well as industry. This Convention therefore differs from all the other Draft Conventions and Recommendations adopted by the Conference in that it applies to commercial undertakings whereas the others are limited to industrial undertakings only.

The Spanish Government delegate also proposed an amendment to the Convention to the effect that the amount of the maternity benefit should be determined by taking into account the number of children of the worker entitled to such benefit. Twice the vote on this amendment resulted in a tie, and a majority not having voted in favour of it, the amendment was lost. From the copy of the Draft Convention, see page 88, it will be seen that a woman in any public or private industrial or commercial undertaking will not be permitted to work for six weeks following her confinement; will have the right to leave work if she produces a medical certificate stating that her confinement will probably take place within six weeks, and will, while she is absent from her work, be paid benefits sufficient for the full and healthy maintenance of herself and her child, provided either out of public funds or by means of a system of insurance.

Besides the Draft Convention, the Conference adopted a resolution submitted by the Committee recommending that the Government be requested to study the question of giving every working woman the right to remain away from work after the birth of a child for a longer period than that fixed in the Draft Convention and to receive certain benefits during her absence for the purpose of enabling her to remain with and nurse her child, this subject to be placed upon the agenda for next Conference. The following motion proposed by the Committee was also carried in the Conference, *viz.* :—

That the Indian Government be requested to make a study of the question of the employment of women before and after confinement, and of maternity benefits before the next Conference, and to report on these matters to the next Conference.

Draft Convention concerning the employment of women during the night. [See page 91.]

As indicated above, the Committee that considered the employment of women before and after childbirth also considered the employment of women at night and the extension and application of the Berne Convention of 1906 on the prohibition of the night work of women employed in industry. In their report the Committee expressed complete agreement with the principle embodied in the Berne Convention that women in industry should not be employed during the night. They proposed some changes on that Convention the main provisions of which, however, will remain untouched. Instead of attempting to modify the existing Convention the Committee recommended that a new Convention concerning the employment of women at night be put forth by the Conference, to supersede the Berne Convention of 1906. A copy of the draft Convention adopted by the Conference is given at page 91. It provides that women shall not be employed during the night in any public or private industrial undertaking, the term "night" signifying a period of at least eleven consecutive hours, including the interval between 10 o'clock in the evening and 5 o'clock in the morning. In countries where no Government regulation as yet applies to the employment of women during the night, the term "night" may for a maximum period of three years be declared to signify a period of only ten hours, which is also the period that may be specified in industrial undertakings that are influenced by the seasons and in all cases

where exceptional circumstances demand it. The following articles of the Convention are of particular interest to India, *viz.* :—

- (5) In India and Siam, the application of Article 3 of this Convention may be suspended by the Government in respect to any industrial undertaking, except factories as defined by the national law. Notice of every such suspension shall be filed with the International Labour Office.
- (7) In countries where the climate renders work by day particularly trying to health, the night period may be shorter than prescribed in the above articles, provided that the compensatory rest is accorded during the day.

In view of the fact that under the existing Indian factory laws women cannot be employed in factories before 5-30 A.M. or after 7 P.M., the ratification of the proposed convention will not affect Indian industries to any extent.

Recommendation concerning the prevention of Anthrax.
[See page 108.]

Recommendation concerning the protection of women and children against lead poisoning. [See page 105.]

Recommendation concerning the establishment of Government Health Services. [See page 108.]

On 4th November the Conference appointed a Committee of 21 members to consider items Nos. 3(c) and 4(c) on the agenda, *viz.* :— the employment of women and children in unhealthy processes. Twelve different countries were represented on this Committee in which none of the Indian delegates had a seat. The report of the Committee is published in the Provisional Record of the 12th day of the Conference, and forms an interesting and instructive treatise on subjects which, as yet, have received little attention in Indian factory legislation. The typically unhealthy processes considered by the Committee were (1) Intoxication by lead ; (2) Infection from anthrax ; and (3) Intoxication by carbonic oxide gas. All three affect men, women and children in industry, and the general principles of exclusion or limitation of women and children in them hold good for practically all other unhealthy processes.

On the subject of anthrax in Great Britain, the Chairman of the Committee, Dr. Legge, Senior Medical Inspector of Factories, who was one of the advisers to the British Government delegates, wrote an appendix to the report which is of interest to all concerned in the handling of hides, wool, horse-hair or bristles of animals. The Recommendation adopted by the Conference suggests that arrangements should be made for the disinfection of wool infected with anthrax spores, either in the country exporting such wool or, if that is not practicable, at the port of entry in the country importing such wool. This recommendation is of interest to India and will no doubt receive the attention of those concerned.

The Recommendation concerning the protection of women and children against lead poisoning adopted by the Conference suggests that the employment of women and young persons under the age of 18 shall be altogether prohibited in certain processes, and shall only be permitted in processes involving the use of lead compounds on conditions specified.

The Recommendation concerning the establishment of Government Health Services adopted by the Conference suggests the establishment, as soon as possible, not only of a system of efficient factory inspection but also of a Government service specially charged with the duty of safeguarding the health of the workers, which will keep in touch with the International Labour Office. In the course of the discussion in the Conference on this Recommendation a motion was proposed and carried unanimously to the effect that an advisory Committee on which the Governments, the employers, and the workers should all be represented, be appointed to act in an auxiliary capacity and to keep in touch with the activities of the health department of the International Labour Office.

Copies of the Recommendations above referred to are given at pages 105 and 108.

Draft Convention fixing the minimum age for admission of children to industrial employment. [See page 95.]

On 4th November the Conference appointed a Committee of 21 to consider the questions of (a) the minimum age of employment of children and (b) the employment of children during the night. Fifteen countries were represented on the Committee, India being represented by its Employers' and Workers' Delegates. The Indian

Government delegates lodged with the Committee of Selection a protest against neither of them having a seat on a Committee set up to consider children's employment, a matter in which India was interested. This was put right to some extent when the Committee appointed a Sub-Committee on Oriental countries on which a seat was found for Mr. Chatterjee. This Sub-Committee consisted of the Oriental members of the main Committee, viz.:—the Employers' and Workers' delegates from India, the Employers' delegate and a Government delegate from Japan together with co-opted members in the persons of a Government delegate from India, the Workers' delegate from Japan, and a representative from each of China, Persia, and Siam. The Chairman of this Committee was Mr. Bellhouse, Deputy Chief Inspector of Factories, one of the advisers to the British Government delegates. Statements were submitted by the members of the Sub-Committee which showed great variations in the educational and industrial conditions existing in the different countries concerned. Japan has both a Factory Act and compulsory education. India has a Factory Act but no general compulsory system of education, although recently some permissive Acts have been passed in several provinces giving to municipal authorities power to adopt compulsory education. China, Siam and Persia have neither Factory Acts nor compulsory education laws. The Sub-Committee were strongly of opinion that the age of admission of children to industry is necessarily closely linked up with the question of education. They therefore recommended certain modifications of the Draft Convention in the case of Japan, but so far as the other countries were concerned they could not recommend the application to them of the Convention in any shape or form. It was proposed that the question of the application of the Convention to India, China, Siam, and Persia should be deferred until the next Conference with a view to proposals being submitted by the Governments of these countries. When the report of the Sub-Committee was under consideration in the main Committee on Children's Employment the Workers' delegates from India and Great Britain moved that in India the age of admission should be fixed at 12 for (a) factories with mechanical power and employing not less than 10 persons, (b) mines and quarries, (c) railroads and (d) docks. It was, however, decided by a majority of 6 to 2 to adopt the recommendations of the Sub-Committee, and the Report of the Committee on Employment of Children was framed accordingly. It is published in the Provisional Record of

the 12th day of the Conference which also contains notice of an amendment to the proposed Draft Convention by the British Workers' delegate. This amendment was in identical terms to that proposed by the Indian Workers' delegate when the question was under consideration in Committee. When the report came up for discussion on the 13th day of the Conference Miss Margaret Bondfield, a member of the Parliamentary Committee of the Trades Union Congress, one of the advisers to the British Workers' delegate, on behalf of that delegate moved the amendment standing in his name. The Italian Workers' delegate seconded the amendment which was supported by Mr. Joshi in a speech which is reported in full in the Provisional Record of the 13th day of the Conference. Mr. Chatterjee and the Government delegate from South Africa both spoke against the amendment, and strongly advocated the adoption of the report of the Committee which had carefully considered the whole question and had submitted recommendations based on the evidence. After the closure of the debate was moved by the Workers' delegate from Canada, the amendment of the British Workers' delegate was carried by a vote of 39 to 21. When the Draft Convention was submitted for approval on the 20th day of the Conference it was adopted by a vote of 91 to 3, the dissenting three being the Indian Government delegates and Employers' delegate.

Article 6 of the Draft Convention* fixing the minimum age for admission of children to industrial employment, reads as follows:—

“The provisions of Article 2 shall not apply to India but in India children under twelve years of age shall not be employed (a) in manufactories working with power and employing more than ten persons; (b) in mines, quarries, and other works for the extraction of minerals from the earth; (c) in the transport of passengers or goods or mails by rail, or in the handling of goods at docks, quays and wharves, but excluding transport by hand.”

If ratified by the Indian Government, the effect of this Article will be to raise the age limit of children from 9 to 12 years, to widen the existing definition of a factory and to bring mining and the transport and handling of goods within the scope of factory legislation in India.

It will be noted that the age limit for children in other countries ratifying the Convention is fixed at 14 years except in the case of

* See page 95.

Japan where children over 12 may be admitted into employment if they have finished the course in the elementary school. It is proposed that every employer shall keep a register of all persons under the age of 16 years employed by him in industrial undertakings. The Convention need not be brought into operation until 1st July 1922.

Draft Convention concerning the night work of young persons employed in industry. [See page 99.]

The report of the Committee on children's employment on the second question referred to them—the employment of young persons during the night,—is published in the Provisional Record of the 16th day of the Conference. Subject to slight amendments in the debate which took place on the 20th day, the report was adopted and is incorporated in a Draft Convention, see page 99. Its leading provision is contained in Article 2 which prohibits the employment during the night of young persons under 18 years of age. This is an advance of 2 years on the limit which was adopted at the Berne Conference in 1913. Provision, however, is made for young persons over 16 being employed during the night in certain processes which are required to be carried on continuously day and night. As in the case of the Draft Convention concerning the employment of women during the night, the term "night" in this convention signifies a period of at least eleven consecutive hours, including the interval between ten o'clock in the evening and five o'clock in the morning. And here also it is provided that in those tropical countries in which work is suspended during the middle of the day the night period may be shorter than eleven hours if compensatory rest is accorded during the day. The latter provision was inserted at the instance of the Indian delegation after being omitted in the Draft of the Organising Committee although included in the Berne Draft Convention of 1913.

Article 6 of the Draft Convention provides that:—

In the application of this Convention to India, the term "industrial undertakings" shall include only "factories" as defined in the Indian Factory Act, and Article 2 shall not apply to male young persons over fourteen years of age.

Under the existing Indian factory laws, no woman or child may be employed in any factory before half past five o'clock in the morning or after seven o'clock in the evening. The prohibition therefore of the employment during the night of young persons under 18 years of age will not affect Indian industries so long as Article 2 is not made applicable to male young persons over 14 years of age.

This convention need not be brought into operation before 1st July 1922.

Recommendation concerning the application of the Berne Convention of 1906, on the prohibition of the use of white phosphorus in the manufacture of matches. [See page 109.]

A statement as to the position of this matter is contained in the Report of the Organising Committee, and this was supplemented by further information received during the Conference in reply to a letter addressed by the Secretary-General to the delegates of the countries which have not adhered to the Berne Convention of 1906. The position at date is detailed in the Proceedings of the Conference as published in the Provisional Record of its 23rd session. It is recorded there that the Indian Government state they have requested His Majesty's Government to give formal notice of the adhesion of India to the Berne Convention. On the motion of one of the British Government delegates, it was resolved that the Conference recommends to all members of the International Labour Organisation which have not already done so that they should adhere to the International Convention adopted at Berne in 1906 on the prohibition of the use of white phosphorus in the manufacture of matches. This resolution having been adopted by the Conference was incorporated into a Recommendation, a copy of which will be found at page 109.

On the last day of the Conference, one of the French Government delegates, on behalf of the Drafting Committee, proposed the following resolution :—

That the Conference express the wish that the provisions of the draft conventions adopted by the Conference may be followed in the legislation of all industrial countries, and to this end it directs the Governing Body of the International Labour Office to communicate the text of the draft conventions to all the Governments of the states which are not

members of the International Labour Organisation and to study the possible methods for inducing these states to embody the provisions of these conventions in their domestic legislation.

After this resolution was carried the following motion was also agreed to:—

Seeing that the Treaty of Peace has not yet been ratified, the Conference gives authority to the Governing Body to take such measures as may be necessary to render the resolution of the Conference effective. Therefore, when this Conference adjourns to-day, it adjourns leaving it at the discretion of the Governing Body to re-convene the present meeting or to declare it closed as may be deemed advisable.

It is possible, therefore, that the delegates may be called together again before long, in order to confirm the proceedings of the Conference at Washington.

It is certain there will be a considerable amount of business ready for discussion at the next annual meeting of the members of the International Labour Organisation. Many notices of subjects for discussion at the next Conference were handed in at Washington. Indeed, on the last day of the Conference, Mr. Fontaine (France), Chairman of the Committee of Selection, expressed the opinion that the number of items proposed was too large to enable them all to be discussed by the next Conference. He therefore submitted a motion that only two very important questions should be formally recommended for next year's agenda, *viz.*:—the position of agricultural labourers, and the revision of the statutes regarding the composition of the Governing Body. The motion was carried by 41 to 14, but as this was less than a quorum it could not be adopted, and the questions referred to could not be formally placed on record for inclusion amongst the items on the agenda of the next annual meeting. The Canadian Labour delegate therefore proposed that the whole question of the agenda of the next meeting be left to the Governing Body in the same manner as the Organising Committee undertook the work for this Conference, and that each of the different groups should send their suggestions and resolutions to the Governing Body for consideration as contemplated by Article 400 of the Peace Treaty. This motion was carried by 64 votes to 7.

As mentioned in Article I of the Draft Convention limiting the hours in industrial undertakings to eight in the day and forty-eight

in the week, the provisions relative to transport by sea and on inland water-ways shall be determined by a Special Conference dealing with employment at sea and on inland water-ways.

The question of revising the Standing Orders and the Statutes regarding the composition of the Governing Body as referred to above, arose largely as the result of the elections of the members of that body at the Conference. In Part XIII of the Peace Treaty, it is provided that the permanent Organisation shall consist of :—

- (1) The General Conference, and
- (2) An International Labour Office controlled by the Governing Body consisting of 24 persons appointed in accordance with Article 393 of the Treaty.

This Article provides that the Governing Body shall be constituted as follows :—

- 12 persons representing the Governments ;
- 6 persons elected by the Delegates to the Conference representing the Employers ; and
- 6 persons elected by the Delegates to the Conference representing the Workers ;

of the twelve persons representing the Governments, 8 shall be nominated by the countries which are of chief industrial importance and 4 by the countries selected for the purpose by the Government delegates to the Conference excluding the delegates of the 8 countries. Any question as to which are the countries of chief industrial importance shall be decided by the Council of the League of Nations.

In the circular letter of 10th May 1919 issued by the Organising Committee, it was pointed out that the appointment of the Governing Body would have to be dealt with at Washington, and the matter was accordingly put down as one of the items on the Organising Committee's suggested programme. In their circular of 20th August 1919 the Organising Committee confirmed a telegram which they had addressed to all the Governments pointing out that the question of the eight countries of chief industrial importance had to be settled before the Washington Conference, and suggesting the following list, *viz.*:—United States, Great Britain, France, Germany, Italy, Belgium, Japan, Switzerland and Spain, the nomination of Spain to lapse if Germany was admitted to the Conference. On the first day of the Conference, the President of the Organising Committee in his report announced that the above list had been objected to by

Canada, Poland and Sweden, whose objections were transmitted to the League of Nations for decision. It appears that India also objected to the Organising Committee's list. Nothing more was published concerning this matter until the seventeenth day of the Conference when the Secretary-General announced the results of the elections which had taken place in the three groups for members of the Governing Body, viz.:—

(1) *Government Members* :—

(a) as suggested by the Organising Committee :—

United States, Great Britain, France, Germany, Italy, Belgium, Japan and Switzerland.

(b) Elected by remaining States :—

Spain, Argentine, Canada and Poland.

(2) *Employers' Nominees from* :—

Great Britain, France, Italy, Belgium, Czecho-Slovakia and, pending the adhesion of the United States, Switzerland.

(3) *Workers' Nominees from* :—

France, Germany, Netherlands, Great Britain, Sweden, and, pending the adhesion of the United States, Canada.

In a letter received by the Secretary-General from the Chairman of the Government delegates, it was intimated that, pending the adhesion of the United States, Denmark had been nominated as a substitute among the eight countries of the chief industrial importance. In this letter it was also stated that the Government delegates of China and Japan objected to the Government nominations, advancing amongst other reasons the importance of their united populations which represent more than one-third of the total inhabitants of the globe. It was stated further that the Indian Government delegates refused to take part in the election, against which they protested on the grounds that the Council of the League of Nations had not yet pronounced on the objections lodged to the list of the eight states of chief industrial importance, as proposed by the Organizing Committee.

In the Conference the Cuba Government Delegation, while expressing satisfaction at the nomination of the Argentine Republic, called attention to the fact that only a single place had been assigned

to the twenty Latin-American countries, from whose representatives a written protest was therefore submitted. One of the Government delegates from Ecuador supported this protest in a speech in which he stated that of the 120 members that composed the Committees to study the different matters of the Conference, 100 had been Europeans, 2 had been from the Spanish-American countries and the balance from the rest of the world. In the proposed Governing Body, 20 members had been given to Europe, 3 elsewhere and only 1 to the twenty Latin-American countries. The debate on the subject was closed on the motion of one of the Belgian Government delegates by a vote of 55 to 16, and both the Employers' and Workers' delegates from South Africa intimated that they were lodging objections against the method of electing members of the Governing Body. Their formal letters of protest are published in the Provisional Record of the 20th day of the Conference. On the 19th day the South African Employers' delegates had given notice of motion that the following matter be placed on the agenda of the next Conference :—

That in view of the fact that no less than 20 out of the 24 members of the Governing Body of the International Labour Office, appointed under Article 393 of the Peace Treaty, are representatives of European countries, the Conference proceed under Article 422 of the Treaty to amend the said Article 393 by laying down a maximum total representation of countries in Europe, so as to ensure more adequate representation of countries outside Europe.

On the 18th day of the Conference, notice was given of the following motion to be moved by the South African Employers' delegate :—

That this Conference expresses its disapproval of the composition of the Governing Body of the International Labour Office inasmuch as no less than 20 of the 24 members of that Body are representatives of European countries.

This notice was signed by representatives from 10 countries including, besides Latin-American States, Japan, Canada, India, South Africa and China; but it was not until the very last day of the Conference that the motion was brought to a vote and carried by 44 to 39.

The first meeting of the Governing Body, as elected at the Conference, was held on the 27th day of November when Mr. Arthur Fontaine (France) was elected permanent Chairman. It was decided

not to elect the Director of the Labour Office permanently until the Governing Body had been fully constituted and Mr. Albert Thomas of France was chosen to act as Provisional Director. Mr. Fontaine was one of the French Government delegates to the Conference, and is described in the Official Guide as Director of the Labour Department, Ministry of Labour; Chairman of Executive Committee of the French State Railways. He acted as substitute for the French representative on the Commission on International Labour Legislation set up by the Peace Conference, and was appointed General Secretary of the Commission. He was the French representative on the Organising Committee of the International Labour Conference and was appointed President of the Committee. Mr. Albert Thomas is the well-known French Socialist. He has acted as Under-Secretary for War and also Minister of Munitions in the French Government.

Another meeting of the Governing Body was held at Washington on the 28th November when it was decided that the International Labour Office should be located provisionally in London, which is at present the temporary seat of the Secretariat of the League of Nations. The next meeting of the Governing Body was held in Paris on 26th January 1920, and fixed the date of closing of the Washington Conference as the 27th January 1920.

A. R. MURRAY,

Employers' Delegate.

IX.—THE COMMITTEE ON THE APPLICATION OF THE FORTY-EIGHT-HOUR WEEK CONVENTION TO SPECIAL COUNTRIES.

Article 405 of the Treaty of Peace includes the following paragraph :—

In framing any recommendation or draft convention of general application, the conference shall have due regard to those countries in which climatic conditions, the imperfect development of industrial organisations or other special circumstances make the industrial conditions substantially different, and shall suggest the modifications, if any, which it considers may be required to meet the case of such countries.

A Committee was accordingly appointed to consider the application of the convention relating to the 48-hour week to India, Japan, Siam, Persia, Tropical America, South Africa and China. An account of its constitution and its deliberations is given in article VIII (pages 50 to 56). Of its report the general portion and the special part relating to India are printed below.

Report of the Committee.

The committee held 10 sessions, the first being on 11th November, and the last on November 22nd. At its first meeting the Rt. Hon. G. N. Barnes (Great Britain) was elected chairman, and Mr. Barnes presided throughout all deliberations of the committee.

The committee took the view that its functions were confined strictly to the consideration of the application of the 48-hour convention to special countries. It did not consider it to be within its province to make special recommendations on the hours of work of particular classes of workers. It conducted all its deliberations on the understanding that nothing embodied in the modified conventions which it proposed and in its further suggestions should be construed as affording any justification for an increase of hours in the case of those workers who, though they came within the terms of the conventions, had already secured shorter working hours.

The committee, however, believes that all the recommendations embodied in its report, represent a substantial improvement in the conditions of the workers in the countries which it has considered.

On the subject of children's employment the committee passed the following resolution :

The committee affirms the principle that, as regards the employment of children in industrial undertakings in which hours of work have been limited by this convention, the limit of eight hours should be regarded everywhere as an absolute maximum, and that, if in any country signatory to this convention there are children working more than 8 hours per day in industrial undertakings, such practice should be discontinued.

The committee is happy to report that it was able to arrive at most of its decisions with a considerable degree of unanimity. The only point of principle on which there was a fundamental divergence of opinion was on the question of the application of the convention to Japan. On this matter, the Japanese labour delegate held the view that Japan should be treated in precisely the same way as the other countries which were parties to the convention, and that no special modifications should be permitted. The grounds for that opinion are set forth in the attached minority report.

The draft convention embodying the detailed modifications with regard to Japan was accepted by 15 votes to 3. The committee desires to express its appreciation of the conciliatory spirit which was displayed by the representatives of Japan in the protracted discussions which preceded the adoption of the modified draft convention.

The reports on India, Siam, Persia, Tropical America, and South Africa, were adopted *nem. con.* The report on China was adopted by 10 votes to 2.

The committee also had referred to it, from the committee on hours of work, the request of the Government delegates of Greece and Roumania, that some delay be granted to those countries in the application of the main convention. The committee unfortunately was not in a position to hear statements from the different interests represented in these countries, and has, therefore, adjourned the consideration of this matter for a short time. It will submit

at an early date a supplementary report as regards these two countries.

* * * * *

INDIA.

1. The committee has had the advantage of access to a good deal of the available information about Indian industrial conditions, by means of the official replies of the Indian Government and the statements of the delegates of the Government, the employers, and the workers. But it is clear that that information covers only a relatively small part of the ground, mainly for the reason that in India conditions do not approximate to anything which is known in the western world. The total number of persons in British India employed in organised industrial undertakings, such as factories, mines, and railways, constitutes an insignificant proportion of the whole population. Other industries are still almost universally on a small scale, and the predominant industry of India is agriculture.

2. At the same time it appears that such industries as exist in India, especially textiles, and Government and private railway and engineering shops, are quite well organised. It is true that present Indian conditions are not such as to make easy in the immediate future either large scale factory production or the application of western standards in the restriction of working hours. Nevertheless, in the industries mentioned, something has already been done in both directions. India has had three factory laws, each law marking a substantial advance on its predecessor. The committee has had evidence that the laws have been well administered and are effective.

3. The factory law at present covers mainly textiles and certain branches of railway and engineering work, and applies only to establishments in which at least 50 persons are employed, though it is possible, by administrative order (which has often been brought into effect where abuses were suspected) to bring under the law establishments employing 20 persons.

4. The committee is of opinion that the present conference can legislate usefully only with regard to large industrial undertakings, such as are already within the scope of the factory acts and mines. With regard to these (*i.e.*, all industries at present under the factory acts, mines, and certain branches of railway and iron works), the

committee recommends that the Government of India should be asked to adopt the principle of a 60-hour week.

5. The committee however recommends the conference to lay before the Government of India a very urgent request that it should consider two important matters; first, the possibility of adopting a lower limit for underground work in mines, and secondly, the possibility of adopting in the light of standards accepted in other countries a modified definition of "factory," which would reduce the number of workers required to bring a factory under the scope of the act. The committee thinks that it should be possible at an early date to limit the hours of underground work in mines to 54, or even lower; and recommends this step to the favourable consideration of the Government of India.

6. With regard to small industries, not coming under the provisions of the Factories Act, the Government of India might be requested to expedite as much as possible the collection of information and statistical data. And as apart from this the committee understands that inquiries were initiated several months ago relating to the amendment of the Factories Act with a view to bettering the conditions of labour, the Government of India might also be requested to communicate at the earliest possible date, and if possible before the next conference, to the International Labour Office the results of these inquiries and the proposals of the Government for carrying into effect the tendencies apparent in modern legislation.

7. The committee therefore recommends the conference to embody the substance of paragraph 4 of this report in the form of a convention, and to communicate to the Government of India the observations and requests of the remaining paragraphs.

* * * *

G. N. BARNES, *Chairman.*

H. J. W. HETHERINGTON, *Secretary.*

**X.—DRAFT CONVENTIONS ADOPTED BY THE INTERNATIONAL
LABOUR CONFERENCE AT WASHINGTON.**

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Draft Convention limiting the hours of work in Industrial undertakings to eight in the day and forty-eight in the week.

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Washington by the Government of the United States of America on the 29th day of October 1919, and

Having decided upon the adoption of certain proposals with regard to the "application of the principle of the 8-hours day or of the 48-hours week," which is the first item in the agenda for the Washington meeting of the Conference, and

Having determined that these proposals shall take the form of a draft international convention,

adopts the following Draft Convention for ratification by the Members of the International Labour Organisation, in accordance with the Labour Part of the Treaty of Versailles of 28th June, 1919, and of the Treaty of St. Germain of 10th September, 1919 :

Article I.

For the purpose of this Convention, the term "industrial undertaking" includes particularly :—

- (a) Mines, quarries, and other works for the extraction of minerals from the earth.

- (b) Industries in which articles are manufactured, altered, cleaned, repaired, ornamented, finished, adapted for sale, broken up or demolished, or in which materials are transformed; including shipbuilding and the generation, transformation, and transmission of electricity or motive power of any kind.
- (c) Construction, reconstruction, maintenance, repair, alteration, or demolition of any building, railway, tramway, harbour, dock, pier, canal, inland waterway, road, tunnel, bridge, viaduct, sewer, drain, well, telegraphic or telephonic installation, electrical undertaking, gas work, waterwork or other work of construction, as well as the preparation for or laying the foundations of any such work or structure.
- (d) Transport of passengers or goods by road, rail, sea or inland waterway, including the handling of goods at docks, quays, wharves or warehouses, but excluding transport by hand.

The provisions relative to transport by sea and on inland waterways shall be determined by a special conference dealing with employment at sea and on inland waterways.

The competent authority in each country shall define the line of division which separates industry from commerce and agriculture.

Article 2.

The working hours of persons employed in any public or private industrial undertaking or in any branch thereof, other than an undertaking in which only members of the same family are employed, shall not exceed eight in the day and forty-eight in the week, with the exceptions hereinafter provided for.

- (a) The provisions of this Convention shall not apply to persons holding positions of supervision or management, nor to persons employed in a confidential capacity.
- (b) Where by law, custom, or agreement between employers' and workers' organisations or, where no such organisations exist, between employers' and workers' representatives, the hours of work on one or more days of the week are less than eight, the limit of eight hours may be exceeded on the remaining days of the week by the

sanction of the competent public authority, or by agreement between such organisations or representatives; provided, however, that in no case under the provisions of this paragraph shall the daily limit of eight hours be exceeded by more than one hour.

- (c) Where persons are employed in shifts it shall be permissible to employ persons in excess of eight hours in any one day and forty-eight hours in any one week, if the average number of hours over a period of three weeks or less does not exceed eight per day and forty-eight per week.

Article 3.

The limit of hours of work prescribed in Article 2 may be exceeded in case of accident, actual or threatened, or in case of urgent work to be done to machinery or plant, or in case of "force majeure," but only so far as may be necessary to avoid serious interference with the ordinary working of the undertaking.

Article 4.

The limit of hours of work prescribed in Article 2 may also be exceeded in those processes which are required by reason of the nature of the process to be carried on continuously by a succession of shifts, subject to the condition that the working hours shall not exceed fifty-six in the week on the average. Such regulation of the hours of work shall in no case affect any rest days which may be secured by the national law to the workers in such processes in compensation for the weekly rest day.

Article 5.

In exceptional cases where it is recognized that the provisions of Article 2 cannot be applied, but only in such cases, agreements between workers' and employers' organisations concerning the daily limit of work over a longer period of time may be given the force of regulations, if the Government, to which these agreements shall be submitted, so decides.

The average number of hours worked per week, over the number of weeks covered by any such agreement shall not exceed forty-eight.

Article 6.

Regulations made by public authority shall determine for industrial undertakings :

- (a) The permanent exceptions that may be allowed in preparatory or complementary work which must necessarily be carried on outside the limits laid down for the general working of an establishment, or for certain classes of workers whose work is essentially intermittent.
- (b) The temporary exceptions that may be allowed, so that establishments may deal with exceptional cases of pressure of work.

These regulations shall be made only after consultation with the organisations of employers and workers concerned, if any such organisations exist. These regulations shall fix the maximum of additional hours in each instance, and the rate of pay for overtime shall not be less than one and one-quarter times the regular rate.

Article 7.

Each Government shall communicate to the International Labour Office :—

- (a) A list of the processes which are classed as being necessarily continuous in character under Article 4 ;
- (b) Full information as to working of the agreements mentioned in Article 5 ; and
- (c) Full information concerning the regulations made under Article 6 and their application.

The International Labour Office shall make an annual report thereon to the General Conference of the International Labour Organisation.

Article 8.

In order to facilitate the enforcement of the provisions of this Convention, every employer shall be required :—

- (a) To notify by means of the posting of notices in conspicuous places in the works or other suitable place, or by such other method as may be approved by the Government, the hours at which work begins and ends, and where work is carried on by shifts, the hours at which each shift begins and ends. These hours shall be so fixed

that the duration of the work shall not exceed the limits prescribed by this Convention, and when so notified they shall not be changed except with such notice and in such manner as may be approved by the Government.

- (b) To notify in the same way such rest intervals accorded during the period of work as are not reckoned as part of the working hours.
- (c) To keep a record in the form prescribed by law or regulation in each country of all additional hours worked in pursuance of Articles 3 and 6 of this Convention.

It shall be made an offence against the law to employ any person outside the hours fixed in accordance with paragraph (a), or during the intervals fixed in accordance with paragraph (b).

Article 9.

In the application of this Convention to Japan the following modifications and conditions shall obtain:—

- (a) The term "industrial undertaking" includes particularly—
 - The undertakings enumerated in paragraph (a) of Article 1;
 - The undertakings enumerated in paragraph (b) of Article 1, provided there are at least ten workers employed;
 - The undertakings enumerated in paragraph (c) of Article 1, in so far as these undertakings shall be defined as "factories" by the competent authority;
 - The undertakings enumerated in paragraph (d) of Article 1, except transport of passengers or goods by road, handling of goods at docks, quays, wharves, and warehouses, and transport by hand; and,
 Regardless of the number of persons employed, such of the undertakings enumerated in paragraphs (b) and (c) of Article 1 as may be declared by the competent authority either to be highly dangerous or to involve unhealthy processes.
- (b) The actual working hours of persons of fifteen years of age or over in any public or private industrial undertaking, or in any branch thereof, shall not exceed fifty-seven in the week, except that in the raw-silk industry the limit may be sixty hours in the week.

- (c) The actual working hours of persons under fifteen years of age in any public or private industrial undertaking, or in any branch thereof, and of all miners of whatever age engaged in underground work in the mines, shall in no case exceed forty-eight in the week.
- (d) The limit of hours of work may be modified under the conditions provided for in Articles 2, 3, 4, and 5 of this Convention, but in no case shall the length of such modification bear to the length of the basic week a proportion greater than that which obtains in those Articles.
- (e) A weekly rest period of twenty-four consecutive hours shall be allowed to all classes of workers.
- (f) The provision in Japanese factory legislation limiting its application to places employing fifteen or more persons shall be amended so that such legislation shall apply to places employing ten or more persons.
- (g) The provisions of the above paragraphs of this Article shall be brought into operation not later than 1st July, 1922, except that the provisions of Article 4, as modified by paragraph (d) of this Article, shall be brought into operation not later than 1st July, 1923.
- (h) The age of fifteen prescribed in paragraph (c) of this Article shall be raised, not later than 1st July, 1925, to sixteen.

Article 10.

In British India the principle of a sixty-hour week shall be adopted for all workers in the industries at present covered by the Factory Acts administered by the Government of India, in mines, and in such branches of railway work as shall be specified for this purpose by the competent authority. Any modification of this limitation made by the competent authority shall be subject to the provisions of Articles 6 and 7 of this Convention. In other respects the provisions of this Convention shall not apply to India, but further provisions limiting the hours of work in India shall be considered at a future meeting of the General Conference.

Article 11.

The provisions of this Convention shall not apply to China, Persia, and Siam, but provisions limiting the hours of work in these

countries shall be considered at a future meeting of the General Conference.

Article 12.

In the application of this Convention to Greece, the date at which its provisions shall be brought into operation in accordance with Article 19 may be extended to not later than 1st July, 1923, in the case of the following industrial undertakings:—

- (1) Carbon-bisulphide works,
- (2) Acids works,
- (3) Tanneries,
- (4) Paper mills,
- (5) Printing works,
- (6) Sawmills,
- (7) Warehouses for the handling and preparation of tobacco,
- (8) Surface mining,
- (9) Foundries,
- (10) Lime works,
- (11) Dye works,
- (12) Glassworks (blowers),
- (13) Gas works (firemen).
- (14) Loading and unloading merchandise;

and to not later than 1st July, 1924, in the case of the following industrial undertakings:

- (1) Mechanical industries: Machine shops for engines, safes, scales, beds, tacks, shells (sporting), iron foundries, bronze foundries, tin shops, plating shops, manufactories of hydraulic apparatus;
- (2) Constructional industries: Lime-kilns, cement works, plasters' shops, tile yards, manufactories of bricks and pavements, potteries, marble yards, excavating and building work;
- (3) Textile industries: Spinning and weaving mills of all kinds, except dye works;
- (4) Food industries: Flour and grist-mills, bakeries, macaroni factories, manufactories of wines, alcohol, and drinks, oil works, breweries, manufactories of ice and carbonated drinks, manufactories of confectioners' products and chocolate, manufactories of sausages and preserves, slaughterhouses, and butcher shops;

- (5) Chemical industries: Manufactories of synthetic colours, glassworks (except the blowers), manufactories of essence of turpentine and tartar, manufactories of oxygen and pharmaceutical products, manufactories of flaxseed oil, manufactories of glycerine, manufactories of calcium carbide, gas works (except the firemen);
- (6) Leather industries: Shoe factories, manufactories of leather goods;
- (7) Paper and printing industries: Manufactories of envelopes, record books, boxes, bags, bookbinding, lithographing, and zinc-engraving shops;
- (8) Clothing industries: Clothing shops, underwear and trimmings, workshops for pressing, workshops for bed coverings, artificial flowers, feathers, and trimmings, hat and umbrella factories;
- (9) Woodworking industries: Joiners' shops, coopers' sheds, wagon factories, manufactories of furniture and chairs, picture-framing establishments, brush and broom factories;
- (10) Electrical industries: Power houses, shops for electrical installations;
- (11) Transportation by land: Employees on railroads and street cars, firemen, drivers, and carters.

Article 13.

In the application of this Convention to Roumania the date at which its provisions shall be brought into operation in accordance with Article 19 may be extended to not later than 1st July, 1924.

Article 14.

The operation of the provisions of this Convention may be suspended in any country by the Government in the event of war or other emergency endangering the national safety.

Article 15.

The formal ratifications of this Convention, under the conditions set forth in Part XIII of the Treaty of Versailles of 28th June, 1919, and of the Treaty of St. Germain of 10th September, 1919, shall be communicated to the Secretary-General of the League of Nations for registration.

Article 16.

Each Member of the International Labour Organisation which ratifies this Convention engages to apply it to its colonies, protectorates and possessions which are not fully self-governing :

- (a) Except where owing to the local conditions its provisions are inapplicable ; or
- (b) Subject to such modifications as may be necessary to adapt its provisions to local conditions.

Each Member shall notify to the International Labour Office the action taken in respect of each of its colonies, protectorates, and possessions which are not fully self-governing.

Article 17.

As soon as the ratifications of two Members of the International Labour Organisation have been registered with the Secretariat, the Secretary-General of the League of Nations shall so notify all the Members of the International Labour Organisation.

Article 18.

This Convention shall come into force at the date on which such notification is issued by the Secretary-General of the League of Nations, and it shall then be binding only upon those Members which have registered their ratifications with the Secretariat. Thereafter this Convention will come into force for any other Member at the date on which its ratification is registered with the Secretariat.

Article 19.

Each Member which ratifies this Convention agrees to bring its provisions into operation not later than 1st July, 1921, and to take such action as may be necessary to make these provisions effective.

Article 20.

A Member which has ratified this Convention may denounce it after the expiration of ten years from the date on which the Convention first comes into force, by an act communicated to the Secretary-General of the League of Nations for registration. Such denunciation shall not take effect until one year after the date on which it is registered with the Secretariat.

Article 21.

At least once in ten years the Governing Body of the International Labour Office shall present to the General Conference a report on the working of this Convention, and shall consider the desirability of placing on the agenda of the Conference the question of its revision or modification.

Article 22.

The French and English texts of this Convention shall both be authentic.

Draft Convention concerning unemployment.

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Washington by the Government of the United States of America, on the 29th day of October 1919, and

Having decided upon the adoption of certain proposals with regard to the "question of preventing or providing against unemployment," which is the second item in the agenda for the Washington meeting of the Conference, and

Having determined that these proposals shall take the form of a draft international convention,

adopts the following Draft Convention for ratification by the Members of the International Labour Organisation, in accordance with the Labour Part of the Treaty of Versailles of 28th June, 1919, and of the Treaty of St. Germain of 10th September, 1919 :

Article 1.

Each Member which ratifies this Convention shall communicate to the International Labour Office, at intervals as short as possible and not exceeding three months, all available information, statistical or otherwise, concerning unemployment, including reports on measures taken or contemplated to combat unemployment. Whenever practicable, the information shall be made available for such communication not later than three months after the end of the period to which it relates.

Article 2.

Each Member which ratifies this Convention shall establish a system of free public employment agencies under the control of a central authority. Committees, which shall include representatives of employers and of workers, shall be appointed to advise on matters concerning the carrying on of these agencies.

Where both public and private free employment agencies exist, steps shall be taken to co-ordinate the operations of such agencies on a national scale

The operations of the various national systems shall be co-ordinated by the International Labour Office in agreement with the countries concerned.

Article 3.

The Members of the International Labour Organisation which ratify this Convention and which have established systems of insurance against unemployment shall, upon terms being agreed between the Members concerned, make arrangements whereby workers belonging to one Member and working in the territory of another shall be admitted to the same rates of benefit of such insurance as those which obtain for the workers belonging to the latter.

Article 4.

The formal ratifications of this Convention, under the conditions set forth in Part XIII of the Treaty of Versailles of 28th June, 1919, and of the Treaty of St. Germain of 10th September, 1919, shall be communicated to the Secretary-General of the League of Nations for registration.

Article 5.

Each Member of the International Labour Organisation which ratifies this Convention engages to apply it to its colonies, protectorates and possessions which are not fully self-governing :

- (a) Except where owing to the local conditions its provisions are inapplicable ; or
- (b) Subject to such modifications as may be necessary to adapt its provisions to local conditions.

Each Member shall notify to the International Labour Office the action taken in respect of each of its colonies, protectorates and possessions which are not fully self-governing.

Article 6.

As soon as the ratifications of three Members of the International Labour Organisation have been registered with the Secretariat, the Secretary-General of the League of Nations shall so notify all the Members of the International Labour Organisation.

Article 7.

This Convention shall come into force at the date on which such notification is issued by the Secretary-General of the League of Nations, but it shall then be binding only upon those Members which have registered their ratifications with the Secretariat. Thereafter this Convention will come into force for any other Member at the date on which its ratification is registered with the Secretariat.

Article 8.

Each Member which ratifies this Convention agrees to bring its provisions into operation not later than 1st July, 1921, and to take such action as may be necessary to make these provisions effective.

Article 9.

A Member which has ratified this Convention may denounce it after the expiration of ten years from the date on which the Convention first comes into force, by an act communicated to the Secretary-General of the League of Nations for registration. Such denunciation shall not take effect until one year after the date on which it is registered with the Secretariat.

Article 10.

At least once in ten years the Governing Body of the International Labour Office shall present to the General Conference a report on the working of this Convention; and shall consider the desirability of placing on the agenda of the Conference the question of its revision or modification.

Article II.

The French and English texts of this Convention shall both be authentic.

Draft Convention concerning the employment of women before and after child-birth.

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Washington by the Government of the United States of America on the 29th day of October, 1919, and

Having decided upon the adoption of certain proposals with regard to "women's employment, before and after child-birth, including the question of maternity benefit," which is part of the third item in the agenda for the Washington meeting of the Conference, and

Having determined that these proposals shall take the form of a draft international convention,

adopts the following Draft Convention for ratification by the Members of the International Labour Organisation, in accordance with the Labour Part of the Treaty of Versailles of 28th June, 1919, and of the Treaty of St. Germain of 10th September, 1919.

Article I.

For the purpose of this Convention, the term "industrial undertaking" includes particularly:

- (a) Mines, quarries, and other works for the extraction of minerals from the earth.
- (b) Industries in which articles are manufactured, altered, cleaned, repaired, ornamented, finished, adapted for sale, broken up or demolished, or in which materials are transformed; including shipbuilding and the generation, transformation, and transmission of electricity or motive power of any kind.
- (c) Construction, reconstruction, maintenance, repair, alteration, or demolition of any building, railway, tramway, harbour, dock, pier, canal, inland waterway, road, tunnel, bridge, viaduct, sewer, drain, well, telegraphic or telephonic

installation, electrical undertaking, gas work, water work, or other work of construction as well as the preparation for or laying the foundation of any such work or structure.

- (d) Transport of passengers or goods by road, rail, sea, or inland waterway, including the handling of goods at docks, quays, wharves, and warehouses, but excluding transport by hand.

For the purpose of this Convention, the term "commercial undertaking" includes any place where articles are sold or where commerce is carried on.

The competent authority in each country shall define the line of division which separates industry and commerce from agriculture.

Article 2.

For the purpose of this Convention, the term "woman" signifies any female person, irrespective of age or nationality, whether married or unmarried, and the term "child" signifies any child whether legitimate or illegitimate.

Article 3.

In any public or private industrial or commercial undertaking, or in any branch thereof, other than an undertaking in which only members of the same family are employed, a woman—

- (a) Shall not be permitted to work during the six weeks following her confinement.
- (b) Shall have the right to leave her work if she produces a medical certificate stating that her confinement will probably take place within six weeks.
- (c) Shall, while she is absent from her work in pursuance of paragraphs (a) and (b), be paid benefits sufficient for the full and healthy maintenance of herself and her child, provided either out of public funds or by means of a system of insurance, the exact amount of which shall be determined by the competent authority in each country, and as an additional benefit shall be entitled to free attendance by a doctor or certified midwife. No mistake of the medical adviser in estimating the date of confinement shall preclude a woman from receiving these

- benefits from the date of the medical certificate up to the date on which the confinement actually takes place.
- (d) Shall in any case, if she is nursing her child, be allowed half an hour twice a day during her working hours for this purpose.

Article 4.

Where a woman is absent from her work in accordance with paragraphs (a) or (b) of Article 3 of this Convention, or remains absent from her work for a longer period as a result of illness medically certified to arise out of pregnancy or confinement and rendering her unfit for work, it shall not be lawful, until her absence shall have exceeded a maximum period to be fixed by the competent authority in each country, for her employer to give her notice of dismissal during such absence, nor to give her notice of dismissal at such a time that the notice would expire during such absence.

Article 5.

The formal ratifications of this Convention, under the conditions set forth in Part XIII of the Treaty of Versailles of 28th June, 1919, and of the Treaty of St. Germain of 10th September, 1919, shall be communicated to the Secretary-General of the League of Nations for registration.

Article 6.

Each Member of the International Labour Organisation which ratifies this Convention engages to apply it to its colonies, protectorates, and possessions which are not fully self-governing:

- (a) Except where, owing to the local conditions, its provisions are inapplicable; or
- (b) Subject to such modifications as may be necessary to adapt its provisions to local conditions.

Each Member shall notify to the International Labour Office the action taken in respect of each of its colonies, protectorates, and possessions which are not fully self-governing.

Article 7.

As soon as the ratifications of two Members of the International Labour Organisation have been registered with the Secretariat, the Secretary-General of the League of Nations shall so notify all the Members of the International Labour Organisation.

Article 8.

This Convention shall come into force at the date on which such notification is issued by the Secretary-General of the League of Nations, but it shall then be binding only upon those Members which have registered their ratifications with the Secretariat. Thereafter this Convention will come into force for any other Member at the date on which its ratification is registered with the Secretariat.

Article 9.

Each Member which ratifies this Convention agrees to bring its provisions into operation not later than 1st July, 1922, and to take such action as may be necessary to make these provisions effective.

Article 10.

A Member which has ratified this Convention may denounce it after the expiration of ten years from the date on which the Convention first comes into force, by an act communicated to the Secretary-General of the League of Nations for registration. Such denunciation shall not take effect until one year after the date on which it is registered with the Secretariat.

Article 11.

At least once in 10 years the Governing Body of the International Labour Office shall present to the General Conference a report on the working of this Convention, and shall consider the desirability of placing on the agenda of the Conference the question of its revision or modification.

Article 12.

The French and English texts of this Convention shall both be authentic.

Draft Convention concerning employment of women during the night.

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Washington by the Government of the United States of America on the 29th day of October, 1919, and

Having decided upon the adoption of certain proposals with regard to "women's employment during the night," which is part of the third item in the agenda for the Washington meeting of the Conference, and

Having determined that these proposals shall take the form of a draft international convention,

adopts the following Draft Convention for ratification by the Members of the International Labour Organisation, in accordance with the Labour Part of the Treaty of Versailles of 28th June, 1919, and of the Treaty of St. Germain of 10th September, 1919 :

Article 1.

For the purpose of this Convention, the term "industrial undertaking" includes particularly :

- (a) Mines, quarries, and other works for the extraction of minerals from the earth ;
- (b) Industries in which articles are manufactured, altered, cleaned, repaired, ornamented, finished, adapted for sale, broken up or demolished, or in which materials are transformed ; including shipbuilding, and the generation, transformation and transmission of electricity or motive power of any kind ;
- (c) Construction, reconstruction, maintenance, repair, alteration or demolition of any building, railway, tramway, harbour, dock, pier, canal, inland waterway, road, tunnel, bridge, viaduct, sewer, drain, well, telegraphic or telephonic installation, electrical undertaking, gas work, waterwork, or other work of construction as well as the preparation for or laying the foundations of any such work or structure.

The competent authority in each country shall define the line of division which separates industry from commerce and agriculture.

Article 2.

For the purpose of this Convention, the term "night" signifies a period of at least eleven consecutive hours, including the interval between ten o'clock in the evening and five o'clock in the morning.

In those countries where no Government regulation as yet applies to the employment of women in industrial undertakings

during the night, the term "night" may provisionally, and for a maximum period of three years, be declared by the Government to signify a period of only ten hours, including the interval between ten o'clock in the evening and five o'clock in the morning.

Article 3.

Women without distinction of age shall not be employed during the night in any public or private industrial undertaking, or in any branch thereof, other than an undertaking in which only members of the same family are employed.

Article 4.

Article 3 shall not apply :

- (a) In cases of *force majeure*, when in any undertaking there occurs an interruption of work which it was impossible to foresee, and which is not of a recurring character.
- (b) In cases where the work has to do with raw materials or materials in course of treatment which are subject to rapid deterioration, when such night work is necessary to preserve the said materials from certain loss.

Article 5.

In India and Siam, the application of Article 3 of this Convention may be suspended by the Government in respect to any industrial undertaking, except factories as defined by the national law. Notice of every such suspension shall be filed with the International Labour Office.

Article 6.

In industrial undertakings which are influenced by the seasons and in all cases where exceptional circumstances demand it, the night period may be reduced to ten hours on sixty days of the year.

Article 7.

In countries where the climate renders work by day particularly trying to the health, the night period may be shorter than prescribed in the above articles, provided that compensatory rest is accorded during the day.

Article 8.

The formal ratifications of this Convention, under the conditions set forth in Part XIII of the Treaty of Versailles of 28th June, 1919, and of the Treaty of St. Germain of 10th September, 1919, shall be communicated to the Secretary-General of the League of Nations for registration.

Article 9.

Each Member of the International Labour Organisation which ratifies this Convention engages to apply it to its colonies, protectorates and possessions which are not fully self-governing :

- (a) Except where owing to the local conditions its provisions are inapplicable ; or
- (b) Subject to such modifications as may be necessary to adapt its provisions to local conditions.

Each Member shall notify to the International Labour Office the action taken in respect of each of its colonies, protectorates and possessions which are not fully self-governing.

Article 10.

As soon as the ratifications of two Members of the International Labour Organisation have been registered with the Secretariat, the Secretary-General of the League of Nations shall so notify all the Members of the International Labour Organisation.

Article 11.

This Convention shall come into force at the date on which such notification is issued by the Secretary-General of the League of Nations, but it shall then be binding only upon those Members which have registered their ratifications with the Secretariat. Thereafter this Convention will come into force for any other Member at the date on which its ratification is registered with the Secretariat.

Article 12.

Each Member which ratifies this Convention agrees to bring its provisions into operation not later than 1st July, 1922, and to take such action as may be necessary to make these provisions effective.

Article 13.

A Member which has ratified this Convention may denounce it after the expiration of ten years from the date on which the Convention first comes into force, by an act communicated to the Secretary-General of the League of Nations for registration. Such denunciation shall not take effect until one year after the date on which it is registered with the Secretariat.

Article 14.

At least once in ten years, the Governing Body of the International Labour Office shall present to the General Conference a report on the working of this Convention, and shall consider the desirability of placing on the agenda of the Conference the question of its revision or modification.

Article 15.

The French and English texts of this Convention shall both be authentic.

Draft Convention fixing the minimum age for admission of children to industrial employment.

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened by the Government of the United States of America at Washington, on the 29th day of October, 1919, and

Having decided upon the adoption of certain proposals with regard to the "employment of children: minimum age of employment," which is part of the fourth item in the agenda for the Washington meeting of the Conference, and

Having determined that these proposals shall take the form of a draft international convention,

adopts the following Draft Convention for ratification by the Members of the International Labour Organisation, in accordance with the Labour Part of the Treaty of Versailles of 28th June, 1919, and of the Treaty of St. Germain of 10th September, 1919:

Article 1.

For the purpose of this Convention, the term "industrial undertaking" includes particularly :

- (a) Mines, quarries and other works for the extraction of minerals from the earth.
- (b) Industries in which articles are manufactured, altered, cleaned, repaired, ornamented, finished, adapted for sale, broken up or demolished, or in which materials are transformed; including shipbuilding, and the generation, transformation, and transmission of electricity and motive power of any kind.
- (c) Construction, reconstruction, maintenance, repair, alteration or demolition of any building, railway, tramway, harbour, dock, pier, canal, inland waterway, road, tunnel, bridge, viaduct, sewer, drain, well, telegraphic or telephonic installation, electrical undertaking, gas work, water work, or other work of construction, as well as the preparation for or laying the foundations of any such work or structure.
- (d) Transport of passengers or goods by road or rail or inland waterway, including the handling of goods at docks, quays, wharves, and warehouses, but excluding transport by hand.

The competent authority in each country shall define the line of division which separates industry from commerce and agriculture.

Article 2.

Children under the age of fourteen years shall not be employed or work in any public or private industrial undertaking, or in any branch thereof, other than an undertaking in which only members of the same family are employed.

Article 3.

The provisions of Article 2 shall not apply to work done by children in technical schools, provided that such work is approved and supervised by public authority.

Article 4.

In order to facilitate the enforcement of the provisions of this Convention, every employer in an industrial undertaking shall be

required to keep a register of all persons under the age of sixteen years employed by him, and of the dates of their births.

Article 5.

In connection with the application of this Convention to Japan, the following modifications of Article 2 may be made:—

- (a) Children over twelve years of age may be admitted into employment if they have finished the course in the elementary school;
- (b) As regards children between the ages of twelve and fourteen already employed, transitional regulations may be made.

The provision in the present Japanese law admitting children under the age of twelve years to certain light and easy employments shall be repealed.

Article 6.

The provisions of Article 2 shall not apply to India, but in India children under twelve years of age shall not be employed:

- (a) In manufactories working with power and employing more than ten persons;
- (b) In mines, quarries, and other works for the extraction of minerals from the earth;
- (c) In the transport of passengers or goods, or mails, by rail or in the handling of goods at docks, quays, and wharves, but excluding transport by hand.

Article 7.

The formal ratifications of this Convention, under the conditions set forth in Part XIII of the Treaty of Versailles of 28th June, 1919, and of the Treaty of St. Germain of 10th September, 1919, shall be communicated to the Secretary-General of the League of Nations for registration.

Article 8.

Each Member of the International Labour Organisation which ratifies this Convention engages to apply it to its colonies, protectorates, and possessions which are not fully self-governing:

- (a) Except where owing to the local conditions its provisions are inapplicable; or

(b) Subject to such modifications as may be necessary to adapt its provisions to local conditions.

Each Member shall notify to the International Labour Office the action taken in respect to each of its colonies, protectorates, and possessions which are not fully self-governing.

Article 9.

As soon as the ratifications of two Members of the International Labour Organisation have been registered with the Secretariat, the Secretary-General of the League of Nations shall so notify all the members of the International Labour Organisation.

Article 10.

This Convention shall come into force at the date on which such notification is issued by the Secretary-General of the League of Nations, but it shall then be binding only upon those Members which have registered their ratifications with the Secretariat. Thereafter this Convention will come into force for any other Member at the date on which its ratification is registered with the Secretariat.

Article 11.

Each Member which ratifies this Convention agrees to bring its provisions into operation not later than 1st July 1922, and to take such action as may be necessary to make these provisions effective.

Article 12.

A Member which has ratified this Convention may denounce it after the expiration of ten years from the date on which the Convention first comes into force, by an act communicated to the Secretary-General of the League of Nations for registration. Such denunciation shall not take effect until one year after the date on which it is registered with the Secretariat.

Article 13.

At least once in ten years, the Governing Body of the International Labour Office shall present to the General Conference a report on the working of this Convention, and shall consider the desirability of placing on the agenda of the Conference the question of its revision, or modification.

Article 14.

The French and English texts of this Convention shall both be authentic.

Draft Convention concerning the night work of young persons employed in industry.

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened by the Government of the United States of America at Washington on the 29th day of October, 1919, and

Having decided upon the adoption of certain proposals with regard to the "employment of children during the night," which is part of the fourth item in the agenda for the Washington meeting of the Conference, and

Having determined that these proposals shall take the form of a draft international convention,

adopts the following Draft Convention for ratification by the Members of the International Labour Organisation, in accordance with the Labour Part of the Treaty of Versailles of 28th June, 1919, and of the Treaty of St. Germain of 10th September, 1919.

Article 1.

For the purpose of this Convention, the term "industrial undertaking" includes particularly :

- (a) Mines, quarries, and other works for the extraction of minerals from the earth.
- (b) Industries in which articles are manufactured, altered, cleaned, repaired, ornamented, finished, adapted for sale, broken up, or demolished, or in which materials are transformed; including shipbuilding, and the generation, transformation, and transmission of electricity or motive power of any kind.
- (c) Construction, reconstruction, maintenance, repair, alteration, or demolition of any building, railway, tramway, harbour, dock, pier, canal, inland waterway, road, tunnel, bridge, viaduct, sewer, drain, well, telegraphic or telephonic

installation, electrical undertaking, gas work, water work, or other work of construction as well as the preparation for or laying the foundations of any such work or structure.

- (d) Transport of passengers or goods by road or rail, including the handling of goods at docks, quays, wharves, and warehouses, but excluding transport by hand.

The competent authority in each country shall define the line of division which separates industry from commerce and agriculture.

Article 2.

Young persons under eighteen years of age shall not be employed during the night in any public or private industrial undertaking or in any branch thereof, other than an undertaking in which only members of the same family are employed, except as hereinafter provided for.

Young persons over the age of sixteen may be employed during the night in the following industrial undertakings on work which by reason of the nature of the process, is required to be carried on continuously day and night :

- (a) Manufacture of iron and steel ; processes in which reverberatory or regenerative furnaces are used, and galvanizing of sheet metal or wire (except the pickling process).
- (b) Glass works.
- (c) Manufacture of paper.
- (d) Manufacture of raw sugar.
- (e) Gold mining reduction work.

Article 3.

For the purpose of this Convention, the term "night" signifies a period of at least eleven consecutive hours, including the interval between ten o'clock in the evening and five o'clock in the morning.

In coal and lignite mines work may be carried on in the interval between ten o'clock in the evening and five o'clock in the morning, if an interval of ordinarily fifteen hours, and in no case of less than thirteen hours, separates two periods of work.

Where night work in the baking industry is prohibited for all workers, the interval between nine o'clock in the evening and four

o'clock in the morning may be substituted in the baking industry for the interval between ten o'clock in the evening and five o'clock in the morning.

In those tropical countries in which work is suspended during the middle of the day, the night period may be shorter than eleven hours if compensatory rest is accorded during the day.

Article 4.

The provisions of Articles 2 and 3 shall not apply to the night work of young persons between the ages of sixteen and eighteen years in cases of emergencies which could not have been controlled or foreseen, which are not of a periodical character, and which interfere with the normal working of the industrial undertaking.

Article 5.

In the application of this Convention to Japan, until 1st July, 1925, Article 2 shall apply only to young persons under fifteen years of age and thereafter it shall apply only to young persons under sixteen years of age.

Article 6.

In the application of this Convention to India, the term "industrial undertaking" shall include only "factories" as defined in the Indian Factory Act, and Article 2 shall not apply to male young persons over fourteen years of age.

Article 7.

The prohibition of night work may be suspended by the Government, for young persons between the ages of sixteen and eighteen years, when in case of serious emergency the public interest demands it.

Article 8.

The formal ratifications of this Convention, under the conditions set forth in Part XIII of the Treaty of Versailles of 28th June, 1919, and of the Treaty of St. Germain of 10th September, 1919, shall be communicated to the Secretary-General of the League of Nations for registration.

Article 9.

Each Member of the International Labour Organisation which ratifies this Convention engages to apply it to its colonies, protectorates and possessions which are not fully self-governing :

- (a) Except where owing to the local conditions its provisions are inapplicable ; or
- (b) Subject to such modifications as may be necessary to adapt its provisions to local conditions.

Each Member shall notify to the International Labour Office the action taken in respect of each of its colonies, protectorates and possessions which are not fully self-governing.

Article 10.

As soon as the ratifications of two Members of the International Labour Organisation have been registered with the Secretariat, the Secretary-General of the League of Nations shall so notify all the Members of the International Labour Organisation.

Article 11.

This Convention shall come into force at the date on which such notification is issued by the Secretary-General of the League of Nations, and it shall then be binding only upon those Members which have registered their ratifications with the Secretariat. Thereafter this Convention will come into force for any other Member at the date on which its ratification is registered with the Secretariat.

Article 12.

Each Member which ratifies this Convention agrees to bring its provisions into operation not later than 1st July, 1922, and to take such action as may be necessary to make these provisions effective.

Article 13.

A Member which has ratified this Convention may denounce it after the expiration of ten years from the date on which the Convention first comes into force, by an act communicated to the Secretary-General of the League of Nations for registration. Such denunciation shall not take effect until one year after the date on which it is registered with the Secretariat.

Article 14.

At least once in ten years the Governing Body of the International Labour Office shall present to the General Conference a report on the working of this Convention, and shall consider the desirability of placing on the agenda of the Conference the question of its revision or modification.

Article 15.

The French and English texts of this Convention shall both be authentic.

**XI.—RECOMMENDATIONS ADOPTED BY THE INTERNATIONAL
LABOUR CONFERENCE AT WASHINGTON.**

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Recommendation concerning unemployment.

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Washington by the Government of the United States of America on the 29th day of October, 1919, and

Having decided upon the adoption of certain proposals with regard to the "question of preventing or providing against unemployment," which is the second item in the agenda for the Washington meeting of the Conference, and

Having determined that these proposals shall take the form of a recommendation,

adopts the following Recommendation, to be submitted to the Members of the International Labour Organisation for consideration with a view to effect being given to it by national legislation or otherwise, in accordance with the Labour Part of the Treaty of Versailles of 28th June, 1919, and of the Treaty of St. Germain of 10th September, 1919 :

I.

The General Conference recommends that each Member of the International Labour Organisation take measures to prohibit the establishment of employment agencies which charge fees or which

carry on their business for profit. Where such agencies already exist, it is further recommended that they be permitted to operate only under Government licences, and that all practicable measures be taken to abolish such agencies as soon as possible.

II.

The General Conference recommends to the Members of the International Labour Organisation that the recruiting of bodies of workers in one country with a view to their employment in another country should be permitted only by mutual agreement between the countries concerned and after consultation with employers and workers in each country in the industries concerned.

III.

The General Conference recommends that each Member of the International Labour Organisation establish an effective system of unemployment insurance, either through a Government system or through a system of Government subventions to associations whose rules provide for the payment of benefits to their unemployed members.

IV.

The General Conference recommends that each Member of the International Labour Organisation co-ordinate the execution of all work undertaken under public authority, with a view to reserving such work as far as practicable for periods of unemployment and for districts most affected by it.

Recommendation concerning the protection of women and children against lead poisoning.

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Washington by the Government of the United States of America on the 29th day of October, 1919, and

Having decided upon the adoption of certain proposals with regard to "women's and children's employment: unhealthy processes," which is part of the third and fourth items in the agenda for the Washington meeting of the Conference, and

Having determined that these proposals shall take the form of a recommendation,

adopts the following Recommendation, to be submitted to the Members of the International Labour Organisation for consideration with a view to effect being given to it by national legislation or otherwise, in accordance with the Labour Part of the Treaty of Versailles of 28th June, 1919, and of the Treaty of St. Germain of 10th September, 1919 :

The General Conference recommends to the Members of the International Labour Organisation that in view of the danger involved to the function of maternity and to the physical development of children, women, and young persons under the age of eighteen years be excluded from employment in the following processes :—

- (a) In furnace work in the reduction of zinc or lead ores.
- (b) In the manipulation, treatment, or reduction of ashes containing lead, and in the desilverizing of lead.
- (c) In melting lead or old zinc on a large scale.
- (d) In the manufacture of solder or alloys containing more than ten per cent. of lead.
- (e) In the manufacture of litharge, massicot, red lead, white lead, orange lead, or sulphate, chromate or silicate (frit) of lead.
- (f) In mixing and pasting in the manufacture or repair of electric accumulators.
- (g) In the cleaning of workrooms where the above processes are carried on.

It is further recommended that the employment of women and young persons under the age of eighteen years in processes involving the use of lead compounds be permitted only subject to the following conditions :—

- (a) Locally applied exhaust ventilation, so as to remove dust and fumes at the point of origin.
- (b) Cleanliness of tools and workrooms.
- (c) Notification to Government authorities of all cases of lead poisoning, and compensation therefor.
- (d) Periodic medical examination of the persons employed in such processes,

- (e) Provision of sufficient and suitable cloak-room, washing, and mess-room accommodation, and of special protective clothing.
- (f) Prohibition of bringing food or drink into workrooms.

It is further recommended that in industries where soluble lead compounds can be replaced by non-toxic substances, the use of soluble lead compounds should be strictly regulated.

For the purpose of this Recommendation, a lead compound should be considered as soluble if it contains more than five per cent. of its weight (estimated as metallic lead) soluble in a quarter of one per cent. solution of hydrochloric acid.

Recommendation concerning reciprocity of treatment of foreign workers.

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Washington by the Government of the United States of America on the 29th day of October, 1919, and

Having decided upon the adoption of certain proposals with regard to the "question of preventing or providing against unemployment," which is the second item in the agenda for the Washington meeting of the Conference, and

Having determined that these proposals shall take the form of a recommendation,

adopts the following Recommendation, to be submitted to the Members of the International Labour Organisation for consideration with a view to effect being given to it by national legislation or otherwise, in accordance with the Labour Part of the Treaty of Versailles of 28th June, 1919, and of the Treaty of St. Germain of 10th September, 1919 :

The General Conference recommends that each Member of the International Labour Organisation shall, on condition of reciprocity and upon terms to be agreed between the countries concerned, admit the foreign workers (together with their families) employed within its territory to the benefit of its laws and regulations for the protection of its own workers, as well as to the right of lawful organisation as enjoyed by its own workers.

Recommendation concerning the prevention of Anthrax.

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Washington by the Government of the United States of America on the 29th day of October, 1919, and

Having decided upon the adoption of certain proposals with regard to "women's employment : unhealthy processes," which is part of the third item in the agenda for the Washington meeting of the Conference, and

Having determined that these proposals shall take the form of a recommendation,

adopts the following Recommendation, to be submitted to the Members of the International Labour Organisation for consideration with a view to effect being given to it by national legislation or otherwise, in accordance with the Labour Part of the Treaty of Versailles of 28th June, 1919, and the Treaty of St. Germain of 10th September, 1919 :

The General Conference recommends to the Members of the International Labour Organisation that arrangements should be made for the disinfection of wool infected with anthrax spores, either in the country exporting such wool or, if that is not practicable, at the port of entry in the country importing such wool.

Recommendation concerning the establishment of Government Health Services.

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Washington by the Government of the United States of America on the 29th day of October, 1919, and

Having decided upon the adoption of certain proposals with regard to "women's employment : unhealthy processes," which is part of the third item in the agenda for the Washington meeting of the Conference, and

Having determined that these proposals shall take the form of a recommendation,

adopts the following Recommendation, to be submitted to the Members of the International Labour Organisation for consideration

with a view to effect being given to it by national legislation or otherwise, in accordance with the Labour Part of the Treaty of Versailles of 28th June, 1919, and the Treaty of St. Germain of 10th September, 1919 :

The General Conference recommends that each Member of the International Labour Organisation which has not already done so should establish as soon as possible, not only a system of efficient factory inspection, but also in addition thereto a Government service especially charged with the duty of safeguarding the health of the workers, which will keep in touch with the International Labour Office.

Recommendation concerning the application of the Berne Convention of 1906, on the prohibition of the use of White Phosphorus in the manufacture of Matches.

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Washington by the Government of the United States of America on the 29th day of October, 1919, and

Having decided upon the adoption of a proposal with regard to the "extension and application of the International Convention adopted at Berne in 1906 on the prohibition of the use of white phosphorus in the manufacture of matches," which is part of the fifth item in the agenda for the Washington meeting of the Conference, and

Having determined that this proposal shall take the form of a recommendation,

adopts the following Recommendation, to be submitted to the Members of the International Labour Organisation for consideration with a view to effect being given to it by national legislation or otherwise, in accordance with the Labour Part of the Treaty of Versailles of 28th June, 1919, and the Treaty of St. Germain of 10th September, 1919:

The General Conference recommends that each Member of the International Labour Organisation, which has not already done so, should adhere to the International Convention adopted at Berne in 1906 on the prohibition of the use of white phosphorus in the manufacture of matches.

XII.—STANDING ORDERS OF THE INTERNATIONAL LABOUR CONFERENCE.

Adopted on November 21st, 1919, by the General Conference held at Washington.

Article 1.—Composition of the Conference.

The Conference consists of all the delegates duly appointed by the Members of the International Labour Organisation.

Each delegate may be accompanied by advisers who shall not exceed two in number for each item on the agenda of the meeting.

Seats in the Conference room shall be assigned to the delegates and their advisers by the Governing Body.

Article 2.—Provisional Officers of the Conference.

The conference shall be opened by the President of the Governing Body of the International Labour Office, assisted by the officers of the same Body. These provisional officers will continue to act until officers have been duly appointed by the Conference.

Article 3.—Verification of Credentials.

The credentials of delegates and their advisers shall be deposited with the Secretariat of the international Labour Office at least 15 days before the date fixed for the opening of the meeting of the Conference.

A brief report upon them shall be submitted by the President of the Governing Body. This report and the credentials shall be open to inspection by the delegates on the day before the opening of the Conference.

Any objections raised concerning the nomination of delegates or advisers shall be lodged with the provisional officers of the Conference during the opening sitting and transmitted by them to a Commission charged with the verification of credentials, elected by the Conference, consisting of a Government delegate, an Employers' delegate and a Workers' delegate.

This Commission shall immediately examine those cases to which attention has been drawn in the report of the President of

the Governing Body, or by individual objections, and shall present an early report.

Any delegate or adviser to whose nomination objection has been taken retains the same rights as other delegates and advisers, until the question of his admission has been finally decided.

Article 4.—Officers of the Conference.

The officers shall consist of a President and of three Vice-Presidents appointed by the whole of the delegates to the Conference. The three Vice-Presidents shall be chosen respectively from among the delegates of the Governments, of the Employers' associations and of the Workers' associations.

The President and the three Vice-Presidents shall be of different nationalities.

Women delegates may be appointed to any of the above offices in exactly the same way as men.

Article 5.—Secretariat.

The secretariat work of the Conference shall be carried out by officials of the International Labour Office appointed for the purpose by the Governing Body of the said Office.

The Director of the International Labour Office shall be the Secretary-General of the Conference, and shall be responsible for the Secretariat. He may be assisted by one or more Assistant Secretaries-General appointed by the Governing Body of the International Labour Office.

The Secretariat of the Conference will be responsible *inter alia* for the receiving, printing, circulation and translation of documents, reports and resolutions; the translation of speeches at the sittings; the taking, printing and circulation of the shorthand notes of the proceedings at the sittings; the custody of the archives of the Conference; the publication of the report of the meetings, and, generally, for all other work which the Conference may think fit to entrust to it.

Article 6.—Order of Procedure of the Conference.

After consideration of the report presented by the Governing Body, and as provided in Article 402 of the Convention, the Conference will decide as to the retention on the agenda of any item

to which objection has been lodged by the Government of a Member of the International Labour Organisation.

The Conference shall then devote a portion of its time, not extending beyond the third sitting, to deciding the order in which the different items on the agenda shall be discussed, and to miscellaneous business, such as the appointment of the Selection Committee and of the Drafting Committee.

It shall be competent for any delegate to move a resolution of which due notice has been given under the provisions of Article 13 of these Rules, that a draft convention or recommendation relating to an item of the agenda, whether it has been prepared by the Governing Body or not, shall be adopted as the basis of discussion.

The debate on any such resolution shall be a debate on the general principles of the draft convention or recommendation, and if such resolution be adopted, the Conference shall then decide whether the draft convention or recommendation shall be considered in full Conference or shall be referred to a Commission for report.

If it be considered in full Conference, each clause shall be placed before the Conference for adoption. During the debate on the draft convention or recommendation, no motion other than a motion to amend a clause of such draft convention or recommendation, or a motion as to procedure, shall be considered by the Conference until all the clauses have been disposed of.

If the draft convention or recommendation be referred to a Commission, the Conference shall, on receiving the report of the Commission, proceed to consider the draft convention or recommendation, clause by clause, as provided above.

During the discussion of a draft convention or recommendation, clause by clause, the Conference may remit a clause or group of clauses to a Commission for report.

The clauses of the draft convention or recommendation as adopted by the Conference shall, if necessary, then be submitted to the Drafting Committee for the preparation of a definitive text, and the draft convention or recommendation so prepared shall be circulated to the delegates.

In principle, no amendment can be allowed to this text, but the President, after consultation with the three Vice-Presidents, may submit to the Conference amendments which have been handed to the Secretary the day after the distribution of the text as revised by the Drafting Committee.

When such amendments have been disposed of, the Conference shall forthwith proceed to take a final vote on the adoption of the draft convention or recommendation as provided in Article 405 of the Treaty of Peace.

Article 7.—Commissions.

The Conference may decide to set up special Commissions for any purpose which it considers desirable.

A Commission of Selection composed of 12 Government delegates, 6 Employers' delegates, and 6 Workers' delegates, shall determine the resolutions to be discussed at each sitting, and shall nominate members of Commissions, subject to the approval of the Conference.

The members of the Commission of Selection shall be elected by the Conference on the nomination of the Government delegates, the Employers' delegates and the Workers' delegates respectively, not more than one in each class belonging to the same country.

An official of the Secretariat of the Conference shall be appointed to act as Secretary to each Commission.

Each Commission shall appoint a chairman and nominate a reporter to present the results of its deliberations to the Conference. The reporter may be an adviser.

As a general rule, the sittings of a Commission shall not take place at the same time as a plenary sitting of the Conference. Delegates may appoint substitutes to represent them on Commissions.

Article 8.—Right of Admission to sittings of the Conference.

The sittings of the Conference shall be public, except in cases where it has been expressly decided to the contrary.

At public sittings arrangements shall be made by the Clerk to the Conference for the accommodation of distinguished strangers and the press.

The only persons authorised to enter the body of the hall besides delegates and advisers shall be:

- (1) The Secretaries or Interpreters of the Delegations, who shall not exceed one in number for each Delegation;
- (2) The Director of the International Labour Office, and the officials of the Office who have been appointed to the Secretariat of the Conference.

Article 9.—Procedure: Functions of the President.

The President shall pronounce the opening and closure of the sittings. Before proceeding to the agenda, he shall bring before the Conference any communications which concern it.

He shall direct the debates, maintain order, and ensure the observance of the Standing Orders by such means as circumstances may demand, accord or withdraw the right to address the Conference, put questions to the vote, and announce the result of the vote.

The President shall not take part in the debates and shall not vote. If he is himself a delegate, he may appoint a substitute delegate in accordance with Article 18 below.

Vice-Presidents shall be entitled to exercise the same right on the occasions on which they act as President.

The Vice-Presidents shall preside in rotation at those sittings, or portions of sittings, at which the President is unable to preside.

Article 10.—Right to address the Conference.

No delegate may address the Conference without having asked and obtained the permission of the President.

Speakers shall be called upon in the order in which they have signified their desire to speak.

No delegate shall speak more than once on the same resolution, amendment, or motion without the special permission of the Conference, provided, however, that the mover of a resolution shall have the right to speak twice unless the closure has been adopted in accordance with Article 19 of these Rules.

The President may call upon a speaker to resume his seat if his remarks are not relevant to the subject under discussion.

A delegate may rise to a point of order at any time and such point of order shall be immediately decided by the President in accordance with the Standing Orders.

No speech shall exceed 15 minutes, exclusive of the time required for translation, except with the special consent of the Conference.

Interruptions and audible conversation are not permitted.

The Director, or any other official of the International Labour Office, may address the Conference if invited to do so by the President.

Article 11.—Languages.

The French and English languages shall be the official languages of the Conference.

Speeches in French shall be summarised in English, and *vice versa*, by an interpreter belonging to the Secretariat of the Conference.

A delegate may speak in his own language, but his Delegation must provide for the translation of a summary of his speech into one of the two official languages by an interpreter attached to the Delegation.

The summary thus translated will then be rendered in the other official language by an interpreter belonging to the Secretariat.

The translation and circulation of documents shall be in the hands of the Secretariat, and the practice adopted at the Washington Conference as regards the translation and distribution of documents in the Spanish language shall be continued.

Article 12.—Drafting Committee.

The Conference shall appoint a Drafting Committee, whose duty it will be to draw up, in the form of draft conventions or recommendations, the decisions adopted by the Conference.

The same Committee shall insure agreement between the French and English texts of any draft conventions or recommendations the translation of which is undertaken by the Secretariat.

The members of this Committee shall be nominated by the Selection Committee as provided in Article 7.

Article 13.—Resolutions, Amendments, Motions.

Any delegate can move resolutions, amendments, or motions, in accordance with the following rules:—

(a) No resolution can be moved at any sitting of the Conference unless a copy has been handed in to the Secretariat of the Conference at least two days previously.

On receipt of such notice the resolution shall be circulated by the Secretariat not later than the day following that on which it is received.

(b) Amendments to a resolution may be moved without previous notice, provided that a copy is handed in to the Clerk to the Conference.

If an amendment to a resolution has been moved, no other amendment, other than an amendment to the original amendment, can be moved until the original amendment has been disposed of.

A delegate may withdraw an amendment which he has proposed unless an amendment to it is under discussion or has been adopted.

(c) In the case of motions as to procedure, no previous notice need be given, nor need a copy be handed in to the Secretariat of the Conference.

"Motions as to procedure" include the following: a motion to refer the matter back; a motion to postpone consideration of the question; a general motion of adjournment; a motion to adjourn a debate on a particular question; a motion that the Conference proceed with the next item on its programme for the sitting.

No resolution or amendment or motion can be discussed unless it has been seconded.

Article 14.—Closure.

A delegate may move the closure of the discussion whether other delegates have signified their wish to speak or not, and the President shall be bound to put it to the meeting if at least 20 delegates signify their support by rising in their places. If application is made for permission to speak against the closure, it may only be accorded to a single speaker.

The closure shall not be moved while a speaker is addressing the Conference nor until his speech has been translated.

Article 15.—Methods of Voting.

The Conference shall vote by a show of hands or by a record vote.

Voting shall be by a show of hands in all cases in which a record vote is not required by the present Standing Orders.

Votes by a show of hands shall be taken by the Secretariat and the result announced by the President.

In case of doubt as to the result, the President may cause a record vote to be taken.

A record vote shall be taken in all cases in which a majority of two-thirds of the votes is required by the Convention.

A record vote may also be taken on any question if a request to that effect has been made in writing by not less than 20 delegates and handed in to the President.

Record votes shall be taken by calling upon each individual delegate, each Delegation voting in turn in the French alphabetical order of the names of the Members of the International Labour Organisation.

The vote shall be recorded by the Secretariat and announced by the President.

The names of the delegates voting in a record vote shall be inserted in the verbatim report of the sitting.

Except as provided in paragraph 4 of this Article, it shall not be within the competence of the President to propose a record vote.

Article 16.—Quorum.

In accordance with Article 403 of the Treaty of Peace, a vote is not valid if the number of votes cast is less than half the number of delegates attending the Conference. This number shall be determined after the presentation of the brief report referred to in paragraph 2 of Article 3. If any delegate is not finally admitted the number shall be modified accordingly for the subsequent sittings.

Article 17.—Majorities.

Subject to the provisions of the preceding Article, a simple majority of the votes cast by the delegates present at the sitting shall be sufficient in all cases in which a larger majority is not specially required by other Articles of the Convention.

The Conference cannot decide that more than a simple majority shall be necessary in other than these cases.

Article 18.—Substitutes.

In accordance with Article 389 of the Treaty of Peace, a delegate may by notice in writing addressed to the President appoint one of his advisers to act as his substitute. Such notice must be addressed to the President before the sitting, unless a new question comes up for discussion in the course of the sitting. The notice shall specify the sitting or sittings at which the substitute will act.

Substitutes may take part in the debates and may vote under the same conditions as delegates.

Article 19.—Verbatim Reports.

A verbatim report shall be printed at the conclusion of each sitting by the Secretariat. There shall be appended to the report

the list of delegates present at the sitting, together with the texts adopted and the results of the votes.

Each delegate may demand the right to revise that part of the report containing a speech which he has made before it is printed in final form. In order that any proposed corrections may be inserted they should be handed in to the Secretariat during the evening following the sitting.

The verbatim reports will be signed by the President of the Conference and the Secretary-General.

Article 20.—Election of the Members of the Governing Body of the International Labour Office.

The Conference will proceed every three years in the course of its meeting to take the necessary steps to appoint the members of the Governing Body of the International Labour Office in accordance with Article 393 of the Treaty of Peace.

For this purpose, the Government delegates of all the Members, excepting those of the eight Members of chief industrial importance within the meaning of the said Article, shall meet in order to choose the four Members whose Governments shall nominate representatives to the Governing Body.

The delegates of the Employers and of the Workers shall meet separately in order to appoint their six representatives on the Governing Body. These representatives shall be appointed by name.

In the event of a vacancy in the Governing Body arising among the representatives of Employers' or Workers' organisations, and if the Governing Body has not provided for the method of filling such vacancies in accordance with Article 393 of the Treaty of Peace, the delegates at the Conference belonging to the category concerned shall assemble during the course of the next meeting in order to fill the vacancy in their representation on the Governing Body.

If the Governing Body has provided for the filling of vacancies according to the same Article of the Convention, the Conference shall proceed to the approval of the decisions taken by the Governing Body in this respect.

If their decisions are not approved by the Conference, steps shall immediately be taken to make fresh appointments under the conditions laid down above concerning the triennial re-appointment of the Governing Body.

XIII.—THE PERMANENT LABOUR ORGANISATION OF THE LEAGUE OF NATIONS.

The permanent organisation established for the purposes set out in the preamble to the labour section of the Peace Treaty is divided into four parts:—

- (a) The International Labour Conference.
- (b) Commissions of Enquiry.
- (c) The Governing Body.
- (d) The International Labour Office.

(a) The International Labour Conference.

The composition of the International Labour Conference is clearly described in the Peace Treaty. In theory at least, the conference is always in existence and gatherings such as that at Washington are annual meetings of the Conference. They are attended, not by Members but by representatives of Members, for, in the Peace Treaty, Member connotes a Nation belonging to the League of Nations and consequently belonging to the labour organisation. Each member is represented by four delegates, so that France for example has the same voting power as Cuba. In the British Empire, however, Great Britain, Australia, Canada, India, New Zealand and South Africa are separately represented and are indeed separate members. The procedure followed at meetings of the conference is clearly indicated by the standing orders (pages 110 to 118). In view of the very varying conditions in different countries and the necessity for a more detailed examination of particular questions it is customary to appoint small committees to investigate special subjects referred to them and to report to the Conference. These committees have, of course, no administrative power. A rather different type of committee supplementary to the Conference is the International Commission of which the International Commission on Emigration which will meet in March 1921 is a first example. This was set up not by the Conference but by the Governing Body in consequence of a resolution passed by the Conference at Washington. It differs from the Committees of the Conference in that those composing it are not necessarily representatives on the Con-

ference and that its meetings are not held during the meetings of the Conference. Its functions, however, are confined to examination of the question referred to it and to the presentation of a Report to the Conference. Such Commissions should not be confused with the Commissions of Enquiry provided for in the Peace Treaty.

The conclusions reached by meetings of the Conference can be expressed in three forms—

- (i) Draft Conventions.
- (ii) Recommendations.
- (iii) Resolutions.

For the adoption of a Draft Convention a two-thirds majority of the votes cast is necessary. The Governments of the Nations must submit all Draft Conventions that have been adopted to the consideration of the competent authorities within one year from the close of the meeting of the Conference. (It should be noted in this connection that although the sessions at Washington ended on 29th November, 1919, the meeting of the Conference was not declared closed till 27th January 1920.) An extension of six months further is permitted in exceptional circumstances. In the case of Draft Conventions involving fresh legislation, the legislature is the "competent authority" referred to, and it is incumbent on the executive Government to submit the Draft Conventions to it. If a Draft Convention has been approved by the competent authority that State is bound to carry it into effect.

A two-thirds majority is also necessary for the adoption of a recommendation, and recommendations, like Draft Conventions, must be submitted to the competent authority within one year or at the most eighteen months. The essential difference between a Draft Convention and a Recommendation is that, whereas a Draft Convention if approved by the competent authority must be carried into effect, there is no such obligation in the case of a Recommendation.

Resolutions require only a simple majority and no action is obligatory in respect of them. Examples of resolutions passed at Washington are—

- (a) the resolution requesting the Governing Body to appoint an International Commission on Emigration ;
- (b) the resolution expressing disapproval of the composition of the Governing Body.

(b) Commissions of Enquiry.

Machinery has also been devised for dealing with States which ratify Conventions and fail to carry them out. Accusations can be made by any Member (*i.e.*, State). But the Governing Body can also act of its own motion or on the application of any individual delegate. On the receipt of a complaint or on the formulation of a complaint by the Governing Body the procedure is as follows. The Governing Body may first refer the complaint to the Government of the State accused and call for a reply. This is in effect calling for the explanation of the accused State and will presumably be the normal procedure although it is optional. If the Governing Body considers further enquiry necessary it applies for the appointment of a Commission of Enquiry. This Commission consists of three persons chosen by the Secretary-General of the League of Nations. Each of the three must be chosen from a separate section of a panel consisting of persons of independent standing, employers' representatives and workpeoples' representatives in equal numbers. One representative for each section of the panel is appointed by each Member of the League. The present representatives for India are—

Sir Ernest Low, K.C.I.E. (Independent standing).

Mr. Rahimtoola Currimbhoy Ebrahim (Employers).

Mr. N. M. Joshi (Workpeople).

In any particular complaint none of the three representatives would be chosen from a Nation concerned in the complaint either as accuser or accused.

It is the duty of the Commission of Enquiry to make a full examination of the complaint and to present a report to the Secretary-General of the League of Nations. This Report should contain recommendations as to the steps to be taken to meet the complaint and as to the measures of an economic character to be adopted against the defaulting Government. Either of the Governments concerned can appeal against the findings to the Permanent Court of International Justice of the League of Nations whose decision is final. If the defaulting Member fails to carry out the final recommendations it is open to any other Member to adopt at once the economic measures indicated.

Complaints can also be lodged by any industrial association of employers or of workers and on receiving such complaints the

Governing Body may forward the complaint to the Government impugned and invite a reply. The complaint and the reply may then be published. No further action follows unless the Governing Body of its own motion sees fit to appoint a Commission of Enquiry.

(c) The Governing Body.

The Governing Body controls the International Labour Office and consists of—

- 8 persons representing the Governments of the 8 Members of chief industrial importance.
- 4 persons representing the Governments of the remaining Members and selected by the Government delegates of these Members.
- 6 persons representing the employers and elected by the employers' delegates.
- 6 persons elected by the workers' delegates.

—
24 TOTAL.

The details of the representatives are given on pages 68 to 70. The Government of India has since preferred a claim for the inclusion of India among the 8 States of chief industrial importance. This claim, if successful, will give India the right to a separate representative on the Governing Body.

Standing orders were adopted by the Governing Body at the meeting of March 23rd, 1920. A general session of the Governing Body must take place at least once every three months. Special meetings can also be summoned, and must be summoned on a written request signed by 6 members of the same group. Voting is normally by show of hands, but a ballot is required for the election of the Chairman and of the Director of the International Labour Office and in any other case where it is demanded by 10 of the members present. The sittings are not public. No vote is valid unless at least 15 members are present, but members may be replaced in the case of absence by substitutes. On the death or resignation of a Government member, the place is filled by the Government which nominated him. Vacancies among non-Government members are filled by election in accordance with the provisions of article 20 in the Standing Orders of the Conference (see page 118).

(d) The International Labour Office.

The International Labour Office may be described as the Secretariat of the permanent organisation. It could not be created until the Governing Body had been appointed by the Washington Conference. At its first meeting, which was held in Paris in January 1920, the Governing Body appointed M. Albert Thomas as Director and he appointed Mr. H. B. Butler (who was Secretary-General at Washington) as Deputy Director. The present organisation includes—

- (1) *The Cabinet*, under the control of M. Lemerrier (France), which contains representatives of most of the important countries in addition to the chief Secretariat officers.
- (2) *The Common Services* (under the Deputy Director) which include sections for—
 - (a) Establishment.
 - (b) Financial relations and commercial services.
 - (c) Examination and control of expenditure.
 - (d) Accountancy.
 - (e) Staff questions.
- (3) *The Diplomatic Division*, under Mr. Phelan (Britain), which is responsible for the preparation and organisation of the meetings of the Conference and the work in connection with the ratification of Conventions and the action taken on Recommendations.
- (4) *The Scientific Division*, under the control of Dr. Royal Meeker (late Commissioner for Labour Statistics in Washington), which is responsible for the collection and distribution of information on all subjects relating to labour. Among the useful publications undertaken by this section is a complete legislative series in English, French and German containing reprints and translations of the Labour Laws and Regulations passed by the different countries of the world.

In addition there are a number of technical services dealing with special subjects such as Unemployment, Co-operation and Industrial Hygiene.

The International Labour Office publishes weekly Bulletins which contain official documents and details of developments throughout the world and separate papers on special subjects are produced at frequent intervals.

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2

No. 10

CORRESPONDENCE

RELATING TO

**THE ACTION TO BE TAKEN IN INDIA
ON THE PROPOSALS**

OF THE

WASHINGTON LABOUR CONFERENCE.



Published by order of the Government of India

**CALCUTTA
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1921**

NOTE.

The Government of India desire it to be understood that the statements made and the views expressed in these bulletins are those of the authors themselves.

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BULLETINS
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INDIAN INDUSTRIES AND LABOUR.

No. 10.]

1921

[February.

WASHINGTON CONFERENCE CORRESPONDENCE.

INTRODUCTION.

BULLETIN No. 4 of this series gives an account of the Washington Labour Conference and includes the text of the Draft Conventions and Recommendations adopted by it. The present Bulletin may be regarded as a sequel to it, as it indicates the action taken in India on the proposals made at Washington up to the opening of the first session of the reformed Legislature at Delhi in February 1921. Except that the formal headings and the concluding phrases have been omitted, the correspondence has been printed *verbatim*. Letters received from local Governments have been arranged not chronologically but by provinces for easy reference

FIRST LETTER FROM THE GOVERNMENT OF INDIA.

No. I-812, dated Simla, the 11th May 1920.

FROM—F. R. R. RUDMAN, Esq., I.C.S., Secretary, Board of Industries and Munitions,

TO—All local Governments and Administrations.

In Commerce and Industry Department letter No. 4495, dated the 20th June 1919, the Government of India invited the attention of local Governments and Administrations to the views and recommendations of the Industrial Commission on the subject of the hours of labour in factories in India and on other cognate questions. It was stated in that letter that these subjects were likely to be discussed at the first meeting of the International Labour Conference to be held, in accordance with the terms of the Treaty of Versailles, at Washington, United States of America, in October 1919.

For facility of reference, there will be found appended to this letter (Appendix I)* a reprint of the relevant portions of the Treaty, viz., Article 23 of Part I (The Covenant of the League of Nations) and the whole of Part XIII (Labour).

2. The Conference at Washington opened on the 29th October 1919, held twenty-five sessions and was adjourned *sine die* on the 29th November 1919. The delegation from India consisted of the following gentlemen :

I. *Government Delegates :*

Mr. L. J. KERSHAW, C.S.I., C.I.E., Secretary, Revenue and Statistics Department, India Office, London.

Mr. A. C. CHATTERJEE, C.I.E., I.C.S., Chief Secretary to the Government of the United Provinces.

Adviser :

Mr. J. D. F. ENGEL, Chief Inspector of Factories, Bombay Presidency.

II. *Employer's Delegate :*

Mr. A. R. MURRAY, C.B.E., Chairman of the Indian Jute Mills Association.

* See Bulletin No. 4, pages 30 to 36.

III. *Workers' Delegate :*

Mr. N. M. JOSHI, Secretary, Social Service League, Bombay.

Adviser :

Mr. B. P. WADIA, President, Madras Labour Union.

3. The Government of India have now received from the Secretary-General, League of Nations, through the Right Honourable the Secretary of State, copies of the draft Conventions and Recommendations which were adopted by the Washington Conference. They have also been informed that the meeting of the Conference was declared closed on the 27th January 1920 and that this is the date to be considered in determining the time limits referred to in Article 405, paragraph 5 of the Treaty. A copy of the Draft Conventions and Recommendations is enclosed herewith. (Appendix II.)*

4. It will be observed from a perusal of Article 405 of the Treaty that the Government of India must come to a very early decision regarding the action to be taken on the Conventions and Recommendations. In inviting the advice and opinions of local Governments on each of these Conventions and Recommendations, I am directed to communicate the following observations indicating the tentative and provisional views of the Government of India on the various points that arise.

5. *Draft Convention limiting the Hours of Work in Industrial Undertakings to Eight in the Day and Forty-eight in the week.*

Article 10 of this Draft Convention embodies the modification relating to India adopted by the Conference in accordance with paragraph 3 of Article 405 of the Treaty. For a full comprehension of the reasons and motives that guided the Conference in arriving at their decision regarding the countries covered by paragraph 3 of Article 405, reference should be made to the Report of the special Committee on this subject appointed by the Conference. The report is reprinted in Appendix III† to this letter. Notes presented to this committee by the various delegates from India are

* See Bulletin No. 4, pages 76 to 109.

† The relevant portions of the report alluded to are given in Bulletin No. 4, pages 72 to 75.

printed in Appendix IV.* Two resolutions adopted by the Conference are also pertinent to this Draft Convention and should be read with it. They are reproduced below:—

- “(1) The provisions of this convention shall not interfere with any better conditions already in operation, or agreed upon, for all or part of the workers of any country; neither shall they interfere with any negotiations now proceeding in which the workers are asking for better conditions than the convention provides.
- (2) The Conference hopes that in no case should the wages of workmen be reduced simply by reason of the introduction of the 8-hour day and the 48-hour week, in order that the conditions which exist in certain industries and which the present convention allows to continue may not be aggravated by the imposition of lower wages on the workers.”

6. The existing law in India on hours of labour is succinctly stated in paragraph 2 of Mr. Kershaw's note* and need not be repeated. The actual hours of labour that prevailed in different Indian industries, during the autumn of last year, is described in paragraph 3 of Mr. Kershaw's note. Since then considerable changes have taken place. It is understood that in the mills in Bombay and Cawnpore a ten-hour day is now the practice. The position, therefore, now is that in the great majority of the organised and larger industries in the country, including mines, workers are not employed for more than 60 hours a week.

7. Since addressing local Governments and Administrations in June last, the Government of India have devoted continuous attention to the question of a revision of the Indian law relating to hours of labour. In the memorandum which the Government of India forwarded to the International Labour Office in answer to the questionnaire issued by that organization on the subjects included in the Agenda of the Washington meeting, they enlarged on the special conditions that prevailed in India and pointed out that any attempt to bring Indian labour conditions into line with those of Western countries by violent legislative changes would inevitably be disastrous to employers and employed alike. Subsequently, the Govern-

* Appendix IV is not reproduced.

ment of India had the opportunity of studying the summary of existing legislation in other countries prepared by the Organizing Committee of the Conference and also the proposals that were likely to be made on this subject by the various States to be represented at the Conference. In view of these proposals and the actual trend of Indian practice, the Government of India authorised their delegates to the Conference to consent to the principle of a sixty-hour week for factories as defined in the Indian Factories Act and for mines, subject to exceptions—

- (1) in the case of definite classes of work and
- (2) similarly, in the case of overtime under conditions to be specified by law or rule.

Since then, as stated above, in all the important industrial centres of the country, actual practice has approximated very closely to the rule suggested in the Draft Convention adopted at Washington.

8. The Government of India have not yet received replies from all provincial Governments to the communication on this subject addressed to them in June last. But the majority of Governments from whom answers have been received are decidedly in favour of an immediate statutory limitation of the hours of labour in the case of adult males to sixty per week. The Government of India have, therefore, arrived at the conclusion that in the revision of the Indian Factories Act, the principle of a sixty-hour week, with necessary exceptions, should be embodied. It is hardly necessary to explain that this limitation will apply only to the hours of labour for each worker and will not affect the time during which plant and machinery may be kept going. As at present, systems of shifts, approved by competent authority, might continue to be allowed.

9. A number of subsidiary questions arise in this connexion. They are enumerated below:—

- (1) Should there be in all or in any particular industries, a further limitation of the working day to 10, 10½ or 11 hours? If such further limitation is desirable, should it be effected by statutory provision or by rules to be made under the Act by either the Central or the Provincial Government? The Government of India are inclined to the view that the law should provide for elasticity in the local application of the principle of the sixty-

hour week. With conditions varying so greatly in different parts of India, a uniform working day will probably not be possible. In this connexion the question of securing a weekly half holiday for the workers also deserves consideration.

- (2) Should there be any further limitation in the working hours of women and children? This point has to be considered along with the Draft Conventions regarding the employment of women and children. The Government of India are of the opinion that differentiation between men and women, though reasonable with a working day of 12 hours in the case of men, may not be justified with an average working day of 10 hours; such differentiation may introduce complications in the working of shift systems in industries in which both men and women are employed; it may not be welcomed by women workers as they may be handicapped thereby in the labour market. It may also be observed that if Japan ratifies the Draft Convention, Japanese women will be allowed to work 57 hours a week. With regard to the subject of a further limitation of the working hours of children, I am to say that the Committee of the Conference accepted a resolution that the daily limit of 8 hours should be regarded as an absolute maximum for children, but that nothing in the resolution should be taken as approving of 8 hours as being a reasonable working day for children, nor suggesting that where shorter hours are worked, these should be increased. The point for consideration is, whether any change is desirable in the existing law in India which limits the employment of children under fourteen to six hours a day in textile factories and seven hours a day in other factories. Local Governments are requested to consider whether, under modern conditions, any discrimination in this respect is justifiable between textile and other factories.
- (3) Should there be any further limitation in the hours of work for labourers in mines? There is at present no provision in the Indian law with regard to the hours of working mines. The Washington Conference has very strongly

recommended that the Government of India should consider the possibility of adopting a lower weekly limit than 60 hours for underground work in mines. In the case of Japan, the Draft Convention prescribes a maximum of forty-eight hours in the week for such work, and it is understood that in South Africa the weekly limit will be at the most 54 hours in the case of such labour. The Government of India understand that in actual practice, the hours of work in Indian mines seldom exceed 54 per week, but they would be glad if local Governments would have a careful inquiry made into the point and make their recommendations after consultation with the interests affected.

- (4) Should there be any alteration in the definition of a factory as laid down in sections 2 (3) and 3 (1) of the Indian Factories Act? The Washington Conference has suggested that the Government of India should consider the possibility of adopting, in the light of the standards accepted in other countries, a modified definition of "factory" which would reduce the number of workers required to bring a factory under the scope of the Act. The same question is also involved in other Draft Conventions of the Conference and will be reverted to later on.
- (5) It will be observed that Article 10 of the Draft Convention extends the principle of a sixty-hour week to such branches of railway work as shall be specified for this purpose by the competent authority. The Government of India are prepared to accept the suggested extension. Provision will be made in the revising Bill for the naming of the competent authority, and the Railway Department (Railway Board) will consult Railway Administrations regarding the rules that will need to be framed on the subject, *e.g.*, specifying the branches of railway work that will come under the sixty-hour rule and for provisions regarding continuous processes, preparatory, complementary or intermittent work and other exceptional cases (Articles 4, 5 and 6 of the Draft Convention).
- (6) Article 10 of the Draft Convention further states that any modification of the sixty-hour limitation made by com-

petent authority shall be subject to the provision of Article 6 of the Convention. At present a number of exceptions and modifications are specified in the relative provision in the Indian Factories Act (*vide* section 30 and also compare sections 21 and 22). The question arises whether it is desirable to continue these provisions in the revised law or whether all such exceptions and modifications should be dealt with in rules made under the Act as is apparently contemplated in the Draft Convention. In order to enable the Government of India to come to a decision on this point, and in order to save delay in the framing of necessary regulations, after legislation has been enacted, I am to suggest that the local Government should at once consider what modifications and exceptions would be necessary in the various industries in its local jurisdiction. Articles 4, 5 and 6 of the Draft Convention merit attention in this connexion.

10. *Draft Convention concerning the employment of women before and after childbirth.*—The subject is entirely new in India and there are at present no provisions relating to it in Indian law. The delegates of the Government of India at Washington explained there that owing to the social customs of the country there had been no occasion to prohibit the employment of women before and after childbirth or to make provision for maternity benefits. The Washington Conference has supplemented the Draft Convention by the following resolution:—

“That the Indian Government be requested to make a study of the question of the employment of women before and after confinement, and of maternity benefits, before the next Conference, and to report on these matters to the next Conference.”

11. There is already a growing and important movement in India for the promotion of child welfare and the protection of women during critical stages in the period of maternity. The Government of India are in full sympathy with the humanitarian motives underlying the Draft Convention adopted at Washington. Effect, however, cannot be given to it in its present form nor can any modifications be suggested, without a study of the subject, as desired

in the Resolution quoted above. The actual practice in various parts of India has first to be ascertained. The local Government is, therefore, requested to institute very early inquiries on the subject. Among others, the following points require investigation:—

- (1) Whether in the industrial undertakings in the province women workers, as a matter of actual practice, owing to social or religious usages, abstain from work, for any period before or after childbirth. If so, what is the usual duration of the periods? Are these periods considered adequate for the health of the mother and the child?
- (2) If such practice does obtain, whether the woman has any difficulty in retaining her employment?
- (3) Whether she receives any wages or allowance from the employer during such period of absence? If she does not, what arrangements are in vogue for the maintenance of mother and child? It is possible that in many cases the earnings of the husband or the father are sufficient for this purpose, but the matter deserves careful inquiry.
- (4) Whether there are suitable arrangements to enable a woman worker who is nursing her infant to do so. [See article 3 (d) of the Convention. In this connexion attention is invited to section 21 (1) and section 24 of the Indian Factories Act.]
- (5) Whether in any industries in the province free attendance by doctors or certified midwives is available in such cases [see article 3 (c) of the Convention].

12. As in compliance with the request of the Washington meeting it will be necessary for the Government of India to be in a position to report on these matters to the next meeting of the Conference, which may be held early in the next autumn, I am to request that the reply of the local Government may reach the Government of India not later than the end of July next.

13. *Draft Convention concerning the employment of women during the night.*—The present Indian law on the subject is embodied in sections 24 to 27 of the Indian Factories Act read with section 21 of the Act. The provision in section 27 of the Act is covered by Article 4 (b) of the Draft Convention. If Articles 2 and 7 of the

Draft Convention are read together, the protection suggested is the same as is already secured by section 24 read with section 21 of the Indian Factories Act. The Draft Convention also provides in Article 5 that the Government of India may suspend the application of the Convention to industrial undertakings outside the purview of the Indian Factories Act. The Government of India therefore propose to ratify the Convention. But it will be necessary under the existing law to suspend its application with regard to labour in mines. Whether it is desirable to extend the protection to women workers in all or any class of mines is a matter on which I am to request that the Government of India may be favoured with an expression of the views of the local Government.

14. *Recommendations concerning the prevention of anthrax.*—The Conference has suggested that arrangements should be made for the disinfection of wool infected with anthrax, either in the country exporting such wool, or if this is not practicable, at the port of entry in the country importing such wool. The Government of India have in recent months been in communication with the Secretary of State and with His Majesty's Government on the subject of precautions for preventing the danger of infection by anthrax in the manipulation of wool. It is understood that the Government of the United Kingdom are making arrangements for the disinfection of wool on arrival in the United Kingdom. The Government of India realise the importance that is to be attached to the disinfection of wool in the interest of the operatives in this country as well as in the interest of the countries to which the wool is exported, but much wool is imported into India from the different countries on our land frontier, and there are practical difficulties in the setting up of disinfecting stations at the points of entry of imported wool into India. There are similar difficulties with regard to arranging for disinfection at the baling-presses. On the other hand, there are technical objections to disinfection at the ports. At present there is no evidence that the handling of wool in India causes infection to those employed in the process. On the other hand, the Government of India do not consider that it is safe to assume its absence. The Government of India do not feel at the present moment in a position to take any action on this recommendation. The question, to what extent infection is caused to workers in wool in India, is being investigated by the Sanitary Commissioner. The experiment that will shortly be made in the United Kingdom, in the disinfect-

tion of imported wool there, will also be watched. Should a simple and inexpensive system of disinfection be devised, it may be possible later on to introduce it in this country, either at the towns of entry, or at the baling presses in the interior or at the ports of export.

15. *Recommendation concerning the protection of women and children against lead poisoning.*—The Conference has recommended the exclusion of women and young persons from certain processes in lead manufacture, and the regulation of the employment of women and young persons in processes involving the use of the salts of lead. These industries are at present in their infancy in India, but there is a prospect that they will become of considerable importance in the near future. The Government of India are not aware to what extent women and children are at present employed or are likely to be employed in these industries in the provinces, where they are now being developed. *Prima facie* in view of the unanimous recommendations of the International Labour Conference it seems most desirable and, so far as the Government can judge, it should be feasible at this early stage of the industry, to introduce precautions for the protection of women and children from the dangers arising from employment in these industries, and I am to suggest that the local Governments should give the matter their careful consideration before formulating views on the subject.

16. *Recommendation concerning the establishment of Government Health Services.*—The Conference has recommended that the countries which have not done so, should establish, as soon as possible, a system of efficient factory inspection, and also in addition thereto a Government Service for safeguarding the health of the workers. The Conference has recognized that there is already an efficient system of factory inspection in India. With regard to the recommendation for a health service, it is understood that this recommendation has a strictly limited application as it relates only to the protection of workers in the unhealthy trades, *e.g.*, in factories and workshops where lead, arsenic or any other poisonous substance is used or those in which grinding, glazing or polishing on a wheel is carried on by which dust, or any gas vapour or other impurity is generated or inhaled by the workers to an injurious extent. Industries of this character are few in India, and it does not seem necessary, at the present moment, to establish a special medical service for this purpose. The Government of India are of opinion

that the medical services of the country, augmented as may be necessary in areas where many unhealthy industries are situated, will be able to safeguard the health of the workers by seeing that the statutory regulations for the safety of persons employed in such trades are strictly carried out.

17. *Draft Convention fixing the minimum age for admission of children to Industrial Employment.*—According to the present law [section 23 (a) of the Indian Factories Act], a child under nine years of age is not permitted to be employed in any factory. Under section 35 of the Act, a register in the prescribed form is kept in every factory, of the children, if any, employed there and of the nature of their respective employment. Section 23 (c) limits the employment of a child (under fourteen years) to seven hours a day, and this is further reduced in the case of textile factories, under section 32, to six hours a day. Moreover these regulations at present apply only to factories as defined in the Indian Factories Act. The Draft Convention on the subject suggests very important changes and I am to invite the particular attention of the local Government to the matter.

18. The Government of India recognise that it will not be possible for any considerable time to maintain at nine years the minimum age for the employment of children. At the Washington Conference, the delegates from practically all States represented there, agreed to a minimum of 14 years. In the case of Japan the Draft Convention provides that ordinarily the minimum will be 14 years but children over twelve years of age may be admitted into employment if they have finished the elementary school course. Apart from the question of extending the definition of "factories" and of applying the provision in the case of mines and quarries a decision on the subject seems to involve the following considerations:—

- (1) To what extent are children between the ages of 9 and 12 at present employed in factories in India that come under the operation of the Indian Factories Act?

Figures abstracted from the Annual Reports for the year 1918 show that out of a total factory population of 1,122,922 persons, there were 53,184 boys and 10,926 girls or a total of 64,110 children. In other words, less than 6 per cent. of the whole factory population were children between the ages of 9 and 14. It will be useful to know what is the approximate number in each in-

- dustry and in each province between the ages of 9 and 11, 11 and 12, and 12 and 14.
- (2) Will there be any serious dislocation in the industries concerned if the age limit be raised to either 11 or 12 years? It may be observed that in the evidence collected by the Indian Factories Commission of 1908 several employers of labour had expressed the opinion that child labour did not pay the factories and that there would not be any serious difficulty in replacing children by adults. The Government of India feel doubtful whether, in view of the general shortage of labour at the present moment, employers will be able easily to replace children by adults. They also believe that, in some cases, the machinery and plant now in use are specially adapted for manipulation by children and there may be some difficulty in substituting other types at once.
- (3) Will educational facilities be available for the children who will be excluded from factories by a raising of the minimum age? In this connection it may be pointed out that in several provinces laws have been passed in recent years, enabling local authorities to introduce compulsory primary education. It is understood however that only a limited number of local authorities have so far availed themselves of these enabling measures. The Government of India are most anxious that all artisans and industrial workers should start life after a course of primary education. As the Industrial Commission observed in their report: "A factor which has tended in the past to delay the progress of Indian industrial development has been the ignorance and conservatism of the uneducated workmen. The evidence tendered by employers was almost universally in favour of labour, both skilled and unskilled, that had at least received a primary education. This is given in countries with which India will have to compete and is a *sine qua non* in this country also." If, therefore, the raising of the minimum age for employment insures a preliminary course of education for all prospective workers, the Government of India consider that the change will

be all to the good. On the other hand, if educational facilities do not exist or are not likely to be provided in the near future, there are obvious dangers in depriving Indian children of the advantages of training which they receive in a factory. There is also some risk that in such circumstances the children may be employed in unregulated occupations.

- (4) Should educational facilities be available and the children can be compelled by law to go to school, what approximately will be the age when they will finish the course of elementary instruction and become eligible for industrial employment?
- (5) The subject has also to be considered from the physiological point of view. Having reference to the fact that in western and northern countries fourteen years is deemed to be a suitable age of physical development for boys and girls to enter upon manual work involving some strain on the muscles and nerves, what is the corresponding age for India or for the different parts of India?
- (6) Finally, public opinion has to be ascertained, specially of the workers themselves, with regard to the proposed change. The Government of India understand that, in some recent instances, factory hands have themselves expressed opinions favourable to a raising of the minimum age. This, if true, is a welcome factor as it is believed that, in the majority of cases, the children now employed in factories are the wards or offspring of adult workers, and the impression has prevailed that the latter would resent a change which might have the effect of temporarily reducing the family earnings.

19. As already mentioned it will not be possible to ratify the Draft Convention unless it is decided at the same time (1) to alter the definition of a factory and (2) to fix the same minimum age for employment in mines and quarries. A reference will be made below to the general question of the definition of a factory. As regards mines, the Government of India understand that now-a-days children are not taken underground by their parents to the same extent as they used to be and that very little actual labour is performed by children under twelve. They are also informed that in

some mines children under twelve are not allowed to go underground. The Government of India will be glad to have precise and accurate information on these points, and I am to request that, in the reply to this letter, the views of the local Governments interested may be particularly specified with regard to the fixing of a minimum age of employment for children in mines and quarries.

20. *Draft Convention concerning the night work of young persons employed in Industry.*—Under the Indian Factories Act, night work is already prohibited in the case of all females (section 24) and of boys under fourteen years [section 23 (b)]. The Washington Conference accepted the view that there was no reason to alter the Indian limit of 14 years, but it has made the recommendation that the present provision in the Indian factory law which limits its application to industries employing 50 persons or more should be modified, and all factories employing at least 20 persons brought under the provisions relating to the prohibition of night work. This suggestion will be dealt with in paragraph 23 below. As the Draft Convention does not alter the present position, the Government of India propose to ratify it.

21. *Recommendation concerning the application of the Berne Convention of 1906 on the prohibition of the use of white phosphorus in the manufacture of matches.*—The Government of India have already taken action in the matter. The White Phosphorus Matches Prohibition Act was passed in 1913, and in October 1919 the Government of India agreed that a formal notification of the adherence of India to the Berne Convention of 1906 should be given to the Swiss Federal Council.

22. *Draft convention concerning unemployment.*

Recommendation concerning unemployment.

Recommendation regarding reciprocity of treatment of foreign workers.

Resolutions on unemployment and allied subjects. (Appendix V.)

The Draft Convention concerning unemployment and the three recommendations noted above are being considered by the Government of India, and a further communication on this subject will shortly be addressed to you.

23. *Definition of a factory.*—In connexion with several subjects that came before the Washington Conference, urgent suggestions have been made to the Government of India to alter the definition

of a "factory," in order that the provisions of the Indian Factories Act might be applied to industries smaller than those that now come within its purview. The Indian Government delegates had urged on the Conference the view that the Government of India could not agree to alter the definition without an accurate knowledge of the character and number of the smaller industries, and without first ascertaining that they could undertake effectively the additional work of inspection and control. It is intended that at the ensuing Census endeavours be made to collect the necessary statistical data. The Government of India realise that there are strong arguments in favour of making the alteration suggested by the Conference. It is in these smaller industries that abuses are more likely to take place than in the larger and better organized industries of the country. Moreover, it is believed that in the bulk a very considerable number of people are employed in these smaller industries, and that the number of such industries as well as the population affected are rapidly increasing. The present definition of a "factory" in India follows the definition that was in force in Great Britain in the earlier factory laws of that country. Since then the trend of economic and social legislation in all countries has been to extend the definition of a "factory" and to bring within the scope of factory laws, so far as possible, all organised industries in their respective countries. I am to ask that the local Governments will consider whether the time has now arrived in India for extending the definition of a "factory" so as to include all industries using power and employing 10 persons or more. If it appears to the local Government, that in view of the fact that the adoption of this definition will lead to a very heavy additional burden in the way of control and inspection, I am to request that the local Government may kindly put forward its suggestions for a more workable definition.

24. As has already been mentioned, in order to comply with the Treaty obligations, the Government of India have to arrive at decisions on the various points mentioned in this letter as early as possible. Such Draft Conventions and Recommendations as will involve legislation have to be brought before the Legislative Council within the period of one year, and in no case later than 18 months, from the 27th of January last. On other grounds also, it is desirable that the revision of the Indian Factories Act, that will be involved, should be undertaken without delay.

25. The Government of India consider that it is impracticable, and, it seems to them unnecessary at this stage, to appoint a Committee of Inquiry for India as a whole. Local Governments will no doubt find it possible to formulate their views on the broad lines of policy after consulting the various interests concerned. If it be decided that the legislation will deal with only the general outlines of the subject, leaving local modifications and exceptions to be regulated by Rules under the Act, there may be occasion to appoint a Committee or possibly Provincial Committees to deal with the Rules under the Act. In view of the urgency of the case, I am to request that local Governments and Administrations will favour the Government of India with their views as fully as possible before the end of July.

APPENDIX V.

Resolutions on unemployment and allied subjects.

Resolved that the governing body of the International Labour Office be invited to form an international commission empowered to formulate recommendations upon the best methods to be adopted in each State, for collecting and publishing all information relative to the problem of unemployment, in such form and for such periods of time as may be internationally comparable.

So far as agricultural unemployment is particularly concerned, the International Labour Office shall come to an understanding with the International Institute of Agriculture at Rome, in order that the latter may regularly transmit the information collected by the institute relative to the aforesaid unemployment.

Resolved that in connection with the problem of unemployment, a special section of the International Labour Office shall be established to be especially charged with the consideration of all questions concerning the migration of workers and the situation of foreign wage earners.

Resolved that the governing body of the International Labour Office shall appoint an international commission, which, while giving due regard to the sovereign rights of each State, shall consider and report what measures can be adopted to regulate the migration

of workers out of their own States and to protect the interests of wage earners residing in a State other than their own, such commission to present its report at the meeting of the International Conference in 1920. The representation of States in the European countries on the commission shall be limited to one half of the total membership of the commission.

SECOND LETTER FROM THE GOVERNMENT OF INDIA.

No. L-812, dated Simla, the 17th May 1920.

FROM—F. R. R. RUDMAN, Esq., I.C.S., Secretary, Board of Industries and Munitions,

TO—All local Governments and Administrations.

In continuation of my letter No. I.-812, dated 11th May 1920, regarding the Draft Conventions and Recommendations adopted by the International Labour Conference at Washington, I am now directed to address you regarding—

- (1) the Draft Convention concerning unemployment;
- (2) the Recommendation concerning unemployment; and
- (3) the Recommendation concerning reciprocity of treatment of foreign workers.

2. Article 1 of the Draft Convention should be read with the resolution adopted by the Conference empowering the International Labour Office to form an International Commission which would recommend the best methods to be adopted in each State for collecting and publishing unemployment statistics. In this connection it should be mentioned that the British Empire Statistical Conference which recently met in London has recommended the establishment of a British Empire Statistical Bureau, and an extract of the Conference's resolution regarding labour statistics is appended to this letter. You will be addressed separately regarding this resolution, but it will be seen that the British Empire Statistical Conference has also suggested that statistics should be collected in each country of the British Empire regarding unemployment. Article 1 of the Draft Convention prescribes that all available information, statistical or otherwise, concerning unemployment, including reports on measures taken or contemplated to combat unemployment, should be communicated, at least every three months to the International Labour Office and if the Draft Convention is ratified, the Government of India must undertake this obligation. The representatives of the Government of India at the Conference took the view that as at present industrial unemployment does not exist in India while agricultural unemployment exists only during

periods of scarcity, when it is, and must continue to be, treated on special lines, it was unnecessary for them to ask for representation on the Commission to which the subject of unemployment was referred by the Conference, and they abstained from voting on the Draft Convention and Recommendations dealt with in this letter. The Government of India will revert again to the question whether the Draft Convention should be ratified. In the meantime, I am to point out that, though statistics could be furnished from time to time as to the numbers employed on relief works or in receipt of gratuitous relief, there are no statistics available at present regarding unemployment in the different trades. Moreover, the collection of such statistics seems to presuppose (1) the organisation of labour into trades unions to a far greater extent than is at present the case, and (2) the existence of labour exchanges. It is believed that such information as is published in European countries regarding unemployment is obtained from these sources, and it is doubtful whether, even if they ratify the Convention, the Government of India will be in a position for some time to come regularly to supply the information indicated in this Article.

3. Article 2 of the Convention should be read with the first two Recommendations concerning unemployment. If Article 2 is ratified it will be necessary to establish in India a system of free public employment agencies under the control of a central authority. On the industrial side this proposal seems to be premature in India, and unemployment arising from climatic conditions must continue to be dealt with under the Famine Codes of the different provinces, which provide probably the most complete and highly organized system of relief for unemployment in the world adjusted to suit the needs, not only of small cultivators and agricultural labourers, but of all manual workers whose livelihood depends directly on the purchasing power of agriculturists.

4. The first Recommendation concerning unemployment suggests (1) that employment agencies which charge fees or carry on their business for profit should be prohibited, and (2) that such agencies, where they exist, should be permitted to operate only under license and that they should be abolished as soon as possible. It may be mentioned that it was explained at the Washington Conference that the suggested prohibition will extend only to employment agencies which charge fees to the workers, and the Recommendation therefore does not affect the Tea Districts, Labour Association or the

Labour Department of the United Planters' Association of Southern India. Similarly it is understood that Shipper brokers who recruit under license, 'lascars and other native seamen for shipping companies are paid by the companies and not by the seamen.' If so, they too are unaffected, but the Government of India would be glad of information on this point. The Government of India are not aware that there are any agencies for the recruitment of labour for work in India which would be affected if this Recommendation were accepted, but the point will no doubt be examined by local Governments. The principle of the Recommendation is clearly sound.

5. The Recommendation, however, applies equally to the recruitment of labour for employment in other countries which is dealt with more specifically in the second Recommendation concerning unemployment. The Government of India see no objection to this Recommendation except that the last clause of it prescribing previous consultation with the workers is hardly applicable to present conditions in India. The prohibition of employment agencies working for profit would apply to the employment of professional recruiters of labour for Ceylon and the Straits and will doubtless be examined by the Government of Madras from this point of view.

6. The Government of India are of opinion that it would be premature to adopt the third Recommendation regarding the establishment of 'an effective system of unemployment insurance,' and if this view is accepted, Article 3 of the Draft Convention need not be considered. The fourth clause of this Recommendation appears to be in harmony with the existing policy of Government, an essential feature of which is the provision of State works in tracts affected by agricultural calamities.

7. There remains only the Recommendation concerning reciprocity of treatment of foreign workers. This Recommendation is not open to objection from the Indian point of view, but does not appear to be of much practical importance at present.

8. The Government of India will await the views of local Governments and Administrations before finally formulating their decision. As at present advised, however, they incline to the opinion that they should not ratify the Draft Convention regarding unemployment but they should accept the principle of the first, second and fourth clauses of the Recommendation concerning unemploy-

ment and of the Recommendation concerning reciprocity of treatment of foreign workers. At the same time they think that they should inform the International Labour Organisation that while they are unable in present circumstances to ratify the Draft Convention as it stands, they propose to consider how far labour statistics can be collected in India on the lines recommended by the British Empire Statistical Conference and that they will be willing to furnish periodically such statistics as can be procured.

Extract from the Report and Resolutions adopted by the first Conference of Government officers engaged in dealing with statistics in the British Empire.

SECTION VII.—LABOUR STATISTICS.

Labour Statistics should be compiled for the Empire as a whole.

83. The Conference is of opinion that with respect to any statistics required to be obtained by the different countries having representation at any International Labour Conference, the material obtained by the countries of the British Empire, being in any case communicated to the proposed British Empire Statistical Bureau, may conveniently be prepared for presentation to the International Labour Office through the agency of the Bureau in any case in which direct presentation of the statistics is not specially desired by the Governments concerned.

The Conference is further of opinion that information, the application of which to redistribution of labour may present advantageous opportunities to citizens of the Empire, should be available for Empire purposes not later than for general international purposes.

Need for Improved Presentation, etc., of Labour Statistics.

84. The Conference realizes that the pressure of modern industrial conditions necessitates a far closer and more accurate study of statistics of labour than has been accomplished hitherto. It realizes that large quantities of statistical data have been secured in some cases, but affirms its opinion that with few exceptions the presentation of such data has left much to be desired. It is of opinion therefore that, notwithstanding the fact that fundamental differences in local conditions make direct world-wide comparisons impossible, special attention should be given in the British Empire to this field

of statistical inquiry, and accordingly recommends that statistics of as complete a character as possible should be obtained in each country of the British Empire bearing on the rates of wages and the earnings of workpeople, the hours of labour, the causes, duration and mode of conclusion of strikes and lockouts, on employment, including unemployment, on industrial organisation, and on all other matters with a bearing on current labour conditions in so far as they are capable of statistical treatment.

Definition of what is meant by "Labour."

85. The Conference recommends that those inquiries should extend not only to the conditions of labour in industrial establishments but also to those of commercial agricultural, maritime, and other employment.

REPLIES OF LOCAL GOVERNMENTS AND ADMINISTRATIONS.

AJMER-MERWARA.

Replies to letters I-812 and L-812.

No. 2278-C.—1477-I., dated Camp Ajmer, the 29th July 1920.

FROM—The Hon'ble Mr. A. T. HOLME, C.I.E., I.C.S., Officiating Chief Commissioner, Ajmer-Merwara,

TO—The Secretary, Board of Industries and Munitions.

I have the honour to refer to the Government of India, Board of Industries and Munitions letter No. I-812, dated the 11th May 1920, on the subject of labour in factories and other cognate questions on which an expression of opinion was invited.

2. In this connection I would invite attention to my letter No. 1325-866, dated the 16th September 1919, to the Government of India in the Department of Commerce and Industry, which gives some information of the actual conditions of factories in Ajmer-Merwara.

3. My opinion on the various points raised by the Government letter under reference is as follows:—

- (1) *Paragraph 9 (I) of the letter—Working Hours for Men.*—In my letter referred to in paragraph 2 above I have already expressed my agreement with the principle of a ten-hour day. Although the railway workshops in Ajmer have a shorter day public opinion is at the present time in the main against the ten-hour day. Factory legislation should, however, unquestionably be ahead of an unprogressive public opinion particularly in the case of the workers who would probably favour unlimited overtime. Progress in this respect could in my opinion best be attained by a limitation of the working day by statutory provision combined with a power to make rules for further limitation. The inclusion in the time table of a weekly half-holiday could be left to the discretion of individual concerns.

- (2) *Paragraph 9 (2).*—I do not consider any change to be called for in the working hours of women and children.
- (3) *Paragraph 9 (3).*—There are at present no underground mines in Ajmer-Merwara.
- (4) *Paragraph 9 (4) and paragraph 23.—Definition of "Factory."*
—In my opinion it would be inadvisable in this district to widen the definition so as to include industries other than those dependent on power. I would further restrict the definition so as to exclude small industries where the number of operatives employed on the power plant and machinery directly operated by the power plant is less than 20, so as to exclude the operation of the definition to such small power works as pumping stations, electric lighting installations and the like.
- (5) *Paragraph 9 (6)—Minimum age.*—The existing law does not seem to require amendment so far as Ajmer-Merwara is concerned.

4. *Paragraph 11.—Child welfare and the protection of women.*—

- (1) The practice in the district appears to be for women to cease work a month before childbirth and resume it about a month afterwards. These periods are presumably considered sufficient for the health of mother and child by the persons concerned, and there are no statistics to show otherwise.
- (2) With the existing shortage of labour of all classes there is little danger of the woman failing to retain or re-obtain employment.
- (3) During absence the woman receives no allowance or maternity benefit from her employer. There would be difficulties in the way of making any regulations on the subject owing to the woman's susceptibilities in the matter of examination, and in view of the comparative ease of childbirth in the class of women concerned no legislation is required.
- (4) No special arrangements are as far as is known made to enable a woman worker who is nursing her infant to do so.
- (5) Free attendance by doctors or certified midwives is nowhere provided.

5. *Paragraph 13.*—There are no mines in Ajmer-Merwara employing women by night.

6. *Paragraphs 14 and 15.*—*Anthrax and lead poisoning.*—These questions do not arise in respect of any existing industries in Ajmer-Merwara.

7. *Paragraph 16.*—I agree with the opinion of the Government of India expressed in this paragraph of their letter.

8. *Paragraphs 17 and 18.*—The question of employment of children is one calling loudly for reform and I consider that the minimum age of employment should be 12.

9. *Paragraph 19.*—I have no opinion to express for the reason given in paragraph 3 (3) above.

10. I agree with the views of the Government of India as expressed in their letter No. L-812, dated the 17th May 1920, regarding the collection and publication of the statistics of unemployment.

ASSAM.

Reply to letter No. I-812, dated 11th May 1920.

No. 4752-M., dated Shillong, the 7th August 1920.

FROM—The HON'BLE MR. A. R. EDWARDS, I.C.S., Second Secretary to the Chief Commissioner of Assam, Municipal Department,

TO—The Secretary, Board of Industries and Munitions.

I am directed to refer to your letter No. I-812, dated 11th May 1920, on the subject of the draft conventions and recommendations adopted by the Washington Labour Conference. I am, in the first place, to explain that paragraphs 2 to 7 of this letter refer only to industries other than tea.

2. The total number of factories in Assam registered under the Indian Factories Act is sixteen. The working hours are stated below:—

Working hours.	No. of factories.
Less than 8 hours	1
8 hours	6
8½ hours	3
9 hours	4
10 hours	1
12 to 18 hours on a shift system of 6 hours each	1

In all these factories Sunday is a holiday, while 6 factories allow in addition a half-holiday on Saturdays. It will be observed that 14 factories work less than 60 hours a week, 1 factory for 60 hours a week, and 1 factory from 72 to 108 hours a week on a shift system.

There are reported to be 9 factories not under the Indian Factories Act which are known to employ less than 50 and more than 10 persons.

3. The "shifts" in the coal mines in Assam are for 9 hours.

4. In this province there are at present only 6 factories which are affected by the existing exceptions and modifications in the Indian Factories Act referred to in paragraph 9 (6) of your letter. These are oil mills, pottery works, railway and engineering works and one saw mill working on a system of shifts. There are no woollen mills or tanneries. No women or children are employed on processes in which the dangers of lead poisoning exist.

5. I am to make the following replies to the specific questions asked in paragraph 11 of the letter under reply. The replies are based on enquiries made as to several but not all industries:—

- (1) Yes, from 3 to 4 months, or longer if required. The periods are adequate.
- (2) No.
- (3) Yes, half pay.
- (4) See answer to (1).
- (5) Free medical attendance is apparently available.

6. In this Province there are only 428 children working in factories which come under the operation of the Indian Factories Act. A statement showing the number of children between the ages of 9 and 11, 11 and 12, and 12 and 14 employed in each industry in Assam is attached.

Children are employed principally in saw mills and mostly on outside work not connected with machinery. The Chief Commissioner is of opinion that the raising of the age limit to 11 or 12 years would not cause any serious dislocation in the industries concerned.

Educational facilities could be provided in the neighbourhood of large industrial undertakings, where such facilities are not already in existence. Twelve years may be taken as the age at which children will complete the course of elementary instruction and become eligible for industrial employment. It is doubtful whether any of the labouring classes in Assam would approve of obstacles being placed

in the way of their children working, as their earnings are a welcome addition to the family income.

It is reported that no children are employed underground in the coal mines.

7. I am to add that as regards changes, legislative or otherwise, the Chief Commissioner will be willing to accept whatever changes are accepted by the Local Governments of the larger industrial provinces, particularly Bengal.

8. I am now to refer briefly to the production of tea.

I am to point out that the whole process of its production has hitherto been considered as "agriculture," but by a very recent decision of the Calcutta High Court (against which an appeal will probably be preferred) certain stages in the production of tea are now classed as "industry." I am to observe that the labour force in tea gardens is protected by special legislation (Act VI of 1901). This legislation covers both the outdoor labour in the garden and the indoor labour in the tea house. According to latest statistics there are 851 tea gardens in Assam, some under European and some under Indian management. The total labour force in the Assam tea gardens amounted to 704,538 persons, of whom about 5 per cent. were employed in the tea houses. At present, by virtue of section 3 (1) (d) of the Indian Factories Act, 1911, tea houses are excluded from the working of the Act, even if they come under the definition of a "Factory" as contained in Section 2 (3). The work of a tea house is altogether of a special nature being merely an adjunct and corollary of the larger work of a purely agricultural nature which is going on in the surrounding plantation. As the leaf must be plucked when it is ready, neither sooner nor later, and as it must be dealt with in the tea house within a limited number of days after it is plucked, it is obvious that the pressure of work in the tea house varies greatly not only from month to month but even from day to day.

The Chief Commissioner is satisfied that the conditions of work in tea houses at present leave little to be desired and he strongly urges that the exemption contained in Section 3 (1) (d) of the Factories Act should remain in force. If any changes are made, they should take the form of additions to, or modifications of, Act VI of 1901, and should be made after very full and careful consultation with the leading managers, both European and Indian. It has not been possible to have such a consultation in the short time at the

local Administration's disposal. As an indication, however, of the reasonable and liberal spirit in which the subject will be approached, I am to enclose a copy of the Hon'ble Mr. Fox's letter dated 20th July 1920 addressed to the Commissioner, Surma Valley and Hill Districts.

Names of industries in Assam employing children.

	NUMBER OF CHILDREN BETWEEN THE AGES OF—						
	Male.			Female.			
	9 & 11.	11 & 12.	12 & 14.	9 & 11.	11 & 12.	12 & 14.	
1 Printing Press .. ..	..	..	..	..	..	..
3 Railway Works	2	1	7	..	..	..
1 Colliery Works .. ..	..	2	4	..	..	..
1 Petroleum Refinery	16	5	8	3	1	2	
1 Coach Building and Motor Car Repairing Works.	..	..	3	..	..	..
1 Pottery Works	14	..	10	3	7	..	
8 Saw Mills (out of 8, 8 employ and other 2 employing 40 children have not submitted their return).	58	55	83	29	21	43	
TOTAL ..	90	63	121	35	29	50	= 388 plus 40 428

Dated the 2nd July 1920.

FROM—H. B. Fox, Esq., Chairman, Surma Valley Branch, I. T. A.,

TO—H. C. BARNES, Esq., C.I.E., Officiating Commissioner, Surma Valley and Hill Districts.

I have the honour to acknowledge receipt of your Memorandum No. 721-22, dated 19th June 1920, with enclosures.

The chief points of interest in the Government of India letter No. I-812 are contained in paragraphs 17, 18 and 23. Paragraphs 17 and 18 relate to the fixing of the minimum age for admission of children to industrial employment. At the Washington Conference the delegates from all States represented there agreed to a minimum of 14 years,

The Government of India expresses the fear that, if educational facilities are not available for the children who will be excluded from factories by a raising of the minimum age, Indian children would be deprived of the advantages of the training they receive in a factory and might, in such circumstances, be employed in unregulated occupations.

Conditions on tea estates are such that these children would be transferred from the factory to light, healthy, out-door work. And there are so few children employed in factory work that the fixing of the minimum age 14 years would in no way cause any disturbance to tea manufacture.

Paragraph 23 is of special importance to the tea industry. It is extremely difficult to put forward any suggestion for a workable definition of a factory.

In so far as tea factories are concerned, there are no settled hours of work such as exist in jute mills, and it would be a sheer impossibility to apply to tea factories principles which might be found suitable to jute and other industries of that type.

As Mr. L. J. Kershaw states in his note, the striking feature of the factory system in India is the amount of absence from work which is permitted to take place during working hours. Generally speaking, in tea factories the custom has grown up of putting a sufficient number of operatives on to a machine so as to allow for the continuous absence of a certain percentage. This system has been found suitable in practice and is popular with the labourer. Any interference with it would be resented in a greater degree by the employee than by the employer.

It would appear that the only course open to the local Government as matters stand at present is to exclude tea factories for the time being from the application of factory laws, except in so far as concerns the personal safety of the operatives.

Reply to letter No. L-812, dated 17th May 1920.

No. 2547-R., dated Shillong, the 7th August 1920.

FROM—The Hon'ble Mr. A. R. EDWARDS, I.C.S., Second Secretary to the Chief Commissioner of Assam,

To—The Secretary, Board of Industries and Munitions.

I am directed to acknowledge the receipt of your letter No. L-812, dated 17th May 1920, on the subject of the Draft Conven-

tions and Recommendations adopted by the Washington Labour Conference.

2. In reply I am to say that the Chief Commissioner agrees generally with the conclusions at which the Board have provisionally arrived, as stated in paragraph 8 of the letter under reply.

3. This province has no agencies of the kind referred to in paragraph 4 of your letter.

BALUCHISTAN.

Reply to letter No. I-812, dated 11th May 1920.

No. 2260, dated Quetta, the 9th June 1920.

FROM—H. D. G. LAW, Esq., I.C.S., First Assistant to the Hon'ble the Agent to the Governor-General in Baluchistan,

TO—The Secretary, Board of Industries and Munitions, Simla.

I am directed to acknowledge the receipt of your letter No. I-812, dated the 11th May 1920, regarding the draft conventions and recommendations adopted by the International Labour Conference at Washington.

2. *Limitation of working hours in Industrial undertakings.*—From enquiries made it appears that the labourers in the various industries, including mines, in Baluchistan are not worked for more than 54 hours a week and thus even if the workmen are allowed a weekly half-holiday the limit of ten hours' working day will not be exceeded so far as this province is concerned.

3. Very few women and children are employed in the Baluchistan industries and, as stated above, the working day being hardly of ten hours, the Agent to the Governor-General agrees that no differentiation between men and women is called for in this respect. As for the employment of children under fourteen years of age, he is of opinion that no change is necessary in the existing law, which limits their employment to six or seven hours a day. There are no textile industries in this province.

4. As stated above, the hours of work for labourers in mines in Baluchistan are already limited to 54 a week and no further reduction therein seems advisable.

5. Overtime is only resorted to in the Railway Workshops in Quetta, which, the local railway authorities say, are controlled from Lahore.

6. *Employment of women before and after childbirth.*—Indian women do not usually take to work for 40 days after childbirth; there is however no custom to leave work before it. Very few women being however employed in the Baluchistan industries, no useful opinion in the matter can be offered.

7. *Employment of women during the night.*—No women are employed during the night in Baluchistan.

8. *Protection of women, children and workmen against lead or other poisoning.*—There are no such industries in this province.

9. *Fixing the maximum age for admission of children to industrial employment.*—In the mines of Baluchistan no children work underground and only a few of them work above the ground. The age-limit might be, however, fixed at fourteen years for mines and quarries and at twelve years for other industries.

10. *Definition of a factory.*—Owing to the small scale of any existing factories, there would seem to be no present need in Baluchistan for extending the definition of a factory.

Reply to letter No. L-812, dated 17th May 1920.

No. 2259, dated Quetta, the 9th June 1920.

FROM—H. D. G. LAW, Esq., I.C.S., First Assistant to the Hon'ble the Agent to the Governor-General in Baluchistan,

TO—The Secretary, Board of Industries and Munitions, Simla.

I am directed to acknowledge the receipt of your letter No. L-812, dated the 17th May 1920, regarding:—

- (1) the draft convention concerning unemployment,
- (2) the recommendation concerning unemployment, and
- (3) the recommendation concerning reciprocity of treatment of foreign workers.

2. The industrial activity in Baluchistan being on a very minor scale, the Agent to the Governor-General is unable to offer any useful remarks on the subject.

BENGAL.**Reply to letters Nos. I-812, dated 11th May 1920, and L-812, dated 17th May 1920.**

No. 377T.—Com., dated Darjeeling, the 2nd October 1920.

FROM—The HON'BLE MR. A. MARR, I.C.S., Secretary to the Government of Bengal, Commerce Department,

TO—The Secretary, Board of Industries and Munitions, Government of India.

I am directed to refer to your letters Nos. I-812, dated the 11th May 1920, and L-812, dated the 17th May 1920, regarding the draft conventions and recommendations adopted by the International Labour Conference at Washington in November 1919.

2. I am, in the first place, to express regret for the delay which has ensued. Some of the bodies consulted have not even yet replied and the criticisms of the Bengal Chamber of Commerce, without which this Government could not deal adequately with the points under issue, was received only on the 9th September. The Governor in Council does not, however, propose to wait further, and offers the following comments on the subject.

3. DRAFT CONVENTION LIMITING THE HOURS OF WORK IN INDUSTRIAL UNDERTAKINGS TO EIGHT IN THE DAY AND FORTY-EIGHT IN THE WEEK.—(*Paragraphs 5-8 of the letter of the Government of India, dated the 11th May 1920.*)—Article 10 of this Draft Convention lays down that in British India the principle of a sixty-hour week shall be adopted for all workers in certain specified industries, that any modification of this limitation shall be subject to certain provisions of the Convention, and that further provisions limiting the hours of work in India shall be considered at a future meeting of the General Conference. The principle of a sixty-hour week has been generally accepted by the mercantile community in this Presidency. The Indian Mining Association have stated in this connection that the mining industry would be prepared to accept a fifty-four-hour week for mine-workers, but could agree to no further limitation. The Government of Bengal agree with the Government of India that in the revision of the Indian Factories Act the principle of a sixty-hour week should be embodied. Provision should also be made in the new Act for exceptions, similar to those contained in sections 21 (2) (b), (c), (d), (e), 21 (3), 30, 31 (2)

and 31 (3) of the present Act (XII of 1911). The Governor in Council also agrees that the systems of shifts approved by competent authority, as dealt with in sections 21 (2) (c) and 29 (2) of the Indian Factories Act, should continue to be allowed. He would, at the same time, emphasise the necessity for prescribing that the hours of labour for each worker will not affect the time during which plant and machinery may be kept going.

4. SUBSIDIARY QUESTIONS ARISING OUT OF THE DRAFT CONVENTION LIMITING THE WORKING HOURS.—(*Paragraph 9 of the Government of India's letter, dated the 11th May 1920.*)—The views of this Government on the various questions referred to in this paragraph are as follows:—

(1) *Clause (1) of paragraph 9.*—As regards the question of prescribing a further limitation of the working day to 10, 10½ or 11 hours, the Bengal Chamber of Commerce are of opinion that no further limitation should be put on the working day, and they have expressed their agreement with the view that the law should provide for elasticity in the local application of the principle of the sixty-hour week. The Chamber are further of opinion that a weekly rest period of twenty-four consecutive hours should be allowed to all classes of workers. At present under section 22 of the existing Act a weekly holiday on Sunday is enjoined, subject to certain exceptions. The question has been raised whether, in addition to this, a weekly half-holiday should be given. In this connection it is to be remembered that in India there are many more religious holidays than in any other country. The Government of Bengal agree, on the whole, with the Government of India that the law should provide for elasticity in the local application of the principle of the sixty-hour week. If any restriction is to be laid down, elasticity might be allowed, when a weekly half-holiday is given in addition to the limitation of a sixty-hour week, but the working day might be limited to ten hours in factories, in which no weekly half-holiday is given.

(2) *Clause (2) of paragraph 9.*—The Government of India point out certain cogent objections to differentiation between men and women in hours of work. The Gover-

nor in Council fully realises the strength of these objections and agrees with the consensus of opinion received by him to the effect that the working hours should be the same for both men and women, and that there should be no differentiation in this respect between the sexes. As regards children, the Bengal Chamber of Commerce agree that no discrimination should be exercised as between textile and other factories. A flat rate of 6 hours a day for children employed in all industries is recommended by this Government.

- (3) *Clause (3) of paragraph 9.*—For underground workers in mines the Indian Mining Association, the Bengal Mining Board and the Bengal Chamber of Commerce have accepted a fifty-four-hour week. The Government of Bengal support this recommendation.

With regard to clause (a) of section 3 (I), which provides that the Factories Act shall not apply to any mines subject to the operation of the Indian Mines Act, 1901, the Chamber of Commerce point out that the provisions of law limiting the working hours in mines should not be included in the Indian Factories Act, but should find a place in the Indian Mines Act, or in some other similar statute. The Governor in Council agrees.

- (4) *Clause (4) of paragraph 9.*—With regard to the question whether there should be any alteration in the definition of a factory as laid down in the Indian Factories Act so as to reduce the number of workers required to bring a factory within the scope of the Act, the bodies consulted are all of opinion that no amendment of the definition given in section 2 (3) is necessary. The Chief Inspector of Factories, Bengal, however suggests that the word "precincts" in this section should be defined so as to cover all that part of the land adjoining the factory on which there are coolie lines, tanks, jetties, etc., which are not directly under the control of any public authority. At present the obligations imposed by section 9 of the Act do not apply to such land or to the structures on it. The Chief Inspector's proposal is supported by this Government. Beyond this, no amendment of the definition given in section 2 (3) seems to be necessary. With

reference to section 3 (1) of the Act, the Government of Bengal have exercised their powers under the proviso to this section in respect of all factories in Calcutta, the 24-Parganas, Howrah and Hooghly. Most of the factories in this Presidency are situated within these areas.

The Bengal Chamber of Commerce now recommends that sub-clause (e) may be modified so as to provide for the application of the Act to any factory employing simultaneously more than nineteen persons, instead of forty-nine persons as at present, and that the proviso to the section may also be amended to permit of the provisions of the Act being applied, at the discretion of the local Government, to any factory or class of factories, employing not less than ten persons, instead of twenty persons as at present. The Governor in Council supports this recommendation and considers that this will be sufficient as a first stage. If further reduction in the limits is made at once, there would be great difficulty in providing an adequate and efficient staff for inspection.

(5) *Clause (6) of paragraph 9.*—As regards modifications of the sixty-hour limitation contemplated by article 10 of the Draft Convention, the Bengal Chamber of Commerce consider it to be desirable that the necessary exceptions and modifications should be specified to the utmost extent in the revised Act itself, instead of in rules to be made under it. While recognising that local Governments must be left to frame rules to meet the varying conditions in the different provinces, it is urged by the Chamber in this connection that the Act itself ought to be as comprehensive as possible, in order that a large measure of uniformity should be attained in factory legislation throughout the country. The Governor in Council agrees that all exceptions and modifications should be specified in the Act and not in the rules made under it.

Article 4 of the Draft Convention deals with the matter of shifts, which is provided for in section 21 (2) (a) and 29 (2) of the existing Act. Article 5 mentions agreements between workers and employers' organizations. India is not ready for this yet. Article 6 of the Convention treats of exceptional cases. These are provided for in

sections 21 (2) (b), (c), (d) and (e), 21 (3), 22 (2), (3), (4), 30, 31 (2), 31 (3) and the Schedules to the present Act. All these provisions should, in the opinion of this Government, be continued. They cover all the requirements of the present industries in Bengal with the exception of coking plants, the inclusion of which in the Schedules is recommended by this Government.

5. DRAFT CONVENTION CONCERNING THE EMPLOYMENT OF WOMEN BEFORE AND AFTER CHILDBIRTH.—(*Paragraphs 10-12 of the letter, dated the 11th May 1920.*)—The Bengal Chamber of Commerce state that they are in sympathy with the motives underlying this Draft Convention and that they have no doubt that employers will give Government all the assistance necessary for a study of the question of the employment of women before and after confinement. They say that, as far as they can ascertain, there is no uniformity of practice in the various industries as to the treatment of women. They also observe that it is not yet possible to apply this Convention to industrial undertakings in India, and in this the Government of Bengal agree.

6. With regard to the specific points referred to in paragraph 11 of the Government of India's letter, the following remarks are submitted by this Government:—

(1) *Clause (1) of paragraph 11.*—It is reported by the Bengal Chamber of Commerce that there are no recognised periods during which women absent themselves from work before and after childbirth. In practice, however, they are free to, and do, abstain from work before and after confinement for periods which vary at their discretion from 10 days to 6 weeks. It depends much on caste custom how soon mothers return to work, but this is usually at least 14 days to 1 month after childbirth. The return to work of the mother is generally to the child's advantage, as it lies in some quiet corner of a well-ventilated work-shed instead of living in a dark, dirty, insanitary home. The Governor in Council is, however, doubtful whether in practice it is possible to regulate the period of absence by any rule, as it is a matter which will be governed by caste and social customs and in which any interference may be resented. His Excellency

in Council thinks that probably Government cannot do more than lay down theoretical periods (before and after), and urge on employers that absence for these periods should be allowed without prejudice to the woman's subsequent re-employment.

(2) *Clause (2) of paragraph 11.*—It is reported by the Bengal Chamber of Commerce that the woman has no difficulty in retaining her employment.

(3) *Clause (3) of paragraph 11.*—The Bengal Chamber of Commerce state that there is no uniformity of practice as regards the wages or allowances paid to women during their absence. The Commissioner of Burdwan reports that during such absences no wages or allowances are paid, and that the women's husbands or fathers are generally able to support them. The Governor in Council doubts if compulsory allowances can be proposed at this early stage. They may come in time, but even in England the idea is a modern one.

(4) *Clause (4) of paragraph 11.*—The conditions obtaining in factories in Bengal are such as enable women-workers to nurse their infants when desired.

(5) *Clause (5) of paragraph 11.*—In most factories of any size Indian doctors are in attendance to give free treatment to workers, but they are seldom called in maternity cases, as Indian women are prejudiced against male medical attendants. It is the custom for the patient to be attended by a *dai*, i.e., a local midwife. In certain of the coal mines, however, there are properly trained certified Indian midwives. The women-workers were at first averse to receiving assistance from these midwives, but they are now beginning to understand the benefits which accrue from such expert aid.

7. DRAFT CONVENTION CONCERNING THE EMPLOYMENT OF WOMEN DURING NIGHT.—(*Paragraph 13 of the Government of India's letter, dated 11th May 1920.*)—The existing Factories Act fulfils all the requirements of this Draft Convention, as far as factories within the purview of that Act are concerned. As regards other industrial undertakings, the Bengal Chamber of Commerce have recommended that the application of the Convention to them should be suspended, particularly to coal mines. The Governor in Council agrees in

this view. As regards coal mines, the Commissioner of Burdwan reports that in the present state of the industry it would be quite impossible to restrict the employment of women in mines either by day or by night. He goes on to say :

"The majority of women working in mines are married and Sonthals. Infidelity is most prevalent, and sooner than leave his wife above-ground, the Sonthal miner will refuse to work in the mine. Moreover, the Sonthal family is an organised industrial unit and any legislation on the lines of the Draft Convention would be even more resolutely opposed by the miners themselves than by the colliery managers. Medically there appears to be no objection to the employment of women."

"Mr. Simpson is of opinion that underground mining is not a suitable occupation for women, but he does not think it would be advisable to prohibit their employment either by day or by night for some years to come. To do so would disorganize the coal mining industry to a very great degree. Their health does not suffer by reasons of underground occupations and they are not, as a rule, exposed to any great danger."

8. RECOMMENDATIONS CONCERNING THE PREVENTION OF ANTHRAX.—(*Paragraph 14 of the Government of India's letter, dated the 11th May 1920.*)—The Washington Conference recommended that arrangements should be made for the disinfection of wool infected with anthrax, either in the country exporting such wool, or at the port of entry in the country importing it. The amount of raw wool imported into Calcutta by sea is not large. In 1906-07 it was about 50,000 maunds, but in 1910-11 it amounted to only 13,000 maunds. The exports of raw wool were about 49,000 maunds in 1910-11, but as much as 71,000 maunds were exported in 1906-07. A considerable amount of wool is brought into Bengal from Thibet *via* Kalimpong. The Government of Bengal are not aware of any case of anthrax having been traced to wool exported from Calcutta nor of any case of wool sorters' disease (anthrax) having occurred in Bengal.

Deaths reported from anthrax among animals during the past 5 years are as follows:—

Year.	Deaths.	Districts.
1915-16	60	5
1916-17	76	7
1917-18	1,683	13
1918-19	2,556	5
1919-20	88	6

It is probable that these numbers represent only a small proportion of the occurrences. Human anthrax has been reported also from certain localities. There has been one case in the Jalpaiguri district and two deaths in Calcutta this year. In view of the facts stated, it is inconceivable that anthrax should not occur in connection with trade processes in this country, in which hides or horse-hair or wool is employed. At present, however, there is no evidence of its occurrence in this Presidency from infection in the manipulation of wool or hides. There are in Bengal two woollen mills and six tanneries and a few smaller concerns, but no cases of anthrax among the employees have ever been reported. This, however, is no proof that the disease does not occur. If a workman contracted anthrax, he would probably merely absent himself from work giving no reason to his employer, and thus he might easily die without anyone being aware that he was suffering from anthrax. The disease might also be confused with carbuncle, or even with plague. As cases of malignant pustule often live several days, even without treatment, it would be quite possible for a sufferer before he died to return to his village, with the result that all trace of him would be lost, except to the most searching enquiry. There is likely to be greater danger from hides than from wool in the case of this province, which has a large export trade in hides. In the opinion of this Government it is impracticable, in the present state of knowledge on the subject, to insist upon the disinfection of either wool or hides exported from or imported into Calcutta. What is needed is a careful investigation to determine, firstly, whether or not human anthrax is occurring, secondly, whether it is due to infected wool or infected hides and, thirdly, whether the infection is autochthonous or imported.

9. RECOMMENDATION CONCERNING THE PROTECTION OF WOMEN AND CHILDREN AGAINST LEAD-POISONING.—(*Paragraph 15 of the Government of India's letter, dated the 11th May 1920.*)—The recommendations of the Conference on this subject are accepted by this Government. In this province at present there are no women or children employed in processes involving danger of lead-poisoning.

10. RECOMMENDATION CONCERNING THE ESTABLISHMENT OF GOVERNMENT HEALTH SERVICES.—(*Paragraph 16 of the Government of India's letter, dated the 11th May 1920.*)—With regard to this recommendation the Government of Bengal agree with the view expressed by the Government of India that at the present moment it is not

necessary to establish a special medical service in India for safeguarding the health of the workers, and that the existing medical services of the country, augmented as may be necessary in areas where many unhealthy industries are situated, will be able to do this by seeing that the statutory regulations for the safety of persons employed in such trades are strictly carried out. In the opinion of the Governor in Council, however, it would be possible to have an intermediate stage by enacting that every factory employing, say 1,000 hands, must maintain a doctor and a dispensary, unless there is a properly-equipped hospital or dispensary in the neighbourhood, to which the factory makes an adequate annual subscription.

11. DRAFT CONVENTION FIXING THE MINIMUM AGE FOR ADMISSION OF CHILDREN TO INDUSTRIAL EMPLOYMENT.—(*Paragraphs 17-18 of the Government of India's letter, dated the 11th May 1920.*)—As regards the general question of fixing an age limit for children, the Governor in Council would in the first place invite the attention of the Government of India to the following extracts from the letters received from the Indian Mining Association and the Bengal Chamber of Commerce in which the difficulties involved are very clearly stated.

The Indian Mining Association say :—

“As regards the minimum age for admission of children to employment in mines the Committee consider that it is very difficult to lay down hard and fast rules. The general practice is that children go down the mines with their parents from a very early age. From about the age of eleven a child becomes a recognized worker, and the Committee would suggest this as an appropriate age to fix as the age at which children would be allowed to become enrolled in a colliery pay-sheet and earn wages for their labour.”

The Bengal Chamber of Commerce state :—

“The Committee are unanimously of the opinion that this Draft Convention should not be ratified by the Government of India. Article 6 provides that in India children under 12 years of age should not be employed in certain industrial undertakings, regarding which the following remarks may be made :—

- (a) The description of manufactories as concerns working with power and employing more than 10 persons is inconsistent with the definition of factories as contained in the Indian Act.
- (b) The inclusion of mines, quarries and other works for the extraction of minerals from the earth brings within the scope of Factory legislation more than is justified by present conditions in India.
- (c) The proposed application of child-labour laws to the transport of passengers or goods or mails by rail, and to the handling of goods at docks, quays and wharves, is an entirely new feature in Indian legislation, as to the probable effects of which, detailed enquiries are necessary. The Com-

mittee are of the opinion that any convention regulating the employment of children should apply only to factories as defined in the Indian Factories Act, and possibly to the coal mines.

As regards the minimum age of employment, it must be kept in view that children between the ages of nine and fourteen years are employed in textile factories for only six hours, and in other factories for seven hours, on six days in the week, and, as above indicated, the Committee are of the opinion that a uniform daily maximum of six hours should be introduced for all factories. So long as there is no system of compulsory education in force in India, the Committee consider that nine years is not too young an age for children here to commence work. In their opinion, more harm to the moral and physical welfare of children of that age in India is likely to result from allowing them to run loose in crowded mill areas, than can possibly arise from their employment for six hours daily on light work in well-ordered factories. The Committee are strongly of the opinion that the question of the age-limit for admission of children to employment is closely linked up with the question of education, and that developments in India have now reached the stage when it is absolutely necessary for child-labour laws and school attendance laws to be taken in hand concurrently. In this connection, the Committee would refer to the Report of the Indian Industrial Commission, where it is stated that 'the first thing to do is to introduce compulsory education in areas where this is feasible, applicable to all classes of children and not merely to those employed in factories. Any consequential amendment of the Factories Act may then be considered.' With this view of the position the Committee are in entire agreement, and they are not in favour of raising the minimum age-limit for employment of children unless and until provision is made for the compulsory attendance at school of all children under a certain age.

The Committee wish also to draw the attention of the Government to the necessity for placing birth registration on a more satisfactory basis than at present. Until such time as this is done, neither child-labour laws nor compulsory education laws can be effectively enforced. For instance, it is impossible in this country to give effect to article 4 of the Draft Convention which requires every employer to keep a register of all persons under the age of 16 years employed by him, and of the dates of their births.

In making comparisons between India and other countries and even between different provinces in India, the physiological point of view has also to be considered. The Committee believe that no reliable evidence is forthcoming regarding the physical, intellectual and moral development of children in India to justify the all-round raising of the minimum age of their admission to industrial employment to 12 years.

Taking into account all these factors—the absence of educational facilities, the neglect of birth registration, and lack of reliable data concerning physical development, the Committee feel strongly that there was no justification for the International Labour Conference at Washington desiring to impose on India limitations on the employment of children such as are contained in article 6 of the Draft Convention. That particular article was inserted on the motion of the Workers' delegate from the United Kingdom, against the wishes of the Commission on employment of children, and in direct opposition to the recommendations of a sub-committee of the Conference which had carefully considered all the

evidence available, and had submitted a report in which India was referred to in the following terms :—

5. The Committee feel it desirable to make a special reference to the case of India which, under present conditions, will come under the scope of paragraph B of these recommendations. They understood from the representatives of India that they have extensive inquiries in hand with a view to introducing a system of education and amending the Factory Acts and that they have in mind the raising of the present age of admission of children into employment, but that until these inquiries are complete, they find it impossible to make definite proposals. The Committee recommends that these inquiries will be pressed on with all possible expedition. They suggest that the International Labour Office should bring the question to the notice of the Indian Government and urge them to put forward some definite proposals at the next Conference.

The Committee of the Chamber are, therefore, of the opinion that the Government of India should refuse to ratify the Draft Convention, but should proceed with their enquiries on the lines indicated in the above Report, with a view to obtaining the required *data* concerning the physical development of children in India, and making early provision for the introduction of compulsory attendance at schools and for universal registration of births, after which it will be possible to give serious consideration to the raising of the minimum age for admission of children to industrial employment."

The minimum age in England at present is 12 years and in the opinion of this Government, it is too much to ask India to rise at once to such a standard. In view of the practical impossibility of distinguishing age to a year or two, the Governor in Council doubts if it is much use at this stage attempting an age-limit by rule, though theoretically 11 years is young enough for any child to work in a factory. A rule limit would, however, tend to diminish the employment of very young children, but it will likely be extensively evaded.

12. The reply of this Government to the specific points mentioned in paragraph 18 of your letter is as follows :—

Paragraph 18 (1).—(a) There are 29,699 children employed in factories in Bengal which come under the operation of the Factories Act, as detailed below :—

BETWEEN

9 AND 11 YEARS.		11 AND 12 YEARS.		12 AND 14 YEARS.	
Male.	Female.	Male.	Female.	Male.	Female.
11,410	1,826	7,249	985	7,672	557

- (b) A statement is enclosed showing the number of children between the ages of 9 and 11, 11 and 12 and 12 and 14 in each industry in Bengal.

It may be pointed out that these figures showing the distribution between the different ages cannot be taken as anything like accurate owing to very faulty birth registration.

Paragraph 18 (2).—In Bengal in textile factories children between the ages of 9 and 11 account for about 5 per cent. of the employees. A raising of the age-limit to 11 years would not cause any serious dislocation either (1) in labour or (2) in the manipulation of the types of machinery now used.

Paragraph 18 (3).—A reference is invited in this connection to this Government's (General Education Department) letter No. 172-T.—Edn., dated the 18th May 1920, to the address of the Government of India, Department of Education, on the subject of expansion of primary education in Bengal, and also to sections 4, 6 and 13 of the Bengal Primary Education Act, 1919 (Bengal Act IV of 1919). The principle of this Act is that compulsory education may be introduced when proper provision has been made for primary education on a voluntary basis, but not till then. The system of voluntary education is only in the initial stage, and municipalities have been asked to submit returns under section 3 of the Act showing the total number of children between the ages of 6 and 10, the number actually attending primary schools and the provision made for elementary education. The municipalities in mill and other areas, however, are not showing any readiness to incur the expenditure necessary for a complete system of voluntary education. The employment of any boy between six and ten years of age, who is required to attend a recognized primary school, is prohibited by section 11 of the Act, but the provisions of this section cannot operate until a system of compulsory education is introduced. There are no prospects at present of such a system being introduced in this Presidency.

Paragraph 18 (4).—Under section 6 of the Bengal Primary Education Act (IV of 1919), compulsory education goes up to 10 years of age. This ordinarily would be the age when children would finish the course of elementary instruction and become eligible for industrial employment, should educational facilities be available and the children can be compelled by law to go to school.

Paragraph 18 (5).—Without a detailed enquiry on the action of labour on children and its effect on their health it is impossible for this Government to suggest to the Government of India the suitable age of physical development for Indian children to enter upon manual work involving some strain on the muscles and nerves.

Paragraph 18 (6).—As far as the Government are aware, in Bengal there has been no case of factory hands expressing an opinion favourable to the raising of the minimum age. The parents and guardians of the majority of children employed in Bengal are illiterate and an intelligent opinion on the proposed change can hardly be expected from them. It may be surmised, however, that Indian labourers at present are not anxious for this change, as they probably appreciate the children's earnings; also because there would be no one to look after the children when their parents are in the factory.

13. EMPLOYMENT OF CHILDREN IN MINES.—(*Paragraph 19 of the Government of India's letter of the 11th May 1920.*)—Mr. Simpson, the Officiating Chief Inspector of Mines, says that children of all ages enter Indian coal mines, but they do not form more than 2 or 3 per cent. of the labour force, and not more than perhaps 10 per cent. of such children actually do work. Of the superintendents of coal mines consulted by him, twenty-one are opposed to their exclusion from mines and ten in favour. The age-limit suggested is about 12 years. Many of those opposed to prohibition state that it is advisable, but not practicable. They consider that the children are better with their parents and that many families of workers would leave the coalfields altogether, if children were not permitted to accompany them underground. Mr. Simpson is personally of opinion that this is a reform greatly to be desired and that any

difficulties would soon be overcome. The Governor in Council agrees with him, and recommends that children under 12 years of age should be excluded from mines.

14. DRAFT CONVENTION CONCERNING THE NIGHT WORK OF YOUNG PERSONS EMPLOYED IN INDUSTRY.—(*Paragraph 20 of the Government of India's letter of the 11th May 1920.*)—As the Draft Convention does not alter the present position in India, the Government of Bengal do not see any objection to its being ratified by the Government of India.

15. DEFINITION OF A FACTORY.—(*Paragraph 23 of the Government of India's letter, dated the 11th May 1920.*)—This Government would refer to the remarks already made by them on this subject in paragraph 4 (4) above, in which it has been suggested that, on account of the difficulty in providing an adequate and efficient inspection staff, Government should first take the intermediate stage of reducing the figures in section 3 (1) (e) and its proviso to nineteen and ten, respectively. If this measure turns out successful, the first figure can be reduced to ten by a simple amendment of the Act.

16. DRAFT CONVENTION CONCERNING UNEMPLOYMENT.—(*Paragraph 3 of the Government of India's letter, dated the 17th May 1920.*)—The Governor in Council agrees with the Government of India that Article 2 of this Convention, which requires (a) the establishment of free public employment agencies under the control of a central authority, and (b) the appointment of advisory committees consisting of representatives of employers and of workers, is premature for India.

17. RECOMMENDATION CONCERNING UNEMPLOYMENT.—

(a) Clause I of the Recommendation regarding the prohibition of employment agencies which charge fees to workers or carry on their business for profit (paragraph 4 of the Government of India's letter, dated the 17th May 1920).—In Bengal there are no agencies which would be affected if this recommendation were accepted. Shipping brokers, who recruit lascars and other Indian seamen, are paid in this Presidency by the owners of vessels and not by the seamen.

- (b) Clause II of the Recommendation regarding recruitment of workers by mutual agreement between countries (paragraph 5 of the Government of India's letter, dated 17th May 1920).—This requires no comment from this Government.
- (c) Clause III of the Recommendation regarding the establishment of an effective system of unemployment insurance.—(Paragraph 6 of the Government of India's letter, dated the 17th May 1920.)—The Government of Bengal agree with the Government of India that it would be premature to adopt this recommendation in India, and that Article 3 of the Draft Convention need not be considered.
- (d) Clause IV of the Recommendation regarding co-ordination of work undertaken under public authority with a view to reserving such work as far as practicable for periods of unemployment and for districts most affecting it.—(Paragraph 6 of the Government of India's letter, dated the 17th May 1920.)—The Government of Bengal agree with the Government of India that this clause is in harmony with the existing policy of Government.

18. RECOMMENDATION CONCERNING RECIPROcity OF TREATMENT OF FOREIGN WORKERS.—(Paragraph 7 of the Government of India's letter, dated the 17th May 1920.)—The Governor in Council agrees with the Government of India that from the Indian point of view there is no objection to this recommendation.

19. In conclusion, I am to say that the Government of Bengal agree in the opinion expressed in paragraph 8 of your letter of the 17th May, to the effect that the Government of India should not ratify the Draft Convention regarding unemployment and should not accept Clause III of the Recommendation about the establishment of an effective system of unemployment insurance. They are also in agreement with the suggestion that the Government of India should accept the principles contained in Clauses I, II and IV of the recommendation.

Statement showing the number of children between the ages of 9-11, 11-12 and 12-14 in each industry in Bengal.

Serial No.	Name of industry.	NUMBER OF CHILDREN BETWEEN THE AGES OF—						
		MALES—			FEMALES—			Total.
		9 & 11.	11 & 12.	12 & 14.	9 & 11	11 & 12.	12 & 14.	
1	Arms and ammunition factories	123	168	216	..	..	..	502
2	Clothing agencies . . .	4	5	5	..	..	..	14
3	Mathematical instrument factories.	..	..	13	..	..	..	13
4	Municipal works . . .	..	..	2	..	..	..	2
5	Water pumping-stations	..	..	4	..	..	..	4
6	Cotton mills . . .	745	422	479	36	22	7	1,711
7	Jute mills . . .	10,049	6,005	5,540	1,725	865	307	24,491
8	Woollen mills . . .	..	..	29	..	..	..	29
9	Iron and brass foundries	57	176	221	51	77	74	656
10	Dockyards . . .	18	37	18	..	..	..	73
11	Railway workshops . . .	6	8	39	..	..	..	53
12	Ship-building and engineering works.	42	61	85	..	..	..	189
13	Tramway works . . .	..	1	24	..	..	..	25
14	Distilleries . . .	1	1	13	..	..	..	15
15	Ice, mineral and aerated water factories.	..	1	7	..	..	..	8
16	Rice mills . . .	..	3	15	..	..	..	18
17	Tobacco factories . . .	70	23	43	..	10	..	146
18	Bone mills . . .	5	2	8	2	8	10	30
19	Chemical works . . .	7	4	19	..	..	..	30
20	Lac factories . . .	..	..	13	..	..	..	13
21	Oil mills . . .	..	6	11	..	..	..	17
22	Paint works . . .	..	2	2	..	..	..	4
23	Soap factories . . .	26	17	21	..	..	..	64
24	Paper mills . . .	32	30	31	3	5	9	110
25	Printing presses . . .	12	25	66	..	..	..	96
26	Coach building and motor-car repairing works.	8	16	39	..	..	..	63
27	Potteries . . .	..	..	69	..	..	7	70
28	Stone works . . .	2	5	8	..	..	..	15
29	Tile factories . . .	..	..	19	..	..	18	37

Statement showing the number of children between the ages of 9-11 11-12, and 12-14 in each industry in Bengal—contd.

Serial No.	Name of industry.	NUMBER OF CHILDREN BETWEEN THE AGES OF—						
		MALES—			FEMALES—			
		9 & 11.	11 & 12.	11 & 14.	9 & 11.	11 & 12.	12 & 14.	Total.
30	Tanning extract works . . .	..	..	13	..	..	..	13
31	Tanneries	13	3	21	..	..	..	36
32	Aerating gas works . . .	..	2	4	..	..	..	6
33	Bulton manufactories . . .	2	3	1	..	..	..	6
34	Cotton ginning and pressing mills.	13	18	32	..	..	40	103
35	Engineering workshops . . .	23	59	238	..	..	6	329
36	Electroplating works . . .	..	..	1	..	..	..	1
37	Gas works . . . . .	..	..	1	..	..	..	1
38	Jute presses	57	62	152	9	3	37	320
39	Kerosene tinning and packing works.	30	25	20	..	..	..	75
40	Lime works . . . . .	..	..	4	..	..	2	6
41	Packing-box factories . . .	34	43	49	..	..	..	126
42	Rope works	16	3	12	..	..	..	31
43	Stationary manufactory . . .	..	..	41	..	..	..	41
	Total	11,410	7,249	7,672	1,826	985	557	20,690

BIHAR AND ORISSA.

Reply to letters Nos. I-812, dated 11th May 1920, and L-812, dated 17th May 1920.

No. 1803-Com.—R., dated Ranchi, the 16th August 1920.

FROM—The Hon'ble Mr. J. D. SIFFON, I.C.S., Secretary to the Government of Bihar and Orissa, Financial Department,

To—The Secretary, Board of Industries and Munitions.

I am directed to refer to your letters Nos. I-812, and L-812, dated the 11th and 17th May 1920, inviting the local Government to formulate their views regarding the action to be taken on the Draft

Conventions and Recommendations adopted by the International Labour Conference at Washington.

2. In reply I am to say that while the local Government have endeavoured, as far as possible, in the short time at their disposal, to consult the various interests concerned, it has not been possible to institute exhaustive inquiries. The Lieutenant-Governor in Council has, however, carefully considered each of the points raised in your letter of the 11th May 1920, and I am to communicate the following conclusions at which he has arrived.

3. PARAGRAPHS 5—8.—*Draft Convention limiting the hours of work in Industrial undertakings.*—The local Government agree to the adoption of the principle of a sixty-hour week, subject to the exceptions enumerated in paragraph 7 of your letter of May 11th, and to its embodiment in the revised Indian Factories Act.

4. PARAGRAPH 9 (1).—*Further limitation of the working day and question of securing a weekly half-holiday for workers.*—The local Government, after consulting the various officers, local bodies and Associations interested in the hours of labour in mines and factories, have already communicated their views on this subject in my letter No. 4745-F., dated the 5th November 1919, to the Department of Commerce and Industry. They agree with the Government of India that the application of the sixty-hour week should be left elastic. The question of a half-holiday usually solves itself according to local conditions, the labourers requiring a weekly opportunity to attend a *hât*.

With regard to factory conditions, the Government of India will naturally be guided in the main by the opinion received from those provinces which contain a large population of mill-workers. It is in the conditions of mining labour that Bihar and Orissa is specially interested, and in regard to these His Honour in Council desires to emphasize the necessity of proceeding with due caution. Steady progress is now being made in this province in the improvement of the condition of the workers in mines, largely through the activities of the Jharia Mines Board of Health; and as soon as the Mining Settlements Act is confirmed, the local Government intend to frame rules which will ensure the provision by the collieries of decent housing for the labouring population. It is expected that this will lead to the growth of a resident population, permanently divorced from agricultural labour and more amenable to legislative control, for whom the limiting of hours of work and the fixing of shifts will be a

much easier matter than it is now. While therefore there is at present no objection to prescribing a weekly maximum of working hours, any attempts suddenly to regularise the daily hours of labour might dislocate the coal trade and cause disastrous reactions on other industries. It is true that the risks of stampeding labour from the coalfields are often exaggerated, but it is also true that the supply of a class of labour, which comes to the mines only in the intervals of agricultural idleness, and which is accustomed to work how it likes and when it likes and to be paid by results, may easily be affected adversely by premature regulation. I am also to call attention to the further permanent difficulty of regulating hours and shifts in such mines as are merely surface workings or are entered by a number of inclines and not by shafts.

5. PARAGRAPH 9 (2).—*Further limitation in the working hours of women and children.*—There is unanimity of opinion amongst those consulted against the differentiation of working hours between men and women. In mines, particularly, the work of the women is complementary to that of the men, who are usually their husbands, and differentiation would cause great difficulty under the present system.

The local Government are in favour of a six-hour day for children in all factories.

6. PARAGRAPH 9 (3).—*Limitation in the weekly working hours for labourers in mines.*—The actual working hours in the mines in Bihar and Orissa vary from 26 to 50 per week as shown below:—

	Per week.
Jharia coalfield	26 to 45
Giridih coalfield	45 to 50
Singhbhum copper mines	36
Hazaribagh mica mines	42

The local Government therefore consider that a fifty-four-hour week with no daily restrictions would not dislocate the existing system in mines and may be adopted.

7. PARAGRAPHS 9 (4) AND 23.—*Definition of Factory.*—The definition of the word "factory" under section 2 (3) of the Indian Factories Act, 1911, should stand as it is, but provision should be made to give local Governments power to class as factories coming under the provisions of the Act any premises in which the machinery or the processes used are dangerous to employees. The local Government also agree to the substitution of the word "ten" for "twenty" in the proviso to section 3 (1) (e) of the Act. This will make it pos-

sible to extend the provisions of the Act to any factories or class of factories that ought to be inspected.

8. PARAGRAPH 9 (6).—*Modifications and exceptions in particular industries.*—There are thirty-six factories in Bihar and Orissa affected by the existing exceptions and modifications in the Indian Factories Act. These exceptions and modifications apply to sugar factories, oil mills, lac factories, potteries, steel works, flour mills, rice mills, printing presses, ice factories and engineering works. The existing exceptions and modifications appear to cover all the requirements of the industries in Bihar and Orissa and may be continued. The local Government agree to the relegation of these exceptions and modifications to the rules to be framed under the Act.

9. PARAGRAPHS 10 AND 11.—*Draft Convention concerning the employment of women before and after childbirth.*—It is reported that women generally abstain from work for about a month before and after confinement. They have no difficulty in retaining their employment: during their absence their husbands are expected to maintain them and there is no regular maternity allowance, though it is said that a gratuity is occasionally given. No special arrangements are necessary for women of the working classes nursing their infants. They are not attended by doctors at childbirth and certificated midwives are almost unknown, even for attendance upon women of the upper classes.

10. PARAGRAPH 13.—*Employment of women during the night.*—The Director of Industries considers it undesirable, in view of the numerous accidents, for women to be employed in mines at night or indeed at any time on underground work. But as under the conditions now obtaining in coal mines it would be impracticable to discontinue the present practice of allowing women to work underground, he suggests, as a preliminary measure, the prohibition of their working at night. The Lieutenant-Governor in Council does not consider this suggestion practicable. Any such prohibition would result in serious disorganisation of the coal mining industry.

11. PARAGRAPH 14.—*Recommendation concerning the prevention of anthrax.*—There is only one woollen mill (Bhagalpur Jail) and one tannery (Utkal Tannery) in Bihar and Orissa; no cases of anthrax are known to have occurred.

12. PARAGRAPH 15.—*Recommendation concerning the protection of women and children against lead poisoning.*—No women or children

are employed in Bihar and Orissa in processes in which the dangers of lead poisoning exist.

13. PARAGRAPH 16.—*Recommendation concerning the establishment of Government Health Services.*—The local Government agreed with the Government of India that the medical services of the country, augmented as may be necessary in areas where many unhealthy industries are situated, will be able to safeguard the health of the workers by seeing that the statutory regulations for the safety of persons employed in such trades are strictly carried out.

14. PARAGRAPHS 17-18.—*Draft Convention fixing the minimum age for admission of children to Industrial employment.*—

18. (1) There are 2,334 children employed in factories in Bihar and Orissa which come under the operation of the Factories Act. A statement showing the number of children between the ages of 9 and 11, 11 and 12 and 12 and 14 in each industry is enclosed.
18. (2) The raising of the age-limit to 11 or 12 would not cause any serious dislocation in the industries concerned.
18. (3) It can hardly be said that in this province educational facilities exist on a sufficient scale to be a justification for the raising of the minimum age. In this respect legislation, if adopted, would be in advance of actual local conditions.
18. (4) The age-limit should be fixed at 12 years, but children of 11 years of age may be admitted into employment if they have finished the elementary school course and are physically fitted for work.
18. (5) An Indian boy and girl of 12 may be taken to correspond to a European boy and girl of about 14.
18. (6) In view of the small number of children employed the question is of little importance and the local Government are at present unable to form an opinion on the point, nor as far as could be ascertained would the workers themselves be likely either to approve of the change or to strongly object to it.

15. PARAGRAPH 19.—*Age-limit for admission to mines.*—The Lieutenant-Governor in Council would fix the age of children in mines at 12 years above ground and 14 below ground, but it is clearly impossible to prohibit children being taken underground to accompany their parents or guardians.

16. PARAGRAPH 22.—*Draft Convention and Recommendation concerning unemployment, recommendations regarding reciprocity of treatment of foreign workers, etc.*—These recommendations appear to have no practical application in Bihar and Orissa. The local Government agree to the course contemplated by the Government of India in paragraph 8 of their letter of the 17th May 1920 cited in paragraph 1 above.

Industries in Bihar and Orissa employing children.

Name of Industry.	NUMBER OF CHILDREN BETWEEN THE AGE OF—						TOTAL.
	Male.			Female.			
	9 & 11.	11 & 12.	12 & 14.	9 & 11.	11 & 12.	12 & 14.	
Iron and Steel Foundry	78	241	427	132	168	331	1,397
Pottaries	20	33	94	38	9	32	230
Engineering Works	34	50	87	..	..	..	171
Copper Concentrating and Ore Crushing Factories.	27	22	36	17	30	20	162
Tobacco Factories	1	63	60	..	..	..	124
Lac Factories	20	30	35	..	..	3	88
Printing Presses . . . . .	..	16	24	..	..	..	40
Bye-product Coking Factories	11	3	9	2	4	6	35
Oil Mills . . . . .	..	7	11	2	2	3	25
Jute Presses . . . . .	..	2	14	..	..	..	16
Sugar Factories	4	6	5	..	..	..	15
Tanneries . . . . .	..	..	13	..	..	..	13
Rice Mills . . . . .	..	3	4	..	3	3	13
Motor Car Repairing Works	3	3	5	..	..	..	11
Canal Foundry . . . . .	..	..	4	..	..	..	4
TOTAL	207	479	828	166	236	398	2,334

D. B. MANN,

Offg. Inspector of Factories, Bihar and Orissa.

BOMBAY.

Reply to letters Nos. I-812, dated 11th May 1920, and L-812, dated 17th May 1920.

No. 690-I, dated Poona, the 24th August 1920.

FROM—J. C. KERR, Esq., I.C.S., Secretary to the Government of Bombay,
General Department,

TO—The Secretary, Board of Industries and Munitions.

I am directed to reply to the Government of India letters No. I-812, dated the 11th May 1920, and L-812, dated the 17th May 1920, in which the opinion of the Government of Bombay is invited

on some of the questions raised in the draft conventions and recommendations adopted by the Washington Conference.

2. The Governor in Council is in the fullest sympathy with every endeavour to secure and maintain fair and humane conditions of labour for men, women and children; at the same time I am to lay special emphasis on the important general consideration that if Indian workmen are encouraged, whether by Government or by labour organisations in western countries, to press too far their demands for equal or similar conditions of employment, Indian Industry will be unable to compete with Europe and America and the Indian workman in the end will be the principal sufferer.

3. On the subject of the employment of children the Governor in Council entirely accepts the principle that the present minimum age of nine years is too low, but he is of opinion that for the following reasons it can be only gradually raised. In the first place there is a danger that any abrupt alteration of the existing conditions might be misinterpreted politically as an attempt to handicap Indian industry for the benefit of European competitors. Again unless adequate educational facilities are provided, combined with some measure of compulsion, it is not clear that the children will be benefited by the change, and it is certain that employers would resent any attempt to force upon them the compulsory education of the children of their employees if the measure were not one of general application to children of all classes. Even from the point of view of their physical welfare alone it is not certain that the exclusion from factories of the youngest children now employed would be to them an unmixed advantage; the reduction in the family earnings would be likely to lower their standard of living and might have a worse effect on the constitution of the children than the work they now perform, while it is also probable that their sanitary and hygienic surroundings in the factory are as a rule better than they are in their own homes. There is also the danger that those children who may be excluded from the factories will be driven to undertake casual and unregulated employment, a change which would not be regarded as for the better.

4. The Governor in Council has been anxious to find a formula which would encourage the education of the excluded children; at the same time he is not in favour of a purely educational test for their employment, as that would lay the authorities of the schools concerned open in some cases to undesirable pressure. On the

whole he is inclined to propose that the minimum age should, as a preliminary reform, be raised by providing that no child should be employed unless he is either over 11 years of age or has passed the vernacular III standard and that no child should be employed at all unless he is over ten years of age.

5. Coming to the specific questions raised in paragraph 18 of the Government of India letter of 11th May, the total number of children employed in the Presidency in 1919 was 14,875, of whom 13,249 were employed in textile factories. An approximate census shows that in Bombay 32 per cent. of these children are between 9 and 11, 35 per cent. between 11 and 12, and 33 per cent. between 12 and 14. In Ahmedabad the percentages are 59, 20 and 21 respectively. Of the 1,626 non-textile children the Government Ammunition Factory at Kirkee employs 652; cotton gins and presses 224 (less than 1 per cent. of the total employees), printing presses 140, glass works 97, whilst the remainder are distributed over other industries with an almost negligible number in each. Any raising of the age-limit therefore principally affects the textile industry, and it is found that whereas Bombay employs 2,879 children out of a total of 1,030,593 hands, Ahmedabad employs 6,132 out of 44,440 and Sholapur 1,895 out of 15,300. The raising of the age-limit even to 11 years, in view of the present shortage of labour, would be a handicap to the mills in the last two towns, especially Ahmedabad, whilst the fixing of the age at 12 at one step would result in very serious dislocation. Children in mills are employed mainly on ring frames; the raising of the age-limit would result in taller children being engaged, and in some instances the frames would have to be raised. This is not a serious difficulty, and in fact many machines have already been so treated.

6. Educational facilities will not be at once available for the excluded children but there is no reason why they should not be provided. The Governor in Council has been led to suggest eleven as the usual age for employment in the first instance partly because this is the age up to which education can at present be made compulsory; it may therefore be regarded as the reasonable limit of a course of elementary instruction. From a physiological point of view a more suitable age would be 12, but the reasons already given would prevent the adoption of this minimum at once. So far as the opinion of the workers is concerned, the facts are that in most instances of illegal employment it is the parents themselves who are found to

have exploited their children, and there is little evidence that they are, as a class, alive to their children's welfare.

7. On questions connected with mines the Governor in Council does not propose to offer any opinion, as the subject is one in which other provinces are concerned much more intimately and to a much greater extent.

8. With regard to the proposed amendment in the definition of a factory the Governor in Council is of opinion that the number of employees mentioned in section 3 (1) (e) of the Act should be reduced. Logically every business using a power plant requires inspection, but in view of the large extra provision for inspection and supervision which a reduction of the number to ten would entail, I am to suggest that at first it might be lowered to 30 and the effect of the change examined. In the short time at its disposal the Government of Bombay has been unable to estimate the probable effect of this reduction.

9. On the general question of unemployment the Government of Bombay concur in the views expressed in your letter L-812, dated the 17th May 1920. With reference to paragraph 4 of that letter it is correct that the fees of the shipping brokers are paid by the companies and not by the seamen, and the Government of Bombay are not aware of the existence of any recruiting agencies which would be affected by the recommendation.

10. A few subsidiary questions raised in the letter of 11th May lend themselves more conveniently to treatment in tabular form, and I am to forward the attached statement which contains the answers and recommendations of the Government of Bombay on these questions.

Subject.	Recommendations and answers of the Government of Bombay.
1.—Draft Convention limiting the hours of work in Industrial undertakings to eight in the day and 48 in the week.	(1) The hours of work for men should be limited to 60 in the week. (2) The hours of work for men should be limited by statutory provision to ten in the day, subject to exceptions for particular industries to be notified by the local Government, which should have power to frame rules under the Act. (3) No statutory provision for a weekly half-holiday should be made.

Subject.	Recommendations and answers of the Government of Bombay.
<p>II.—Draft Convention concerning the employment of women before and after childbirth.</p>	<p>(4) It is not necessary to regulate separately the hours of work for women. In actual practice in the Bombay mills they come half an hour later and leave half an hour earlier than the men.</p> <p>(5) Children below 14 should work as half-timers as a rule but some exceptions may be necessary as, for instance, in the drawing-in departments of textile mills.</p> <p>(6) No recommendation is offered on the subject of the hours of labour in mines.</p> <p>(7) The existing exceptions and modifications in the Factories Act should continue, if smaller factories are to be included more exceptions and modifications may be necessary. These should be dealt with by rules under the Act.</p>
<p style="text-align: center;"><i>Questions.</i></p> <p>(1) Whether in the Industrial undertakings in the province women workers, as a matter of actual practice, owing to social or religious usages, abstain from work for any period before or after childbirth. If so, what is the usual duration of the periods? Are these periods considered adequate for the health of the mother and the child?</p> <p>(2) If such practice does obtain, whether the woman has any difficulty in retaining her employment?</p> <p>(3) Whether she receives any wages or allowance from the employer during such period of absence? If she does not, what arrangements are in vogue for the maintenance of mother and child? It is possible that in many cases the earnings of the husband or the father are sufficient for this purpose, but the matter deserves careful inquiry.</p> <p>(4) Whether there are suitable arrangements to enable a woman worker who is nursing her infant to do so?</p> <p>(5) Whether in any industries in the province free attendance by doctors or certified midwives is available in such cases?</p>	<p style="text-align: center;"><i>Answers.</i></p> <p>(1) Factory women usually return to their villages for varying periods before and after confinement, the average absence being about a fortnight before and the same after.</p> <p>(2) The demand for labour is so great that they have no difficulty in retaining their employment or obtaining similar employment.</p> <p>(3) Generally no wages are paid, but the women are usually relatives of other workers who support them.</p> <p>(4) No such arrangements are usually made.</p> <p>(5) In a few mills free attendance by doctors and midwives is available but there is a general disinclination among mill women to avail themselves of these facilities.</p>

CENTRAL PROVINCES.

Reply to letters Nos. I-812, dated 11th May 1920, and L-812, dated 17th May 1920.

No. 424-C-XIII, dated Nagpur, the 30th July 1920.

FROM—The HON'BLE MR. J. F. DYER, I.C.S., Third Secretary to the Chief Commissioner, Central Provinces, Commerce and Industry Department,

To—The Secretary, Board of Industries and Munitions, Simla.

I am directed to reply to your letters No. I-812, dated the 11th May, and No. L-812, dated the 17th May 1920, relating to the draft conventions and recommendations adopted by the International Labour Conference at Washington. The Chief Commissioner convened a conference of the principal employers of labour in the Central Provinces, which was presided over by the Director of Industries. It was representative only of the views of the employers in the textile industry, including ginning and pressing factories, but the Director of Industries has since discussed the Board's letters with the Chairman of Central Provinces and Berar Mining Association, the members of which control the great bulk of the mineral output of the province. Apart from the cotton industry and mining, there are few privately owned concerns employing organized labour in this province. It is not feasible to obtain an opinion representative of the views of the employees as a body. In view of what is said in paragraph 7 of your earlier letter the Chief Commissioner confines himself to answering the specific points raised in your two letters.

2. The Government of India authorized their delegates at the conference to consent to the principle of a 60 hours' week for factories as defined in the Indian Factories Act and for mines subject to certain exceptions. In my letter No. 637-K, XIII, dated the 8th September 1919, Sir Benjamin Robertson supported a 10 hours' day for male adult workers in factories, but he was contemplating primarily textile factories within the limited definition of that term contained in section 2, sub-section 9 of the Indian Factories Act, and the proposal now made is to apply the principle of the 60 hours' week to all factories as defined in the Act and also to mines. The only important class of factories other than weaving and spinning mills in the Central Provinces and Berar which will be affected by

this extension of the statutory limitation of the hours of labour are the numerous cotton ginning and pressing factories. The original draft of the Act prescribed a 12 hours' day for such factories, but the Select Committee, by altering the definition of textile factories, in clause 2 of the Bill excluded them from the special provisions for textile factories on the ground that the conditions of work did not make any limitation in the hours of labour necessary. Such a reason does not have the same force under the present altered condition of labour, as it leaves the law helpless if abuses do arise, and the Chief Commissioner has evidence that the conditions of work at present existing in the gins and presses of this province as a result of the heavy cotton crop of the last two years are not satisfactory. It has been brought to his notice that cases occur in which operatives work for one shift in one factory and for another in another, and while sections 23 to 27 of the Act give power to punish cases of the employment of women and children for excessive hours, the law is powerless to prevent adult male workers from doing as they like. Apart therefore from any question of the general limitation of the hours of labour, there is reason in this province to put gins and presses on the same footing as textile factories.

3. The general sense of the meeting of the cotton representatives was in agreement with the proposal of the Government of India that a '60 hours' week should be prescribed by law, but they would prefer that for it should be substituted a definite 10 hours' day for six days a week. Their ready acquiescence in the limitation of the hours of work shows a great advance on the views which they expressed when consulted on the point a year ago, and is in strange contrast to the opposition raised nine years ago, when the present Factories Act was under discussion, to the introduction of a statutory 12 hours' day in weaving and spinning mills. Two of the representatives suggested that during the two months of shortest daylight in the year factories should be allowed to work for 10 minutes less, and that the time so lost should be made up by working 10 minutes more a day in two other months, but the majority of the members did not support this proposal, and the Chief Commissioner does not think that such a minor modification should be permitted. As far as this province is concerned, a uniform 10 hours' day for six days in the week seems suitable. It would be a sufficient improvement on the existing law without complicating the working of the Act by permitting variations in the daily hours

of work so as to allow of a weekly half-holiday. At present there is no demand for such a holiday. Workers prefer to take casual days off as it suits their convenience, and the numbers on the books always considerably exceed the numbers actually working on any given day. The workers cannot be expected to give up this habit easily.

4. The system of permitting shifts if approved by a competent authority should be allowed to continue. Their regulation, in conjunction with the other increased duties which will be imposed on the inspecting staff by the remodelling of the Factories Act, will involve the strengthening of the staff. Even at present the local Senior Inspector of Factories reports that he is dissatisfied with the shift system in the two textile mills in which it was adopted last year, and the limitation of the working hours in gins and presses will render regulation more difficult. Indeed, the Hon'ble Mr. Mehta, the Manager of the Empress Mills, advocated at the meeting the abolition of relieving shifts, which are now common in gins and presses, as capable of much abuse. He contended that all shifts should be whole-time ones of the whole body of workers and not of selected batches. The majority of those present, while admitting the possibility of abuses, considered that they could be minimized by efficient inspection and held that the law in this respect should not be altered. It would be unfair to expect the owners of gins and presses to erect them in sufficient numbers to cope, during the ordinary hours of labour, with a bumper cotton crop, which may only come once in ten years. The express permission of approved systems of shifts will therefore be more necessary under the revised law than at present, but the provisions of the Act should be severe enough, and the inspecting staff strong enough, to defeat the attempts which will undoubtedly be made to use the shift system contrary to the statutory provision of a 60 hours' week or a 10 hours' day for each individual worker.

5. In my letter of last September Sir Benjamin Robertson did not discuss in detail the question of the hours of work for women and children, but in recommending a 10 hours' day, he advocated a corresponding alteration for women and children. The meeting of the textile representatives agreed with the Government of India that with an average of 10 hours a day for male adults, no limitation beyond that is required for the hours of women, and Sir Frank Sly accepts their opinion. Mr. Mehta pointed out that as a matter

of practice the women are allowed to join their work shortly after the men and to leave it shortly before so as to avoid the chance of their being hustled on their way to and from their work. The meeting did not consider the present 6 hours' day for textile factories and 7 hours' day in other factories too long for children, but they were prepared to support a reduction of the hours for children to 5 in order to facilitate the working of shifts. The Chief Commissioner agrees with these views. So far as this province is concerned, he sees no need for any differentiation between textile and other factories, as it would add to the complexity of the Act.

6. As already explained in my letter of last September, to prescribe a 10 hours' day in mines would be inoperative in this province, as workers already work for shorter hours. All work is carried out on the piece system with no fixed hours, and the average period of labour is 8 hours a day and 44 per week, as the workers take the local bazar day as a whole holiday and also leave work for another half day to collect firewood. In this latter respect they differ from the workers in mills, gins and presses, which are situated in places where firewood can only be obtained in the markets. While therefore the introduction of a 60 hours' week would not reduce the working day in the mining industry of this province, the Association does not think it feasible to introduce any further statutory restriction. As will be mentioned below, mine labour is so hard to procure that any strict regulations of shifts would make the working of mines still more difficult, because it would go against the inclinations of the workers. The Chief Commissioner agrees with the Mining Association, and considers that the only restriction which should be introduced is the statutory limitation of the hours of work per week to 60.

7. The general sense of the meeting of the cotton employers was in favour of retaining the existing exceptions and modifications without alteration as part of the Factories Act. Mr. Mehta however recommended the deletion from paragraph (e) of part A of Schedule I of the Act of the processes of packing, bundling or baling as not being properly classed as work of an urgent nature such as cannot admit of discontinuance at a fixed hour. Similarly he recommended the deletion from section 21 (2) (b) of the work of sizing, calendering, finishing, sewing or tailoring in textile factories. As the opinion of the manager of one of the largest textile factories in India Mr. Mehta's views deserve special consideration, but Sir

Frank Sly considers the subject a highly technical one which should be examined by factory experts and not one on which he can offer an opinion of value, but he would like to see the list of exceptions reduced to the smallest limits possible.

8. The general period of absence of women mill workers before and after childbirth varies from a month to six weeks, but in the Empress Mills, Nagpur, and the Burhanpur Tapti Mills, women are reported to absent themselves from 4 to 5 months and from 3 to 4 months respectively. Information for gins and presses, where the female labour is essentially casual, is not obtainable. Women have no difficulty in retaining their employment as the position of the labour market is such that managers are always eager to obtain workers of experience. No wages or allowances are given by the employer during the period of absence, as women of child-bearing age are as a rule members of a joint family whose earnings are clubbed together, nor would any system of maternity benefits be feasible in this province, where factory labour is fluctuating. In paragraph 27 of their report the Factory Commission mentioned that the personnel of the workers in Nagpur changed almost completely in about a year and a half, and the Manager of the Empress Mills has recently stated that this still holds good. The introduction of a maternity benefit would therefore be unfair to employers, who have no guarantee that the women receiving it would continue in their employment for any reasonable time after enjoying it. It is the universal practice for women to be allowed to leave their work to enable them to nurse their children. In some mills special sheds are provided for the purpose. Free medical attendance is provided by all mills to such as seek it, and the Empress Mills employ in addition a full-time Indian lady doctor for the benefit of their women and child employees. The free attendance of midwives is neither provided nor is it desired by the workers, and any suggestion that the services of certified midwives should be available is negatived by the fact that such a class so far scarcely exists outside some hospitals, and moreover with a floating mill population any attempt to provide such free attendance would be ineffective. In seasonal factories, where labour comes and goes as it pleases, medical benefits are not provided, but all the larger mines employ doctors of the sub-assistant surgeon class, who give free attendance to women at childbirth if called upon. The Chairman of the Mining Association is, however, not able to say for what

periods women abstain from their work at such times. As the work is all on the piece system and as it is the custom of the labourers, both male and female, to work whenever they like and to stay away as they like, it is impossible to obtain any reliable figures on this point. As in the mills, however, the demand for labour is always greater than the supply, and a woman finds no difficulty in retaining her employment.

9. The Chief Commissioner is in general agreement with the views expressed in paragraph 13 of your earlier letter. With the existing system of working in mines in the province, it is impossible to prohibit night working by women, as they work in gangs with the husbands and there would be strong opposition among the workers to the breaking up of the family system.

10. Paragraphs 14, 15 and 16 have little application to the Central Provinces. The only dangerous industry, as the term is ordinarily understood, in this province is a match factory which works spasmodically in the Bilaspur district, and even if it were desirable to establish a health service in addition to the factory inspection service, it would not be feasible to do so for many years to come. The Administration is now, as a tentative measure, considering the introduction of a sanitary service in rural areas, but it is probable that there will be considerable difficulties in manning it, and the development of a general health service must take precedence to any special service.

11. The textile representatives were opposed to any statutory raising of the minimum age of the admission of children to factories, but they recognized that the recent passing of the Central Provinces Primary Education Act, which permits municipalities and local bodies to establish a scheme for compulsory primary education for a period of not less than 5 and not more than 7 years for children between the ages of 6 and 14, will automatically prevent children under eleven working in the areas where advantage is taken of the powers conferred by the Act. They considered that with the proposed reduction of the hours of work of children to 5, no further step should be taken to dislocate existing conditions. During 1919 the number of children employed in all factories averaged under 5 per cent. of the total average attendance and they were almost exclusively employed in weaving and spinning mills. It has not been possible to undertake a complete census of children by ages but the figures of four of the largest mills employing over

half of the factory children of the province show that out of 1,345, 342 were between the ages of 9 and 11, 568 between the years of 11 and 12 and 435 between the ages of 12 and 14. It has not been possible to obtain full details of the ages of children at present employed in mines. The annual returns give details for persons over 12 years of age and for children under 12 years of age, and of the total number of persons employed on the mines children form less than 4 per cent. They are engaged on light work on the surface of the mines or on open workings, and no children under 12 years of age are employed on night work. The problem of child labour in mines is therefore not a pressing one locally, but the Chief Commissioner thinks the same minimum age should be fixed for mines as for factories. He agrees with the textile employers that the raising of the age-limit for the employment of children should go hand in hand with the spread of compulsory education. Until it is possible that the younger children at present engaged in factories and mines should all be sent to school, any raising of the statutory age-limit under which children may not be employed would be detrimental to the interests of the children. There is no evidence that the present factory age of nine is physically injurious to the children, and a considerable number of them obtain instruction in half-time schools run by the factories. To exclude them from work and to compel them to idle away their time at home would not only deprive the children at present receiving instruction of the benefit of it but would handicap them in learning their work also, when they reached the statutory age.

12. The meeting of textile representatives supported the proposal that the definition of a factory should be extended so as to include all industries using power and employing ten or more persons. So far the Chief Commissioner has exercised the power given to him under section 3, sub-section (1) of the Indian Factories Act to notify factories employing not less than twenty but less than fifty operatives only in the case of nine factories. Accurate statistics are not available to show the number of concerns which would come within the definition suggested by the Government of India, but enquiries made some time ago show that there were about 100 factories employing not less than twenty but less than fifty, and the Chief Commissioner's main reason for notifying only nine was the shortage of the inspecting staff. As abuses are however more likely to be found in small and badly organized concerns than in

larger factories, he would welcome the adoption of the definition suggested. It will involve the strengthening of the inspection staff, but that staff will require the strengthening anyhow to cope with the increased work which the amplifying of the Act in other respects will bring.

13. The Chief Commissioner agrees with the conclusions arrived at by the Government of India in paragraph 8 of your second letter. As explained above, both in factories of all sorts and in mines the chronic complaint is the shortage of labour. In textile factories few of the hands are permanent mill workers and this is more so in gins and presses, in which special arrangements have to be made every year for importing workers for some of the heavier operations of pressing. Much of the work at mines is done by labourers who are induced by cash advances to come from distant parts of the provinces or from other provinces of India, as the hard work of mining is distasteful to the bulk of the labouring class of the localities in which the mines are situated. The question of industrial unemployment therefore does not exist. There are no such employment agencies as are mentioned in paragraph 4 of your letter, and the establishment of such agencies as are mentioned in Article 2 of the draft conventions and recommendations concerning unemployment is not a practical proposition.

COORG.

Reply to letters Nos. I-812, dated 11th May 1920, and L-812, dated 17th May 1920.

No. 2740-103-19, dated Bangalore, the 16th August 1920.

FROM—Major C. T. C. FLOWDEN, I.A., Secretary to the Chief Commissioner of Coorg,

TO—The Secretary, Board of Industries and Munitions.

I am directed to invite a reference to your letters Nos. I-812 and L-812, dated the 11th and 17th May 1920, respectively, calling for the Chief Commissioner's views on the draft conventions and recommendations which were adopted by the International Labour Conference held at Washington, United States of America, on the 29th October 1919 and succeeding days.

2. Coorg does not afford a useful field for any enquiry of this nature and the Collector of the Civil and Military Station, Bangalore, and the Mysore Darbar were, therefore, consulted in the matter. They have been asked to expedite their reports and it is hoped that they will be received by the end of this month. On their receipt, the Chief Commissioner's views on the matters in question will be submitted to the Government of India with the least possible delay.

No. $\frac{3749}{103-19}$, dated Bangalore, the 4th November 1920.

FROM—Major C. T. C. FLOWDEN, I.A., Secretary to the Chief Commissioner of Coorg, and First Assistant to the Resident in Mysore,

TO—The Secretary, Board of Industries and Munitions.

I am directed to invite a reference to my letter No. $\frac{2749}{103-19}$, dated the 16th August 1920, on the draft conventions and recommendations which were adopted by the International Labour Conference held at Washington, United States of America, on the 29th October 1919, and successive days. I am to forward copies of letters Nos. 5203 and C. No. 1-P., dated the 1st September and the 9th October 1920, respectively, received from the Collector of the Civil and Military Station, Bangalore, and the Mysore Durbar* (with enclosures) reporting upon the various questions raised by the Board of Industries and Munitions.

2. In Coorg there is no sort of industrialism. The Province is solely interested in planting and agriculture, and the plantation cooly labour does not come within the scope of the present enquiry. In the Civil and Military Station, with which the Resident is alone directly concerned, it will be seen that factory conditions are on the whole satisfactory and there will be no difficulty in giving effect to any changes that may be initiated by the Government of India in their industrial policy. Steps will be taken to extend the Factories Act, to the Station. The position in the Mysore State is discussed in the Durbar's letter. The only industry of real importance is the mining industry and the Government of India may, the Resident thinks, rely on the Durbar's full co-operation in any attempts made to ameliorate the conditions of employment in the mines of India. Similarly as regards Factory legislation.

* This letter is not reproduced.

3. On the numerous questions raised in the Government of India's letter the Resident is not in a position to give a considered opinion. He would, however, venture to express the view that in existing political and economic conditions it is essential that the Government of India should initiate legislation to put industrial labour on an equitable basis *qua capitalism*. It should be possible, in view of the era of prosperity through which most Indian industries are passing, to effect improvements in labour conditions without any prejudicial effect on the industrial organism.

No. 5203, dated the 1st September 1920.

FROM—T. B. RUSSELL, Esq., I.C.S., Officiating Collector, Civil and Military Station, Bangalore,

TO—The First Assistant to the Resident in Mysore.

With reference to your No. 5133, dated the 17th June 1920, and in continuation of Mr. Tasker's letter No. 4666, dated the 30th July 1920, I have the honour to forward the following replies received from (1) The Bangalore Trades Association, (2) The United Breweries, Limited (Bangalore Brewery) and (3) The Peninsular Tobacco Company, Limited, on the reference made to them regarding the hours of labour in factories and other cognate questions.

(1) The Bangalore Trades Association:—

“The question of labour, etc., in factories referred to in your letter No. 3398, dated the 15th July 1920, deals with a matter the Association does not feel itself conversant in to give an opinion on it, as it is little concerned with factories or factory labour.”

(2) The United Breweries, Limited (Bangalore Brewery):—

“We have no comment to make.”

(3) The Peninsular Tobacco Company, Limited:—

“We beg to express the following views based on our own experience:—

Our factory working hours are nine hours per day and we do not consider this excessive. On Saturdays our factory closes at noon and there is no Sunday work except in the case of urgent repairs, etc. All our work is of a very light nature and we do not think a curtailment of working hours desirable.”

2. The average number of persons employed daily in the industrial factories in Bangalore is:—

Peninsular Tobacco Company.—1,500 (of whom about 55 are between the ages of 9 and 14).

Bangalore Brewery.—161 at present (of whom 117 are men and 44 boys under 14 years of age. No women or girls are employed).

3. I do not feel competent to express an opinion on the many important questions raised in the correspondence under reference.

By reason of its temperate climate Bangalore should be able to approximate more closely than the rest of India to non-tropical countries in the matter of shorter working hours and more sustained effort during the working period. I therefore consider that any legislation that may be considered suitable for the rest of India could be applied here without difficulty. It will be observed that the children employed in the Peninsular Tobacco Company and the Bangalore Brewery work longer hours than those allowed by the Factory Act (*vide* Mr. Tasker's letter No. 5928, dated the 30th August 1919). I have since ascertained that the working hours are the same for children and adults. I am looking into this matter and will address you further if necessary in regard to Mr. Tasker's suggestion that the Factory Act should be introduced.

DELHI.

Reply to letter No. I-812, dated 11th May 1920.

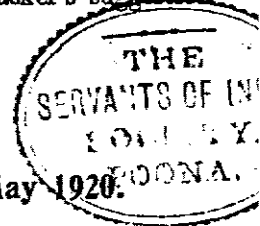
No. 4465-I. & M., dated Delhi, the 15th July 1920.

FROM—H. P. TOLLINGTON, Esq., C.L.E., I.C.S., Officiating Chief Commissioner, Delhi,

TO—The Secretary, Board of Industries and Munitions, Simla.

With reference to your letter No. I-812, dated the 11th May 1920, I have the honour to reply in detail on the points that have been raised in so far as the Delhi Province is concerned.

Paragraphs 5 to 8.—A reply was sent by my predecessor to the Government of India letter referred to in paragraph 8 (see this office letter No. 5495-C. & I., dated the 10th September 1919). This was done after consulting the local mill-owners.



The three flour mill-owners still adhere to the opinion then expressed, that an exception should be made in their case on the ground (1) that as their machinery works automatically, there is comparatively speaking, very little strain on the physical or mental strength of a labourer, (2) that unlike other manufacturing mills a flour mill must work continuously to turn out an even quality of flour and that it would be impracticable to work by a shift of ten hours, (3) that if a shift of eight hours is introduced, it would considerably add to the cost of production. They therefore urge that they may be allowed to have a 72-hours week. They have been informed that as the Government of India have definitely adopted the principle of a 60-hours week, this point is no longer open for discussion.

Paragraph 9 (1).—The presses, workshops and the two spinning and weaving mills have no objection to the limitation of the working day to ten hours. The Managers of both the Delhi Cotton and Birla Mills here state that they do not anticipate any appreciable loss in the rate of production if a day of ten hours is fixed as mill hands at present loiter away much of their time. They attribute it partly to the climatic conditions of Northern India where it is considered impossible for a mill hand to put in hard work for twelve hours a day all the year round. I am therefore of opinion that a uniform working day for the whole of India is not possible and that Provincial Governments should be given power in the local application of the principle of the 60-hours week. If any limitation of the working day is to be made, it should be done in the case of cotton mills only and in their case the working day should be limited to ten hours. Even now the Factory Act draws a distinction between textile and other industries. Such a limitation should in my opinion be effected by rules to be made under the Act by Provincial Governments.

Paragraph 9 (2).—

Women.—At present women are employed in Delhi in the two textile mills only and the managers of both the mills are of opinion that with a 60-hours week it is not necessary to differentiate between men and women. The majority of these women are piece-workers and, with cost of living rising higher and higher, women will be injuriously affected if the number of hours of work is curtailed.

Children.—The limitation of the employment of children under fourteen to six hours a day in textile factories and seven hours

a day in other factories seems to have been based on the principle that a boy's strength is equal to half the strength of a full-grown man. When in the case of the latter the 72-hours week has been reduced to a 60-hours week, the child also is entitled to a similar relief. Work in a textile factory is arduous and imposes a great strain on the nervous system. I should like to see discrimination continued in this respect between textile and other factories. Thus, if a working day in a textile factory be limited to ten hours a day for adults, I think a change should be made in the existing law limiting the employment of children to five hours a day in textile factories and six hours a day in other factories.

Paragraph 9 (3)—Does not concern the Delhi Province.

Paragraph 9 (4)—Will be discussed in connection with paragraph 23.

Paragraph 9 (5)—No comment required.

Paragraph 9 (6)—Most of the mill-owners consulted think that the exceptions and modifications specified in the present Factories Act meet all requirements and they have no amendments to propose. The Delhi Cloth Mill, however, suggests that Section 29 of the Act should be deleted and that hand reeling, winding, warping, cleaning and urgent repairs should be added to the exceptions specified in Sections 21, 22 and 30, but no arguments have been advanced in support of this proposal.

Paragraph 11 (1)—The women working in the mills are either Kohlis or Chamars. Being of low caste, they have no rigid social or religious usages to follow. The duration of their absence from work during the period of their maternity depends to a large extent on the financial position of individuals. From enquiries made from the mill hands themselves and from those directly in charge of women it appears that the period of abstention varies from 15 days to one month before and from one to three months after childbirth. As these women are generally recruited from the surrounding villages, they are of stronger physique and are of fairly good age. These periods are adequate generally.

Paragraph 11 (2)—When a woman is absent owing to childbirth her post is not specially kept for her. As however, there is always a dearth of workers, she does not at present find any difficulty in resuming work in the same mill on her return.

Paragraph 11 (3).—As a rule she is a piece-workgr and does not receive any allowance during such period of absence. It makes no difference if she is on fixed monthly wages. When women workers' allowances are stopped, they manage somehow. Either they have put something aside for a rainy day, or there is the father of the child to support them or, if the worst comes to the worst, a loan is raised. It has been found very difficult to get accurate information on this point as these women and their relations are very reticent on the subject and resent being questioned as to their private affairs.

Paragraph 11 (4).—In our factories at least women do not suffer for the lack of any organized arrangement to enable them to nurse their infants. Besides the interval of half an hour allowed for rest under Section 21 (1) of the Act and the limitations imposed on her employment during certain hours of the day under Section 24 there is nothing to prevent a woman worker from going out and nursing her child when she wants to. Women are employed exclusively in the reeling department and on cotton waste cleaning. They are paid according to their outturn. It is not an uncommon sight to see a woman at work with her infant at her breast. What generally happens is that there is usually an older child at hand to look after the infant. When the infant is persistent in its cries, the mother comes to its rescue. Conditions in Europe are vastly different from those prevailing in this country and the system of supervision is not so strict.

Paragraph 11 (5).—There is not a single industry in this province where free attendance by doctors or certified midwives is available in such cases.

Paragraph 13.—As there are no mines in this province our opinion is hardly called for.

Paragraph 14.—No comment required.

Paragraph 15.—No industry has so far been started in this province involving in its processes the use of the salts of lead. I am therefore unable to give any useful suggestions as to the precautions to be introduced for the protection of women and children from the danger arising from employment in these industries.

Paragraph 16.—No comments required.

Paragraphs 17 and 18.—18 (1).—In this province boys are employed chiefly in the textile industry. In the two cotton mills in Delhi their number is 81. The medical certificates of fitness obtained by the mills from the Certifying Surgeons as to the ages of

the children employed by them have been carefully inspected. I give the result below:—

1. *Delhi Cloth Mills*—sixty-one boys on the roll on the day of inspection. They started work at the following ages:—

9 years	.	.	.	.	.	.	.	.	.	8
10 years	.	.	.	.	.	.	.	.	.	13
11 years	.	.	.	.	.	.	.	.	.	9
12 years	.	.	.	.	.	.	.	.	.	20
13 years	.	.	.	.	.	.	.	.	.	12
TOTAL										62

The Birla Spinning Mill had only nineteen boys on its rolls. It was started in June last and has had occasion to employ thirty-five different boys since then from time to time. Their ages are:—

9 years	.	.	.	.	.	.	.	.	.	2
10 years	.	.	.	.	.	.	.	.	.	4
11 years	.	.	.	.	.	.	.	.	.	5
12 years	.	.	.	.	.	.	.	.	.	16
13 years	.	.	.	.	.	.	.	.	.	8
TOTAL										35

Paragraph 18 (2).—If the age-limit of children be raised to 11 or 12 years, I doubt very much if there will be any serious dislocation in the industries concerned. Take for instance the case of Delhi Cloth Mills, the largest employer of labour in this province. It has about 1,200 workers, of whom only 61 are children. This means one child to every twenty adults. If the age-limit of children be raised to 11, this class of labour being replaced by adult labour, there would be little change. It would mean an increase of say, $2\frac{1}{2}$ per cent. only to adult labour. In Birla Mill the rates of children over and under 11 is 5 to 1.

The machinery and plant in use in the mills of the Delhi Province is not specially designed for children, but in working at them an adult has to stoop a good deal and there is no doubt that in the class of work on which children are employed they can do better work as their fingers are more pliable.

Paragraph 18 (3).—The introduction of compulsory education rests with the local municipality and it is not known when they intend to take action in this matter. The change is, however, likely to come within the next 3 or 4 years at the latest and it seems we ought

to prepare ourselves for it and raise the minimum age of children eligible to work in factories. A provision can be inserted in the Act that this raised minimum age will apply to those cities only which have adopted the compulsory educational system.

Paragraph 18 (4).—The ages of boys at present undergoing instruction in the Primary Department have been collected from four local schools. There are 103 boys in these four schools in the First Primary Department, out of whom not less than 54 are between the ages of 6 to 8. This seems to be the most popular school-going age. When compulsion is used, parents will doubtless have to send their children to school at an earlier age, which should be between 6 and 7 at the latest. In the case between the age of 9 and 10 a child will be out of the Primary Department. From the figures quoted in paragraph 18 (1) it will be seen that the majority of children who enter life in a factory are 12 years old. If the minimum age be raised to 11 or even 10 years, there will not be any dislocation in the industrial world and boys will be able to finish their course of elementary instruction.

Paragraph 18 (5).—In a hot country like India children, I imagine, develop more quickly than they do in the West, the age ratio being, say, 15 in the West to 12 in the East. I am inclined to think that even the minimum age of 12 years is too high for India.

Paragraph 18 (6).—I have spoken to several of the factory hands. They are against the raising of the minimum age. At present a boy is considered by them to be a wage-earning machine, and I fear Indian reformers have a great deal of spade-work to do before they can introduce compulsory education without opposition and with the good-will of the parents.

Paragraph 19.—The Delhi province is not concerned.

Paragraph 20.—No comment required.

Paragraph 21.—No comment required.

Paragraph 23.—If the definition of factory is extended so as to include all industries using power and employing ten persons or more, I am afraid we shall be taking up duties which it will be very difficult to discharge efficiently. There will be hundreds of small industries which will come within the scope of the Factories Act. It is not uncommon to see in any bazar two or three small *chakkis* worked by electricity in a shop where the number of men employed is ten. As the supply of electricity is being extended and people are coming to know of its advantages and the various ways in which it can profit-

ably be used, it may before long be employed by ordinary blacksmiths working one or two lathes. The suggested definition would hamper small industries. I think the limit at the lowest should be fixed at twenty or preferably at thirty.

Reply to letter No. L-812, dated 17th May 1920.

No. 5763-I. and M., dated Delhi, the 11th September 1920.

FROM—H. P. TOLLENTON, Esq., C.I.E., I.C.S., Officiating Chief Commissioner, Delhi,

TO—The Secretary, Board of Industries and Munitions, Government of India, Simla.

With reference to your letter No. L-812, dated the 17th May 1920, I have the honour to enclose a copy of a letter No 508-2, dated the 14th August 1920, from the Honorary Secretary, Punjab Chamber of Commerce, Delhi, and to say that I concur generally in the Chamber's views.

No. 508-2, dated the 14th August 1920.

FROM—The Honorary Secretary, Punjab Chamber of Commerce, Delhi,

TO—The Chief Commissioner, Delhi.

With reference to your endorsement No. 3329-C. and I., dated the 27th May last, forwarding copy of letter No. L-812, dated the 11th May 1920, from the Government of India, Board of Industries and Munitions, Simla, on the subject of the Draft Conventions and Recommendations of the International Labour Conference at Washington and inviting the views of this Chamber thereon, I am directed to say as follows:—

1. *Change of definition of "Factory."*—This Chamber is of opinion that the present definition should be retained; only that the word "operative" should be substituted for the word "person" in the definition.

2. *Conditions of Labour, etc., in mines.*—There should be statutory limitation in the hours of work for labourers in mines but as regards the employment of women during night time this Chamber is of opinion that it is not practicable to stop it as men working during night will like their women to help them in their work as is usually the case. Holidays and hours of rest should be prescribed and

ages of children should be certified and they should not be allowed to work under fixed ages. Provision should also be made to regulate the employment of women and children and to provide hygienic conditions in mines.

3. *Working hours in factories.*—This Chamber agree to the fixing of hours at 60 a week as the maximum excluding the hours of cleaning. These 60 hours may be made up in any way provided the prescribed limit of hours is maintained. Any modification of this limit of 60 hours should, as mentioned in article 10 of Appendix II, be subject to article 6 of the Convention.

In the exceptions mentioned in Section 21 of the Factories Act, the words "reeling," "winding" and "warping" should be added to the other process and the management should be empowered to grant two holidays in a fortnight. These exceptions should be included in the Statute.

4. *Limitation of daily hours of work for adult males.*—Having fixed a maximum of 60 hours for a week, this Chamber do not think it necessary to further limit the daily hours of work to 10, 10½ or 11 hours for adult males.

5. Hence there should not be any statutory or other provision on the point.

6. *Limitation of the daily working hours of women and children.*—Under the present rules women are not to be employed before 5-30 A.M. and after 7 P.M. or for more than eleven hours a day and children are not to be employed before 5-30 and after 7 P.M. or for more than seven hours a day. This Chamber do not consider any further limitation necessary on this point.

7. *Discrimination of factories regarding working hours of children.*—This Chamber do not consider that any discrimination should be made between textile and other factories as regards the working hours of children.

8. *Employment of women before and after childbirth.*—(1) There are no hard and fast social or religious usages prohibiting women from working before and after childbirth, but in practice they abstain from doing any work during that period. The length of this period of course depends upon circumstances.

(2) There is practically no difficulty in retaining her services during this period.

(3) During this period no allowance is given to women working as the employers cannot be certain of their return to work. There is

no arrangement made by the employer for the maintenance of the mother and child as the women workers generally depend upon their husbands for maintenance.

(4) As the mothers generally are anxious to keep their children with them, no arrangement has been made to enable a woman worker to nurse her child.

(5) In times of childbirth, free attendance by doctors is available but not by midwives.

9. *Minimum age for admission of children to Industrial employment.*—(1) No statistics are at present available as to the exact number of children between the ages of 9 and 12 employed in factories but roughly about 25 per cent. are children between the ages of 9 and 14.

(2) There will be serious dislocation in the industries if the age-limit of children is raised to 11 or 12 years. In that case the parents or guardians working in the same industrial concerns will not be able to keep their children with them with the result that they will have to seek employment elsewhere for the sake of their children. The Committee of this Chamber agree with the Government of India that it would be extremely difficult for employers to replace children by adults and that as the machinery and plant now in use are specially adapted for manipulation by children, great difficulty will be felt substituting other types at once.

(3) If the age-limit for employment of children in factories is raised and children below that age are excluded from working in factories, there is every likelihood of their seeking employment outside the factories where they may have to work longer hours; and there is hardly any possibility of educational facilities being available for some years at least for the education of such children.

(4) Ordinarily the age at which children may be expected to complete a course of elementary education and be eligible for work in factories may be taken as eleven.

(5) As regards the age when children develop physically so as to become fit for manual labour, opinions differ and so no definite age-limit can be given.

(6) As a general rule the workers do not favour the raising of the age-limit of children as it will reduce their family earnings.

10. *Draft Convention regarding unemployment.*—The Committee of this Chamber do not think it feasible to give effect to the recommenda-

tion contained in Article I of the above Convention requiring that information regarding unemployment and measures taken to combat them should be supplied.

11. *Licensing of employment agencies.*—There are some employment agencies in the Punjab which charge fees and the Committee consider it necessary that they should be made to work under licenses.

12. *Recruitment of workers of one country for employment in another country.*—So far as India is concerned, there should be no reciprocity between governments in indentured labour as outside labour will not be suited to India for a long time to come.

13. *Insurance against unemployment.*—The Committee do not consider any such insurance necessary.

14. *Co-ordination of execution of work to provide for unemployment.*—The Committee agree to the co-ordination of the execution of all undertaken under public authority with a view to reserving such work for periods of unemployment or districts affected by it.

15. *Reciprocity of treatment of foreign workers.*—The Committee agree as to the necessity of reciprocity of treatment of foreign workers.

MADRAS.

Reply to letters Nos. I-812, dated 11th May 1920, and L-812, dated 17th May 1920.

No. 2892-D-20-2, dated Ootacamund, the 5th August 1920.

FROM—The HON'BLE MR. E. S. LLOYD, I.C.S., Acting Secretary to the Government of Madras, Revenue Department,

TO—The Secretary, Board of Industries and Munitions, Simla.

I am directed to reply to your letters Nos. I-812, dated 11th May 1920, and L-812, dated 17th May 1920, asking for information and the opinion of the Governor in Council on various points touching the welfare of labour which arise out of the Draft Conventions and Recommendations adopted at the International Labour Conference held at Washington in October-November 1919.

2. The subject was referred to the Commissioner of Labour for report in consultation with the Labour Advisory Board, to which he was specially asked to nominate two ladies for the purpose of this enquiry. The Commissioner has submitted a report after obtaining the opinions of Collectors, Chambers of Commerce, the

Central Labour Board and the chief employers of labour in this presidency, and after placing the whole matter before his Advisory Board. His assistant visited all the chief industrial centres and made personal enquiries amongst both employers and employees. So far as his numerous other duties rendered it possible, the Commissioner himself made personal enquiries into the matter.

3. Before proceeding to deal with the various points raised in your letters under reply, I am directed to offer certain general observations regarding the main problem of labour in this presidency. The most striking fact about factory labour in Madras is the smallness of its present numbers, only 98,000 out of 45,000,000 being employed in factories. It is therefore of considerable importance not to frighten away capital which has not up to now shown any great predilection for the opportunities offered in this presidency.

The chief demands made by labour as judged by recent strikes are for an increase of pay to meet the extra expenditure caused by the rise in prices, for the grant or for an increase in the rate of rice allowance which is invariably preferred to a supply of cheap rice, and for the recognition of their unions. Complaints regarding hours of work play an insignificant part in labour unrest, but grant of holidays for the chief festivals and for domestic occurrences and of privilege leave for persons who have put in some years of service are frequently made and earnestly pressed.

With these preliminary remarks the questions asked by the Board of Industries and Munitions will be taken up *seriatim*.

4. *Limitation of the working day—paragraph 9 (1) of letter dated 11th May 1920.*—Having accepted the principle of a sixty-hour week, the Government of India enquire whether there should be in all or particular industries a further limitation of the working day to 10, 10½ or 11 hours; whether in case such limitation is desirable it should be effected by statutory provision or by rules framed under the Act made either by the Central or the Provincial Government, and whether a weekly half-holiday should be given to the workmen.

At present the only limitation of the working day is that imposed in the case of textile factories under section 28 of the Factories Act which limits the total period of work in one day to 12 hours. The Madras Government are not aware of any hardship that has arisen through absence of a shorter limit. On the other hand, labour in this country owing to climatic and other considerations is not so efficient as labour in other countries with which it has to compete.

and until a higher level of efficiency is secured it is necessary that it should work longer hours if it is to compete with success.

Closely connected with this subject is the subject of a weekly half-holiday. Here, again, the Governor in Council does not consider that there is any necessity for a provision for the reason above stated, to which may be added the fact that a very large number of holidays is taken in India in connection with religious and social ceremonies. At the same time it may be desirable later on, if not at present, to have power to arrange for the weekly half-holiday if it is so desired. It will be observed that the limitation of the working day to 10 or 10½ hours puts a weekly half-holiday in addition to Sunday out of the question and that nothing short of a 11 hours maximum will allow for both. At the same time there are rare exceptions in which provision has to be made for a longer period even than 11 hours a day in special industries or where overtime is worked.

In these circumstances the Governor in Council is of opinion that it is not necessary to make any provision for a lower maximum than 12 hours in the Act, but that it is desirable to empower local Governments by rule to impose a statutory limitation of not more than 11 hours subject to exception in special cases.

5. *Limitation in the daily working hours of women and children—paragraph 9 (2) of the letter.*—As regards women the employers consulted are generally averse from any differentiation between the working hours for men and women, chiefly on the grounds that the work of the latter is ordinarily light, that it is paid for as job work by the piece, that, when they work with men, the work of the factory, as a whole, would be affected by differentiation, and that, despite all rules, their attendance is irregular. The Commissioner of Labour remarks that nearly one-half of the women workers in this presidency are engaged in cotton or jute reeling, coffee garbling or coir hanking which, if done by women at all, is done by women only and that therefore in these cases the work of the factory as a whole will not suffer by the grant of any concession to the women. He also observes that there is no danger of women being placed at a disadvantage in the labour market by reason of a special reduction in their working hours as apprehended by the Government of India, since the demand for cheap female labour which is preferred to male labour in the industries in which it is most largely employed, as for instance in cotton gins and rice mills, is not likely to decline. In agreement with his Advisory Board he recommends that the term of work

for women should be reduced to nine hours in the day so as to give them ample time to attend to their domestic work and to look after their children. The Governor in Council accepts this conclusion, which agrees with the recommendation already made in letter No. 528-Revenue (Special), dated the 13th March 1920.

As regards children, the employers consulted agree that the hours of work per diem should be reduced to five (a half day) and that there is no reason for discriminating between textile and other factories in this respect. This proposal is in accordance with the view expressed in the letter above quoted.

6. *Limitation of hours of work in mines—paragraph 9 (3) of the letter.*—There are very few real mines in this presidency, most of the so-called mines being only quarries. The labourers work only about 8 hours a day and even that work is not always continuous. In some mines no weekly holiday seems to be allowed, in which case the nominal hours of work per week will be 56. The Governor in Council agrees with the Commissioner of Labour and his Advisory Board that the hours of work may be limited by statute to 54 each week, provision being made for the grant of a weekly holiday and half-holiday when required. At the same time he is of opinion that the decision on this question should depend on the conditions obtaining in other presidencies where mines are more numerous.

7. *Exceptions from, and modifications of, the sixty-hour limit in regard to particular industries—paragraph 9 (6) of the letter.*—So far as this presidency is concerned no changes are required in the list of modifications and exceptions appearing in sections 21, 22 and 30, and Schedules I and II of the Factories Act.

As regards section 21 (1) a suggestion has been made that a daily interval of at least $\frac{1}{4}$ of an hour for tiffin should be allowed to all persons who work more than eight hours in the day I am to commend this suggestion for the consideration of the Government of India though it is perhaps not strictly germane to the subject dealt with under this paragraph.

8. *Employment of women before and after childbirth.*—

- (1) *Whether in the industrial undertakings in the province women workers, as a matter of actual practice, owing to social or religious usages, abstain from work for any period before or after childbirth; if so, what is the duration of the periods? Are these periods considered adequate for the health of the mother and the child? Paragraph 11*

(1) *of the letter.*—There is no religious or social objection to a pregnant woman working *before* her delivery; but the period of 'pollution' observed *after* confinement may be taken as representing the time, during which, owing to social or religious usage, women should abstain from work. There is no idea of "pollution" among Christians, but they observe approximately the same periods of abstention from work as are prevalent locally among the corresponding class of Hindus. The period of pollution varies from ten days in the socially lower castes to forty days in the higher, but seven to sixteen days appear to be the minimum limit which in any case has to be observed. It is reported that women ordinarily stay away from work about the 6th to the 8th month of pregnancy, but that some women work right up to the time of delivery. No case is known of a woman having returned to work within one month of delivery; usually an interval of two or three months elapses between the time of delivery and return to work and sometimes even an interval of six months. No precise statistics are available, except in the case of the Basel Mission, for one of whose works information for the last 18 months has been obtained, and is appended to this letter.

The Governor in Council accepts the principles laid down in article 3 (a) and (b) of the Draft Convention on this subject.

9. *If such practice does obtain, whether the woman has any difficulty in retaining her employment—vide paragraph 11 (2) of the letter.*—It is reported that the woman has ordinarily no difficulty in retaining her employment.

10. *Whether she receives any wages or allowance from the employer during such period of absence? If she does not, what arrangements are in vogue for the maintenance of mother and child—paragraph 11 (3) of the letter.*—In this presidency women do not receive any wages or allowance from the employer during the period of such absence, except in work controlled by the Basel Mission, where a Sick Fund has been constituted. Members of the Fund are grouped in four classes, according to the subscriptions paid, the monthly amount being annas six, annas four, annas 2 and anna one, respec-

tively. Married-women members of the Fund receive, in case of confinement, a special aid of Rs. 5 and are not required to pay any subscription for two successive months. In case of sickness, they can claim assistance from the 5th week after their confinement according to the class of membership as shown below:—

	Per day.
I Class	Four annas.
II Class	Three
III Class	Two „
IV Class	One anna.

No member is entitled to assistance for more than sixteen weeks in any one year.

In other works, the woman depends on her own relations for maintenance during the period of confinement. Sometimes she supplements the family earning by doing light work at home, *e.g.*, by collecting firewood or grass, making coir, hand reeling, etc.; when she is destitute or is unable to work, it is reported that she attends one of the local hospitals for delivery.

The Labour Advisory Board recommend that, if abstention from work is made compulsory by law, the women should be given an allowance either from a Maternity Insurance Fund or from public funds. The Central Labour Board has put forward a similar proposal. The Government are in agreement with the principle underlying these suggestions and are inclined to think that, as a first step, State assistance might be offered to workmen's or employers' benefit funds which provide for payments of the kind.

11. *Whether there are suitable arrangements to enable a woman worker who is nursing her infant to do so—paragraph 11 (4) of letter dated 11th May 1920.*—In a very few cases proper crèches are provided. Ordinarily if the mother lives close to the place where she is working, she either goes home to nurse her infant during intervals of work, or has it brought to the factory. If she lives at a distance from the factory, she brings the infant with her and keeps it with her if convenient or puts it out in a country cloth cradle in the compound. There is no evidence that women find any difficulty in nursing their infants properly while they are at work.

12. *Whether in any industries in the province free attendance by doctors or certified midwives is available in such cases—paragraph 11 (5) of the letter.*—Free attendance by doctors is provided for only in a few factories where the management is very efficient. Qualified doctors and midwives attached to public hospitals or dispensaries are, however, available in most places where there are factories.

If labour unions or employers would arrange for free attendance, the State might, in the opinion of the Governor in Council, undertake to meet half the fee.

13. *Employment of women during night especially in mines—paragraph 13 of the letter.*—At present night work by women is allowed in cotton ginning and pressing factories only. The Governor in Council accepts the recommendation already made by the Indian Cotton Committee in paragraph 321. of their report that night work by women in these factories should be forbidden.

As remarked in paragraph 6 above, there are few real mines in this presidency and no night work is ordinarily done.

14. *Recommendations concerning the prevention of anthrax—paragraph 14 of the letter.*—There are no woollen factories in this presidency.

15. *Recommendation concerning the protection of women and children against lead poisoning—paragraph 15 of the letter.*—In this presidency there are no industries which involve the use of lead.

16. *Recommendation concerning the establishment of Government health services—paragraph 16 of the letter.*—The Governor in Council agrees that no immediate action is called for, but would suggest that Factory Inspectors should undergo a simple course of training in sanitation.

A suggestion has been made that the Sanitary Commissioner should be *ex-officio* an Inspector under the Act. This will be examined separately.

17. *Minimum age for admission of children to industrial employment.*—

To what extent are children between the ages of 9 and 12 at present employed in factories in India that come under the operation of the Indian Factories Act?—paragraph 18 (1) of the letter.—The statement

below shows the children now employed in factories classified by age :—

Industry.	Total children.	Age.				
		9	10	11	12	13
Cotton Mills	4,854	477	1,010	1,308	1,143	916
Coffee Works	277	25	35	48	76	99
Rice Mills	193	7	26	50	58	52
Jute Mills	143	11	41	36	30	16
Tile Works	130	1	12	17	48	61
Printing Works	131	1	12	10	42	57
Engineering Works	117	1	2	12	30	66
Clothing Factory	115	17	17	24	44	13
Cigar Factory	91	1	11	12	44	23
Coir Works	70	..	8	15	20	27
Other Works	120	6	20	31	38	34
TOTAL	6,259	647	1,104	1,572	1,588	1,358

18. Will there be any serious dislocation in the industries concerned if the age-limit be raised to either 11 or 12 years?—*paragraph 18 (2) of the letter.*—The majority of the children are employed in cotton spinning mills, for which detailed statistics are given below :—

Names of Managers.	No. of mills.	Locality.	Total No. of children.	Classification by age.				
				9	10	11	12	13
Messrs. Binny and Company.	2	Madras City	1,341	23	119	314	510	370
Mr. Karsandas Mooljee Jaitha.	1	Ditto	341	56	39	68	65	23
Messrs. A. & F. Harvey.	3	Madura and Tinnevelly districts	2,476	233	586	740	445	472
Messrs. Stanes and Company.	2	Coimbatore	382	113	124	94	36	15
Rao Bahadur P. Somasundaram Chetty.	2	Coimbatore and Malabar Districts	104	20	30	27	22	5
Messrs. M. S. T. Chari and Company.	1	Tinnevelly District	131	27	47	25	19	13
Others	2	Guntur and Godavari districts	79	..	15	20	26	13
TOTAL	13	..	4,854	477	1,010	1,308	1,143	916

Messrs. Binny and Company, who manage the two largest cotton mills in the city, consider that there will be no serious dislocation if the minimum age is raised as proposed, provided that the children now working are allowed to remain. Messrs. A. and F. Harvey, who manage three large mills in the Madura and Tinnevely districts, say that no opinion can be offered before some experience is gained under the raised limit; but they are inclined to the view that the raising of the limit may have a deleterious effect on factories as it would tend to restrict the quantity of available labour. Messrs. Stanes and Company, Coimbatore, think that there may be some dislocation of work if the age-limit is increased. Mr. K. M. Jaitha of Madras, Manager of the Choolai Mill, is the only Manager who holds the opinion that there will be a serious dislocation of work if the minimum age is raised to 11 and 12 years. The only other industry in which children are employed largely is coffee curing on the West Coast where during the season over 500 of them, mostly girls, are engaged in garbling. Some dislocation in the industry is anticipated if the minimum age is raised.

The Labour Advisory Board recommend that the Act should fix the minimum age at 11 and give power to local Governments to raise it gradually by rules made under the Act. The Commissioner of Labour agrees subject to the proviso that the children at present working should be allowed to remain so as to prevent dislocation of work. The Governor in Council agrees with the Commissioner.

19. *Will educational facilities be available for the children who will be excluded from factories by a raising of the minimum age?—paragraph 18 (3) of the letter.*—There are schools in most of the places where there are factories at present. Practically the only school attached to a factory is that of Messrs. Binny and Company in Madras, which is a great success.

The Elementary Education Bill (copy enclosed*) which, it is expected, will be passed into law very shortly, empowers Municipal Councils and Taluk Boards to levy an education tax, provides for the creation of education funds for each Municipal Council and Taluk Board to be used for the expansion of elementary education under the guidance of District Educational Councils, and authorizes local bodies to introduce compulsion with the sanction of the Governor in Council. It is therefore hoped that educational facilities

* Not printed.

will not be lacking for children who will be excluded from factories by an increase in the minimum age of 11.

20. *Should educational facilities be available and if the children can be compelled by law to go to school, what approximately will be the age when they will finish the course of elementary instruction and become eligible for industrial employment?*—paragraph 18 (4) of the letter.—This matter is under reference to the educational authorities and a further communication will be sent shortly.

21. *What is the suitable age of physical development for boys and girls to enter upon manual work involving some strain on muscle and nerve?*—paragraph 18 (5) of the letter.—The workmen consulted by the Commissioner of Labour put the age at 14 to 16 with reference to the nature of the work. They consider that heavy work should not be given until the age of 16.

22. *Public opinion with regard to the proposed raising of the minimum age for children*—paragraph 18 (6) of the letter.—The employers are not generally opposed to the change, though as a body they are not enthusiastically in favour of it. The ordinary workman looks at the question from the point of view of his domestic budget, but the better informed among them appreciate the advantages of at least an elementary education.

23. *Children in Mines*—paragraph 19 of the letter.—Very few children under 12 work in mines.

24. *Night work of young persons employed in industry*—paragraph 20 of the letter.—The Governor in Council considers that the local Governments may be empowered to raise the existing age-limit where necessary.

25. *Definition of a factory*—paragraph 23 of the letter.—Opinion on this subject is divided. The Labour Advisory Board and the Central Labour Board are in favour of declaring as factories all concerns using power and employing 20 persons and more. Sir Robert Stanes of Coimbatore would fix the minimum number at 25. The Godavari District Association accept the proposal of the Government of India to fix the minimum at 10. In paragraph 227 of their report the Indian Cotton Committee recommend that all cotton ginning and pressing factories should be brought under the operation of the Factories Act irrespective of the number of hands they employ. This view is supported by the Tuticorin Chamber of Commerce. The District Magistrate, South Kanara, suggests the extension of the Act to the weaving establishments in his district

which do not use power but employ a large number of workmen who work long hours in most unhealthy conditions. The Commissioner of Labour, after a careful consideration of the different opinions on this question, recommends that the limit should be fixed by statute at twenty persons, power being reserved to local Governments to reduce this limit in specified areas. The Governor in Council is disposed to agree with the Commissioner and would apply this minimum to all factories whether they use power or not.

In the short time allowed for a reply it has not been practicable to calculate the number of works that would be brought under the operation of the Factories Act by the adoption of the above proposal, but the Governor in Council does not anticipate any necessity for large strengthening of the factory inspection staff. The limit would be reduced only in the case of large towns where sweating is more likely to exist: and the existing factory inspection staff would be able to cope with the additional work involved by this proposal.

In other areas, the Assistant Commissioners of Labour could attend to this matter in addition to the other duties assigned to them. The important point is that power should be reserved to deal with unhealthy conditions of work; and the recommendation of the Governor in Council has been framed so as to secure this object.

26. *Communication to the International Labour Office of information regarding unemployment—Article 1 of the Draft Convention regarding unemployment and paragraphs 1 and 8 of letter dated 17th May 1920.*—The organization of industries and labour is so extraordinarily loose and the attachment of the Indian to his village so strong that it is difficult to say that there is either adequate employment or unemployment in any given locality. The fact that recruiters take away large numbers shows that there are many who are not remuneratively employed. On the other hand, one never observes in this presidency the phenomenon of crowds wandering about in search of work which is the sign of unemployment in other countries. The only statistics that would be of any use are periodical returns of rates of wages in different areas which would give a rough idea of the places where employment is most scarce.

27. *Establishment of free public employment agencies—Article 2 of Draft Convention concerning unemployment and paragraphs 5 and 8 of letter dated 17th May 1920.*—The Governor in Council has no objection to Article 2 of the Draft Convention being ratified. It is a part of the duties of the Commissioner of Labour to enquire

into the places where labour is available and to consider the possibility of putting it into touch with employment. The Advisory Board suggests the establishment in the office of the Commissioner of Labour of a public employment bureau as an experimental measure. This matter is engaging the attention of the Commissioner.

28. *Employment Agencies working for profit*—*Clause I of Recommendation concerning unemployment and paragraphs 4 and 8 of the letter dated the 17th May 1920.*—The principle of the recommendation may be accepted as proposed. There are at present no public or private employment agencies at work in this Presidency, other than those specified in paragraph 4 of the letter dated 17th May 1920 and none of these is working for profit.

29. *Recruitment of labour for employment in other countries*—*Clause II of Recommendation concerning unemployment and paragraphs 5 and 8 of letter dated the 17th May 1920.*—Recruitment of labour for Ceylon and the Straits is controlled by Commissioners representing the interests of the planting industry in those countries and the expenses are met from a fund to which the planters contribute. The recruiters (called Kanganis) are remunerated for their labour from this fund and not by the recruit himself. They are not therefore employment agencies working for profit. The Governor in Council is prepared to accept the principle of the recommendation as proposed by the Government of India and agrees that the clause prescribing previous consultation with the workers is hardly applicable to present conditions in India. If this clause is accepted caution will be needed to prevent consultation with the workers from developing into consultation with officials of labour unions who have interested themselves in the matter from political motives alone.

30. *Unemployment Insurance*—*Clause III of the Recommendation and paragraphs 6 and 8 of the letter dated the 17th May 1920.*—As observed by the Government of India, the proposal is premature.

31. *Co-ordination of all work undertaken by Public authority*—*Clause IV of the Recommendation and paragraphs 6 and 8 of the letter dated the 17th May 1920.*—The Governor in Council is unable to accept the recommendation except with a great deal of reservation.

In the first place the Government must have their buildings constructed and other works executed when they want them at appropriate times, e.g.; roads must be constructed in most localities during the rains.

As regards famine relief works, the present policy is to insist on the works being carried out strictly in accordance with the provisions of the Famine Code and this will constitute an obstacle to the free expansion of the relief programme. In addition, the fact that the labour available in times of famine is, for the most part, unskilled limits the possibility of expansion of the programme of works.

Moreover financial considerations afford a strong check on sudden alternations in regard to time and place of expenditure.

32. *Recommendation concerning reciprocity of treatment of foreign workers—paragraphs 7 and 8 of letter dated 17th May 1920.*—The Governor in Council concurs in the opinion of the Government of India that the recommendation is not open to objection but is not of much practical importance at present.

List showing the number of women and the allowances received by them during their confinement from 1st January 1919 to 30th June 1920. Basel Mission Tile Works, Jeppoo, Mangalore.

Month.	Name of woman.	Date of stoppage from work.	Date of confinement.	Date of return to work.	ALLOWANCE GIVEN.			
					Sick allowance.			
					Preg-nancy.	Months.	Amount.	
							Rs.	Rs.
January 1919.	Veronika .	6th Jan. 1919	24th Jan. 1919	3rd June 1919	5	N/A.	..	..
	Sus. Emily	24th Jan. 1919	25th Jan. 1919	14th April 1919	5	..	..	..
	Havva .	1st Jan. 1919	27th Jan. 1919	19th May 1919	5	..	..	..
February 1919	Mon. Shanthy	1st Oct. 1918.	3rd Feb. 1919	22nd Mar. 1919	5	..	..	..
	Deborah .	11th Oct. 1918	17th Feb. 1919	3rd May 1919	5	..	..	..
April 1919 .	Marl Mathoo	14th April 1919	16th April 1919	1st Sep. 1919	5	..	..	..
May 1919 .	Th. Kalyani	11th April 1919	1st May 1919	4th Sep. 1919	5	..	..	..
August 1919 .	Is. Victoria	18th Aug. 1919	22nd Aug. 1919	13th Apl. 1919	5	..	..	..
	Prasanni .	27th Aug. 1919	26th Aug. 1919	10th Feb. 1920	5	..	..	..
September 1919	B. Dovamma	19th Aug. 1919	2nd Sep. 1919	..	5	..	..	..
October 1919 .	Pavithri .	8th Aug. 1919	25th Oct 1919	..	5	..	..	..
November 1919	Co. Subhadra	1st Sep. 1919	25th Nov. 1919	1st April 1920	5	..	..	..
December 1919	Ari. Martha	5th Dec. 1919	6th Dec. 1919	17th May 1920	5	..	..	..
	Sus. Emily	16th Dec. 1919	16th Dec. 1919	..	5	..	..	..
February 1920	Rob. Gulald	18th Feb. 1920	18th Feb. 1920	3rd May 1920	5	..	..	..
	Es. Marry	17th Nov. 1919	10th Feb. 1920	3rd May 1920	5	..	..	..
May 1920	Eid. Jullah	5th May 1920	17th May 1920	..	5	..	..	..
	Th. Rosa	1st May 1920	25th May 1920	..	5	..	..	..

No. 2892-D.-20-5, dated Stonehouse Hill, The Nilgiris, the 10th August 1920.

From—The HON'BLE MR. E. S. LLOYD, I.C.S., Acting Secretary to the Government of Madras, Revenue Department,

To—The Secretary, Board of Industries and Munitions, Simla.

In paragraph 20 of my letter No. 2892-D.-20-2, dated 5th August 1920, on the subject of the draft conventions and recommendations adopted at the International Labour Conference a further communication was promised on the point raised in paragraph 18 (4) of your letter No. L-812, dated 11th May 1920, regarding the approximate age at which children, if they can be compelled by law to go to school, will finish the course of elementary instruction and become eligible for industrial employment.

2. The Director of Public Instruction, whom the Government have consulted in the matter, considers that the ordinary boy cannot learn anything which would justify him in being called educated in less than four years and that economic conditions in this Presidency will not permit of compulsion being adopted at the outset for more than a four years' course. He therefore puts the age at which children will complete a course of elementary education at eleven years—a conclusion which has been independently arrived at by the Labour Advisory Board and in which the Governor in Council also concurs.

3. In continuation of paragraph 16 of the letter, I am to observe that the Sanitary Commissioner and Deputy Sanitary Commissioners have recently been appointed Inspectors of Factories under the Factories Act. This fact was overlooked when my previous letter was despatched.

NORTH-WEST FRONTIER PROVINCE.

Reply to letter Nos. I-812, dated 11th May 1920, and L-812, dated 17th May 1920.

No. 2814-Ag. (Revenue), dated Peshawar, the 26th October 1920.

From—The HON'BLE SIR ALFRED HAMILTON GRANT, K.C.I.E., C.S.I.,
Chief Commissioner and Agent to the Governor-General, North-
West Frontier Province,

To—The Secretary, Board of Industries and Munitions, Simla.

I have the honour to acknowledge the receipt of your letters Nos. I-812 and L-812, dated the 11th and 17th May respectively,

on the subject of the Draft Conventions and Recommendations adopted by the Washington Labour Conference, and in reply to state as follows:—

2. The Salt quarries in the Kohat district are the only works of importance on which specialised labour is employed in this Province, but even in them the conditions of employment are those of casual labour rather than organised industry and no measures appear necessary or desirable at present for the regulation of this labour.

3. The life of the great majority of the inhabitants is pastoral and agricultural, though there is no considerable surplus of agricultural products; agricultural labour is not employed here on an organised scale; capital and skilled labour are alike wanting; there are no industrial centres; with the exception of Peshawar there are no towns of importance. There are certain cotton ginning, cotton baling and pressing, bhusa pressing and ice-making machines in the Peshawar district. The recommendations of the Washington Conference have been communicated to the local officers as well as to the firms concerned. However, for the reasons given in the enclosed letter from the Deputy Commissioner, Peshawar, and in view of the peculiar features of the Province, no change is considered necessary here at present, as the rules already in force meet with our requirements.

No. 6212-G., dated the 7th October 1920.

From—The Deputy Commissioner, Peshawar,

To—The Revenue Commissioner, North-West Frontier Province.

Reference the correspondence ending with your endorsement No. 1238-C., dated the 18th September 1920.

The recommendations of the Washington Conference apply particularly to the spinning, weaving and foundry mills and factories.

In this district there are only cotton ginning, cotton baling and pressing, bhoosa pressing and ice-making machines and the rules already in force meet with our requirements and no change is, I think, necessary.

In regard to the questions raised by the Government of India, I give below the required information :—

1. *Hours of work in Industrial undertakings.*—The ginning factories here work for 11 hours a day. They do not work throughout the year but for about 100 days in a year. Their working depends on the quantity of cotton obtainable or on the conditions of the cotton crop in the district.
No children are employed at all in the factories here and the females are only employed in ginning factories. No further limitation in the working hours is, therefore, necessary.
2. *Definition of a factory.*—The industries in this district are still in their infancy and it would not be advisable to make any alteration in the present definition of a "Factory" which includes only those industries which use power and employ more than 49 persons.
3. *Employment of women before and after childbirth.*—The women workers are all Pathans having strong constitutions and they abstain from work for about a fortnight before and for a similar period after childbirth. The factory owners do not pay any wages for this period of absence. The workers are all only day-labourers and go to their homes after the day's work is done. No special arrangements, therefore, exist for the free attendance by doctors or certified midwives.
4. *Employment of women during the night.*—No women are employed after sunset or before sunrise in any factory in this district.
5. *Prevention of anthrax and protection of women and children against lead poisoning.*—There are no wool or lead factories in this district.
6. *Fixing the minimum age for admission of children to Industrial employment.*—No children are employed in any factory in this district.

The other points raised by the Washington Conference do not concern this district and I would not, therefore, offer any opinion about them.

PUNJAB.**Reply to letter No. I-812, dated 11th May 1920.**

No. 4788-S. (C. & I.), dated Simla, the 27th August 1920.

From—The HON'BLE MR. L. FRENCH, C.B.E., C.I.E., L.C.S., Officiating
Financial Secretary to Government, Punjab,

To—The Secretary, Board of Industries and Munitions.

I am directed to reply to your letter No. I-812, dated the 11th May 1920 (with enclosures), in which local Governments were invited to formulate their views on the broad lines of policy to be adopted in regard to the draft conventions and recommendations which were adopted by the International Labour Conference held at Washington in 1919.

2. As desired by the Government of India the various interests concerned have been consulted as well as officials with some knowledge of the matters under consideration: and in addition a conference for the discussion of the points at issue was convened at Simla consisting of officials and non-officials, representative of various interests (including Lala Lajput Rai who is interested in the welfare of the labouring classes). A large mass of written opinions has been received; but the Lieutenant-Governor does not intend to trouble the Government of India with a perusal of these, all of which have been carefully examined. He contents himself with submitting a copy of the proceedings of the Committee referred to; anything of value in the opinions recorded by other gentlemen consulted is discussed or embodied in this letter.

3. With a view to all possible curtailment of the length of this letter the points on which the views of this Government are sought are not reproduced at length, but are referred to by the numbers of the paragraphs and sub-paragraphs of your letter under reply. Before dealing, however, with these points, I am to invite attention to the fact that at the meeting of the Provincial Committee at Simla, Mr. Harkishan Lal, the well-known industrial capitalist, objected to the application of the principle of 60 hours a week in factories where the manufacturing process has to be continuously carried on. He expressed the view that by the laws of arithmetic a 60-hours week in such factories is a practical impossibility. Shifts must be regularly divided up and the common practice, which suits the habits of the labouring people of this country, is that a shift

should be reckoned as either one of 12 hours, or one of 8 hours if the work be arduous. He pleaded therefore for a maximum of 84 hours per week in the case of work necessitating continuous production. While admitting that there is some plausibility in the argument that many forms of labour are carried on in the factories referred to where the strain entailed by occasional attendance to a machine is not a severe one, His Honour does not agree that an exception of so far-reaching a nature should be made to the principle already accepted by the Government of India. Even where a shift is reckoned as 12 hours, a weekly holiday must, in accordance with the provisions of section 22 of the Factories Act, be permitted to every person employed in a factory, and a re-adjustment of shifts should present no insuperable difficulties. Consequently His Honour would accept the principle of a 60-hours week as applicable all round, subject to the exceptions mentioned in article 6 of the draft convention limiting hours of work (Appendix II of your letter under reply).

4. *Paragraph 9 (1).*—For the reasons indicated in the preceding paragraph His Honour concurs in the view that the law should provide for elasticity in the local application of the principle of the 60-hour week. This result can best be achieved by imposing limitations by rules made under the Act rather than by statutory provision: but the existing provision under the Factories Act (section 28) that no person shall be employed in any textile factory for more than 12 hours in any one day may, the Lieutenant-Governor thinks, reasonably be extended by statute to all industries brought under the Act, subject again to the provisions of article 6 referred to in paragraph 3 above. To this suggestion it has been objected that the only result will be that a labourer, after having performed 5 days' full time in one factory, will transfer his services for the 6th day to another factory. This possibility must be conceded: but there is no human law which can prevent a free man from working in his leisure time; and as soon as the industrial population can attain to a higher standard of living and education and recognize fully the intention and advantages of the restrictions now placed on labour, the dangers of this form of over work will tend to disappear. Subject to the maximum of 12 hours per diem now suggested, all other restrictions on the hours of work per diem may safely be left, His Honour thinks, to rules framed by the local Government.

As regards a weekly half-holiday, the Lieutenant-Governor feels that, while this is obviously desirable, it is perhaps unnecessary to do more at present in this industrially-backward province than to empower the local Government to prescribe one by rule in specific or all industries. The amendment of section 25 of the Factories Act so as to cover men also would be one means of securing that a man did not employ his spare time on Saturday in taking up outside work: but such an amendment would go beyond the needs of the case. One complaint that has been made is that there are already far too many gazetted holidays of which the labourer voluntarily avails himself or which he is constrained by social or religious customs to enjoy: and the Lieutenant-Governor is disposed to hold that there is considerable force in this contention and that, circumstances in European countries and India differing as widely as they do, there is little need to insist on the suggested weekly half-holiday. He would leave the existing law as to holidays unaltered.

5. *Paragraph 9 (2).*—The Provincial Committee were not in favour of any alteration in the present law as to the limitations placed on the labour of women and children in factories. The question is not a very pressing one in this Province, because the industrial population is small in itself and the total number of women employed in factories, according to the statistics of the last few years, is 4,000 to 5,000 only. Medical opinion, which naturally must have great weight in this question, is in favour of a reduction of the existing hours. Certainly, in His Honour's opinion, no women should be permitted to work in a factory in a country like India for more than 10 hours per diem: and if the law is amended to this effect it will rest with the factory-owners to adjust their shifts to altered conditions where male and female labour is employed together. It is not possible under the existing law for a woman to work more than 11 out of the 24 hours, whereas it has been suggested above that in certain cases a 12-hour maximum should be permitted for men. Personally, the Lieutenant-Governor would like in this province to see an 8-hours day prescribed for women as a maximum. As to children, it is significant that one prominent factory owner of conservative views has expressed the opinion that it would be an all-round advantage to limit the hours of children's labour to 6 hours per diem. The employment of children for 1 hour only after the interval enjoined by section 21 (1) of the Factories Act is said to be inconvenient; and he would like to

see the restriction imposed by section 32 of the Act applied without qualification to all children. The Lieutenant-Governor agrees that 6 hours per diem is a sufficient length of time during which a child should be allowed to work whether in a textile or other factory.

6. *Paragraph 9 (3).*—Apart from the Khewra Salt Mines (administered under the Government of India) there are only 2 or 3 unimportant mines in the Punjab. As a rule, working hours are believed not to exceed 54 hours per week inclusive of overtime and the Lieutenant-Governor considers this a suitable maximum to impose. He would commend to the consideration of the Government of India the suggestion put forward by the Provincial Committee under Agendum II of their proceedings that, as far as may be possible, provisions similar to those of the Factories Act relating to hours of work for women and children, ventilation, hygiene, etc., should be made applicable to mines. He understands that night work in the Punjab mines is the exception, and he is not, therefore, in a position to say with any confidence whether total prohibition of women working during the night in mines is or is not feasible in this country.

7. *Paragraph 9 (4).*—The majority of the Provincial Conference was of opinion that the statutory exception made in favour of indigo and tea or coffee plantation factories in section 3 of the Factories Act should be abrogated. Of these classes there are only a few small tea plantation factories in the Province; and as the Lieutenant-Governor has not been able to ascertain definitely why these classes of factories were originally excluded from the purview of the Act he prefers to express no opinion on this suggestion.

As regards the extension of the definition of a "factory" His Honour considers that the use of power in any form should not be an essential element of the definition. The case of the carpet factories in Amritsar is in point. This industry, which is carried on under insanitary conditions (largely by the agency of children), should undoubtedly be brought within the scope of the Act. His Honour would therefore suggest that the definition might run:—

"Factory means any premises wherein or within the precincts of which persons numbering not less than (number to be defined) are employed on any process for or," etc.; etc.

The number of persons to be defined has, in view of the remarks made in paragraphs 9 (4) and 23 of your letter under reply, been

the cause of considerable discussion by the Provincial Committee and thought by the Lieutenant-Governor. The Committee recommends maintenance of the present statutory numbers. In fact, owing to the recent application of the proviso of section 3 of the Factories Act in the Province all cotton pressing or ginning factories employing not less than 20 persons and all other factories employing not less than 30 persons on any one day in the year have been brought within the purview of the Act: and their control and inspection, if not as satisfactory as it might have been, has not presented any great difficulty. But it is necessary to look to the future in view of the signs of awakening industrial development in the Province. Even with an increased inspectorate it seems doubtful whether efficient control of all "factories" employing more than 10 persons could in the near future be undertaken. In matters of this kind Government must rely on the co-operation of enlightened public opinion: and this has still to be created both in urban and rural centres. On the whole, therefore, His Honour thinks that we should not go beyond a statutory provision reducing the number 49 to 20 in section 3 (1) (e) of the Factories Act and the number 20 in the proviso to 10. Whatever decisions, however, be finally arrived at the Lieutenant-Governor trusts that a provision will be inserted in the amended Act covering the cases of such establishments as the carpet factories referred to where power is not used.

It has been suggested that for the word "persons" that of "operatives" should be substituted. But after careful consideration the Lieutenant-Governor is not in favour of an amendment which is designed to give factory owners a wider latitude than they now possess of evading the provisions of the law.

8. *Paragraph 9 (5).*—No remarks appear to be required from the local Government.

9. *Paragraph 9 (6).*—In connection with modification of the 60-hour limitation I am to bring to the notice of the Government of India the suggestion made in the conference of the Provincial Committee that the words "reeling, winding and warping" should be added after the word "tailoring" in sub-clause (b), clause 2 of section 21 and in section 30 of the Factories Act. This is a technical matter in which His Honour is not competent to express an opinion. Subject to what has been said above in paragraphs 4 and 5, no modifications and exceptions, other than those specified in the Factories Act and its schedules, appear to be required in the Punjab.

The Lieutenant-Governor thinks, however, that there are advantages of elasticity in dealing with these matters in rules made under the Act by the local Government in view of the prospects of future industrial development.

10. *Paragraphs 10 and 11.*—As to the question of maternity in relation to industrial employment the Lieutenant-Governor's views on the points requiring investigation, after consideration of the evidence before him, are briefly as follows:—

- (1) The periods during which woman workers abstain from work before or after childbirth are, for pecuniary reasons, as short as possible. Social or religious usages in the cases of labouring women have no prohibitory influence. The actual periods of abstention are, therefore, quite inadequate.
- (2) In this Province a woman after childbirth has no difficulty in retaining her employment.
- (3) She receives no wages or allowances from an employer during absence. She has to depend on her husband or other relatives for maintenance. It appears that, failing this resource, the charity, which is so noticeable a feature of private life in India, takes the place of organised relief. His Honour is doubtful whether it would be possible in the present stage of industrial development in this Province where industrial labour is fluctuating to insist on contributions by employers for the purpose of maternity benefits.
- (4) Attention is invited to the report under Agendum VIII (4) of the Provincial Committee's proceedings. The Lieutenant-Governor thinks that in the Punjab, where there are only 4 large textile mills, the facilities provided are probably sufficient in the present stage of industrial progress. He recognizes the validity of the objections raised by Mr. King, Commissioner of Lahore (*vide* page 3 of enclosure), to the present system and, on the other hand, the difficulties inseparable from the care of children by women engaged in labour in factories. The suggestion that the local Government might be empowered to make rules prohibiting the employment of women and children in certain factories is worth considering and offers a possible solution of difficulties in future.

(5) Enquiries will be undertaken to ascertain particulars of medical arrangements existing in factories, with a view to formulating proposals to provide suitable medical arrangements, if possible, in parturition cases. But the Lieutenant-Governor feels that the spread of education and the augmentation of the Women's Medical Service are essential preliminaries to real progress in this matter.

11. *Paragraph 13.*—Please refer to paragraph 6 above.

12. *Paragraph 15.*—As far as His Honour is aware the process of lead manufacture is not carried on in the Punjab and he has no suggestions to make on the recommendations made by the Washington Conference for the protection of women and children against lead poisoning.

13. *Paragraph 17.*—The application of article 6 of the convention fixing the minimum age for admission of children to industrial employment obviously depends on other decisions arrived at by the Government of India on the general policy to be adopted.

14. Turning to the six considerations summarized in paragraph 18 of your letter under reply I am to observe—

(1) that statistics are not at present available as to the numbers of children employed in this Province between the ages of 9 and 11, 11 and 12 and 12 and 14. The total number of children of all ages employed in Punjab factories has hitherto been returned as in the neighbourhood of 1,000, more or less: but it is believed that this total is an under statement. The number, however, is in any case comparatively small.

(2) & (3) It will be seen from the proceedings of the Provincial Committee that support is lent to the Government of India's belief that in some cases the machinery and plant now in use are specially adapted for manipulation by children: but the total number of all ages employed in factories being what it is, it is improbable that the raising of the age limit to 11—the age fixed by the Punjab Primary (Compulsory) Education Act as the limit of age up to which a child must remain at school—will cause any general derangement of provincial industries. In certain industries, such as textiles and carpets, there will no doubt be a temporary derangement for which it will be necessary to provide by fixing a reason-

able period for falling in with the provisions of new legislation. It has to be borne in mind that in the almost universal absence of compulsory education (which has at present been adopted by only one municipality in the Punjab) and in the deficiency of general facilities for schoolgoing, the due supervision of the children of industrial workers, as the Government of India has pointed out, becomes a matter of some difficulty, which, however, should be eased by the rapid multiplication of schools. On the whole, therefore, the Lieutenant-Governor thinks the minimum age of 11 years applicable to all children, wherever resident, is the most suitable to adopt.

- (4) & (5) It follows from the above that the reply to the question asked is 11 years, which may be taken as corresponding roughly to 14 years in Western and Northern Countries.
- (6) It cannot be said that any public opinion on the question of the proposed changes exists among the small and extremely ignorant industrial population of the Province which is intent on earning as quickly as possible the highest possible income for the family and would naturally be hostile to any alteration in the existing situation which is likely to curtail this income.

15. As regards the minimum age for employment in mines attention is invited to the suggestions made in paragraph 6 above. Children are employed in the Khewra Salt Mines: but as the Government of India have no doubt consulted the Commissioner, Northern India Salt Revenue, it is unnecessary to refer further to these mines. It is believed that in the other unimportant (coal) mines of the Province children are not employed underground.

Proceedings of a Committee convened at Simla in the Financial Commissioner's Office on the 16th and 17th July 1920, to consider the recommendations adopted by the International Labour Conference at Washington.

PRESENT:

The Hon'ble Sir JOHN MAYNARD, K.C.I.E., C.S.I., I.C.S.,—
Chairman.

The Hon'ble Mr. FRENCH, C.I.E., C.B.E.
 Lieutenant-Colonel P. S. M. BURLTON, Commissioner, Jullundur.
 C. M. KING, Esq., C.I.E., Commissioner, Lahore.
 E. A. SCOTT, Esq., O.B.E., Director of Industries, Punjab.
 Pandit AVATAR KISHAN KAUL, Extra Assistant Commissioner,
 Lyallpur.
 Rai Bahadur GANGA RAM, C.I.E., of Lahore.
 Mr. S. P. LILLEY of New Egerton Mills, Dhariwal.
 Mr. J. H. SMELLIE, D.S.O., O.B.E., of North-Western Railway.
 Lala LAJPAT RAI of Lahore.
 Lala HARKISHAN LAL of Lahore.
 Mistri ASMATULLAH, Factory-owner, Lahore.
 Mr. SOBHA SINGH, Punjab Chamber of Commerce, Delhi.
 ABDUL AZIZ,—*Secretary*.
 (Colonel BURLTON did not attend on the 17th.)

Of the representatives invited in Punjab Government letter No. 1073, dated the 16th June, Sheikh Imam Din of Kasur was absent throughout. The India Chamber of Commerce did not nominate any representative. In opening the proceedings the Chairman expressed regret at the sudden death of Mr. Taffs, Factory Inspector in the Punjab, whose expert knowledge of the subjects to be discussed by the Committee would have been of considerable help. The Committee recorded their regret.

The discussion of the various items included in the Agenda (copy enclosed) circulated to the members with Junior Secretary's letters Nos. 721, 721-6, dated, respectively, 5th and 10th July 1920, is briefly summarised below :—

AGENDUM I.

The definition of the work 'factory' was discussed and the President asked the Committee to consider whether the definition should be extended as suggested in this Agendum. Lala Lajpat Rai put a preliminary question and wished to know the object of excluding indigo and tea factories from the operations of the Factories Act, XII of 1911. The Chairman expressed the view that this exclusion was based possibly on the assumption that such factories were occupied in completing purely agricultural processes.

Mr. King proposed the inclusion of certain factories like the Amritsar Carpet factories in the operations of the Act, although no power

was used in the workshops. He remarked that the employment of children in these factories and the over-crowded and ill-ventilated houses in which the work was being carried on necessitated the application of the Act. With regard to Mr. King's suggestion Mr. Scott, Director of Industries, proposed that a proviso should be inserted in the Act with the object of empowering the local Government to enforce the provisions of the Factories Act in any factory whether power was used or not.

The next question taken up was as to the method of counting the number of factory hands for the purposes of the Factories Act. This point arose out of a suggestion by Rai Bahadur Ganga Ram that workers in open air should be excluded from the number of operatives as counted for the purposes of applying the Factories Act. Rai Bahadur Ganga Ram explained that on general grounds it was desirable to exempt small factories from the operations of the Act at least for some time to come, to permit of their free development.

Mr. Harkishan Lal also was of the opinion that exclusions should be as numerous as possible for so long till industries were well established in the Province.

On the close of the discussion Mistri Asmatullah moved the following resolution:—"On the assumption that the number of workers in a factory for the purposes of the application of Act XII of 1911 remained as at present, an attempt should nevertheless be made for the purposes of the definition to exclude the workers in the open air." The resolution was seconded by Lala Harkishan Lal. The proposal was put to the vote. Four members of the Committee voted for it and four against it. The Chairman gave his casting vote against the motion. The Chairman then asked the members whether any of them wished to move that the figure 49 as given in the Act should be altered. The Committee decided that the numbers given in the Act that is 49 and 20 should be neither raised nor reduced. This subject was again referred to on the second day of the meeting. The question of reducing the number of workmen from 20 to 10 for the purposes of the application of the Factories Act was considered. Attention was drawn to the fact that the non-adoption of the figure of 10 would lead to non-ratification of the conventions. The Committee could not find in the draft convention any specific number and recorded it as their decision that notwithstanding that it was mentioned in the draft convention in connec-

tion with the definition of a factory that the number of workers should be reduced to 10 for the purposes of the definition on which depends the application of the Factories Act, the Committee did not think it necessary to alter their decision refusing either to raise or to reduce the numbers at present fixed in the Act that is 49 and 20.

Lala Lajpat Rai moved that the statutory exceptions provided in section 3 of Act XII of 1911, regarding indigo and tea factories should be removed. Mr. Harkishan Lal suggested that the local Government should be empowered to prepare a list of exceptions. Lala Lajpat Rai remarked that all that he desired was that there should be no statutory exceptions and he had no objection to accepting Mr. Harkishan Lal's proposal. Six members voted in favour of the proposal that the statutory exemption of indigo and tea factories should be removed. As regards carpet and other factories of the same kind Mr. King proposed the following resolution:—

“The Act should provide by means of a proviso to section 3 that the local Government may extend the provisions of the Act to any premises where power is not used but where the number of operatives is more than 49 excluding the clerical staff.” Mr. Harkishan Lal seconded this resolution. Rai Bahadur Ganga Ram remarked that this would apply to jail industries. The resolution was put to the vote and carried. Seven members voted for and none against. Earlier in the proceedings Rai Bahadur Ganga Ram had urged that his pumping stations should not be included in factories under the Act, as these pumping stations are essentially for agricultural purposes. Adverting to this observation the Chairman pointed out that as the Committee had decided that indigo and tea factories should not be excluded by statutory provision and that the local Government should be empowered to exempt any particular factories, it was no longer desirable to proceed with the suggestion put forward by Rai Bahadur Ganga Ram regarding his own pumping station. The Committee agreed to this.

AGENDUM II.

Lala Lajpat Rai expressed the opinion that mines should certainly come under the operations of the Factories Act. Mr. King pointed out the undesirability of bringing mines under two departments. Sir John Maynard pointed out that the objection was not

insuperable, as the Mines Inspector could be authorised to act as a Factories Inspector in the mines under the Factories Act. The Conference agreed to the proposal that provisions similar to those of the Factories Act relating to hours of work, ventilation, hygiene, etc., not dealt with in the Mines Act should be made applicable to mines. The agreement was unanimous. It was recorded that the information before the Committee was that working hours in mines do not exceed 54 per week. The Committee agreed that there should be statutory provision limiting the hours of work of labourers in mines to a maximum of 54 inclusive of overtime. It was noted that piece workers in mines also should not be allowed to work more than 54 hours per week. With regard to the question as to whether women should be prohibited from working in mines during the night Mr. Scott's proposal based on his experience in Bengal where certain male adults, it was said, would not work unless their women were also allowed to work, to the effect that there should be no interference in the employment of women in mines was not accepted. The sense of the meeting was that women should be prohibited from working during the night in all mines.

AGENDUM III.

Mr. Harkishan Lal observed that he would accept a 60 hours week except in factories where the manufacturing process was continuous. He pointed out that in electric plants and in sugar and ice factories where work had to continue day and night there could be either two shifts meaning 84 hours a week for a labourer or three meaning 56 hours a week. His idea was that where the work was not arduous and consequently two shifts were feasible, the 84 hours week may be fixed, and where the work was arduous a 56 hours week would serve the purpose. Mr. King urged that a 60 hours limit was quite sufficient for allowing for shifts. Mr. Harkishan Lal again submitted that in factories where the manufacturing process was continuous there could be either an 84 hours week or a 56 hours week. The President remarked that no legislative body would accept an 84 hours week for any labour. Voting was consequently taken in the alternative on the following two proposals:—

- (1) That even in the case of operatives where the process on which they were employed was continuous the outside limit should be only 60 hours a week and no attempt should be made to alter it ; or

- (2) That the local Government should have power to modify or increase the number of hours in case of factories where the process of manufacturing was a continuous one without saying what the number of hours should be. Four members voted in favour of (1). The following six members voted for No. (2): Rai Bahadur Ganga Ram, Mr. Scott, Mr. Smellie, Mr. Harkishan Lal, Mr. Sobha Singh and Mistri Asmatullah.

Speaking on the subject of the compulsory weekly holiday Rai Bahadur Ganga Ram argued that the Act should be so altered as to allow to a factory owner an option of giving in any month four holidays at a stretch as this was suitable both for labour and for the proprietor. He pointed out that the provision of four successive holidays would enable the operatives to wash their clothes, etc., while the factory owner could have the factory and the engines cleaned. The Rai Bahadur added that his experience was that the weekly holiday was practically lost as labourers sought work elsewhere. Lala Lajpat Rai stated that there was no guarantee that labourers would not do the same thing if they were allowed four days at a stretch. Mr. French suggested that a two days' continuous holiday in a fortnight might be adopted. The Rai Bahadur accepted the suggestion. The Committee adopted the following conclusion:—"The weekly holiday rule should be so far modified that the requirements of the Act may be met by giving at least two holidays in a fortnight, continuously if desired." Rai Bahadur Ganga Ram's proposal that two hours per diem might be fixed by statute as dinner time was not adopted.

Another point was mooted by Rai Bahadur Ganga Ram, viz., that different working hours should be fixed for hot weather and cold weather factories. His definite proposal was that in ginning factories working hours should be 66 per week. Mr. Harkishan Lal remarked that it was a mistake on the part of ginners to run their factories only in the cold weather. In his opinion such factories should run for at least nine months, thus reducing speculation meeting railway convenience and easing the money market. The proposal that the local Government should have power in the case of factories which work only in the cold weather to extend their hours of working to 66 hours per week, was put to the vote and lost.

Mr. Sobha Singh proposed that the words "reeling, winding and warping" be added to sub-clause (b), clause 2 of section 21 of the

Indian Factories Act. Mr. Harkishan Lal supported the suggestion and observed that the half-hour interval was not necessary in the case of these processes. Mr. Lilley also considered this to be a great convenience. The proposal was put to the vote and was lost as only three members voted for it.

AGENDUM IV.

Lala Lajpat Rai proposed that the daily working hours for an adult male should not exceed 11 hours. Mr. King advocated a limitation of 10 hours per diem. Mr. Smellie proposed a 12 hours' day. Rai Bahadur Ganga Ram proposed that no limit should be laid down except in textile factories. Mr. Scott pointed out that there was no necessity for fixing a daily limit as each factory had to notify to the Factories Inspector its daily working hours. Two proposals: one to have a limit for daily hours and the other to have no limit were put to the vote. Four members voted for a limit and five for having no limit other than that involved in the 60 hour week rule. It was understood that it was not intended to interfere with any existing rule regarding daily hours in textile factories.

AGENDUM V.

The Committee was unanimously of opinion that if any limitation of the daily working hours of adult males was necessary it should be by rule and not by a statutory provision.

AGENDA VI AND VII.

The Committee proposed no change as regards women. As regards children also the Committee decided to recommend no alteration. The proposal that the working hours in any one day for a child should be reduced to six without discriminating whether the child worked in a textile factory or other factories was put to the vote and lost. Five voted for leaving the existing rules as they were; only three members voted in favour of the proposed reduction.

AGENDUM VIII.

The five points raised in paragraph 11 of the Government of India letter No. 1-812, dated the 11th May 1920, were taken up *seriatim* and discussed. It was generally recognised that there was no existing custom laying down any usage of absence for any fixed

period before childbirth. Mr. Asmatullah stated that he knew of a case in which a woman worked up to the day of the childbirth and resumed work on the 3rd day after delivery. The Committee came to the conclusion that the periods for which women workers absented themselves from factories were not sufficient and in their opinion the health of mothers and children suffered in consequence.

- (2) It was admitted generally by the members that women workers would have no difficulty in resuming their employment if they stayed away longer than they did at present at the time of childbirth.
- (3) The Committee recorded that women received no wages or allowance from their employers during the period of their absence from the factory. The Committee agreed that the question of the provision for women workers during the period of childbirth deserved careful enquiry.
- (4) The Committee noted that no obstacles were put in the way of women workers suckling their children whom they carried as a rule with them to their work. Mr. King pointed out that the existing arrangement enabling a woman to carry her infant into the factory and there suckling it in public could not be called an arrangement, much less a suitable arrangement. He suggested that factory owners should be made to provide crèches. Mr. Lilley explained that the Dhariwal factory has provided a crèche, but that some difficulty had been experienced as regards its working. In the first place women objected to leave their children and secondly there was some difficulty about the identification of children. He explained that two women were engaged to look after the children and they were paid Rs. 10 a month each. The average number of children kept in the crèche was about 25. The mothers worked three hours in the morning and three in the afternoon. Mr. Lilley explained that at first none of the women liked leaving their children in the crèche and that though now they do not object to this they still prefer to take their children in. The crèche is more in the interests of the factory rather than in the interests of the workers and the children. He also stated that the children were not fed by the paid nurses artificially or otherwise. The women workers in

Dhariwal it was explained were mostly piece workers. Mr. King objected to the taking of children into the factory on account of the dust and the noise and the generally nerve-racking atmosphere of the place. He spoke with particular reference to ginning factories. Mr. Smellie suggested that in certain factories where it was not suitable for women to work they should not be permitted to work at all and that it should be left to the local Government to make rules prohibiting the employment of women and children in certain factories. It was pointed out that if all factories were to be ordered to provide crèches women might lose employment. It was also recognised by the Committee that some kinds of factories were suited for children owing to the nature of the work done there by women and others were not. The Committee agreed to leave the question with the expressions of opinion noted above without coming to any conclusion.

- (5) As regards free medical attendance in factories Mr. Lilley stated that Dhariwal employed a Sub-Assistant Surgeon who rendered free medical service to mill-hands. The Sub-Assistant Surgeon was seldom, if ever, called in midwifery cases. Mr. Harkishan Lal said that in large factories medical aid was free but no midwife was provided. The general custom was that the people made their own arrangements. Mistri Asmatullah pointed out that in small factories there is no arrangement for a doctor. At some places there was not even a certifying doctor. The Committee recommended that the Government should have collected the particulars of medical arrangements in factories with a view to formulate proposals to provide suitable arrangements.

AGENDUM IX.

The six points enumerated in paragraph 18 of Government of India letter No. I-812 of 11th May 1920, were discussed—

- (1) It was recorded that the Committee was not in a position to give statistics regarding the employment of children in factories between the ages of 9 and 12.

- (2) Mistri Asmatullah urged that if boys below 12 years of age were debarred from working in factories there would be a serious dislocation of labour in the Province. Lala Lajpat Rai pointed out that at present children employed in the Punjab on factory labour were only 3 per cent. of the total factory labour and so the prohibition could not result in any dislocation of the industries of the Province. Mr. Harkishan Lal pointed out that in certain industries (particularly in the ring frame work) the employment of children was essential and he also pointed out that the small number of children employed in the Punjab was due to the fact that there were very few spinning factories. Both Mr. Harkishan Lal and Mr. Scott were of the opinion that the figures given in the Factories Report were not quite reliable. Mistri Asmatullah pointed out that as a matter of fact the figures did not represent the actual number of children employed, as boys were often made to run away when the Inspector came round to visit the factory. Mr. Smellie pointed out that railways did not employ people under 14 years of age in their workshops. Several other considerations bearing on this point such as that the raising of the age to 11 or 12 years would diminish the supply and that adult labour would also suffer as in several cases adults did not like to leave their children behind, were also discussed.

It was recognised that the addition of the child's wages to the funds of the family formed an extra inducement to the adult labourer. Mr. Sobha Singh mentioned that in Delhi factory owners had resolved to share one-third of the cost for educating children of labourers. The Committee after considering all these views recorded the decision that the age, 11 years, fixed by the Compulsory Education Act as the minimum age up to which a child had to remain at school was a good compromise age as a starting point for factory labour. The Committee thought that the principle of compulsory primary education should be extended to mill areas not depending on the option of the local Authority concerned, wherever there should be a certain stated minimum number of children employed in the factories. The question as to the minimum age before which the child could not be employed in factory labour was put to the vote. Six members voted in favour of the proposal that 11 years should be

fixed in areas where the Primary Education Act was in operation and 9 years elsewhere. Three members voted in favour of fixing the minimum at 11 years absolutely. No member voted in favour of fixing 9 years absolutely.

- (2) The Committee recorded that there might be a serious dislocation in some factories if the age-limit be raised to either 11 or 12 years.
- (3) The Committee agreed to the raising of the age-limit only if educational facilities were provided.
- (4) The answer is 11 years.
- (5) The Committee did not feel qualified to answer this question.
- (6) The Committee agreed to make a suggestion that this was a matter in which an enquiry might be made possibly by the Board of Economic Survey.

AGENDA.

I. Factory, under Act XII of 1911, means any premises where power is used for certain processes. But the provisions of the Act do not apply to factories in which not more than *forty-nine* persons are simultaneously employed: provided that they may be extended by special order to factories where not less than *twenty* are simultaneously employed. Should the provisions of the Act be extended to all industries using power and employing ten persons or more? Or if this would be unworkable, should the definition be changed so as to bring within the scope of the factory laws, so far as possible, *all organised industries*: and if so what form should it take?

II. The provisions of the Factories Act do not apply to any mine subject to the operation of the Indian Mines Act, 1901. Roughly speaking that Act gives powers to provide for ventilation of mines and for dealing with defects which threaten human life or safety: and to prohibit the employment of women and children where there is urgent and immediate danger to their life or safety. It does not give power to regulate hours of work, to prescribe holidays and intervals of rest, to certify the ages of children and prevent their employment under specified ages, to regulate the employment of women and children or to provide for hygienic conditions.

NOTE.—The definition of mine is: "Mine" includes every shaft in the course of being sunk, and every level and inclined plane in the course of being driven for commencing or opening any mine or for searching for or proving minerals, and all the

shafts, levels, planes, works, machinery, tramways, and sidings, both below ground and above ground, in and adjacent to and belonging to the mine; but it does not include any pit, quarry, or other excavation the depth of no part of which measured from the level of the adjacent ground exceeds twenty feet and no part of which extends beneath the superjacent ground.

Do the hours of labour in any mine exceed 54 per week? Should there be any statutory limitation in the hours of work for labourers in mines? and is it desirable to prohibit the employment of women workers during the night in all or in any class of mines?

III. There is at present no limitation of the number of hours for which a male adult can be employed, daily or weekly, except in textile factories. The rules for textile factories (section 28 of Act) is not more than 12 hours in any one day and not before 5-30 A.M. or after 7 P.M. (with certain exceptions for which see section 30 and section 31).

Government have now decided to adopt a 60 hour week as the maximum for the employment of individuals in factories generally. Article 10 of the draft convention on hours of work states that any modification of this 60 hour limitation is to be subject to Article 6 of this convention. Article 6 provides that regulations shall determine—

- (a) the permanent exceptions that may be made in preparatory or complementary work which must necessarily be carried on outside the limits laid down for the general working of the establishment or for certain classes of workers whose work is essentially intermittent.
- (b) the temporary exceptions that may be allowed, so that establishments may deal with exceptional cases of pressure of work.

Sections 21, 22 and 30 of the Factories Act deal with permanent and temporary exceptions. What modifications and exceptions in the 60 hour rule would be necessary in the various industries of the Punjab?

Should exceptions and modifications be included in the statute or dealt with by rules made under it?

IV. Should there in all or in any particular industries be any further limitation of the working day for male adults to 10, 10½, or 11 hours?

V. If such further limitation is desirable, should it be affected by statutory provision or by rule to be made under the Act by either the Central or the Provincial Government?

VI. At present (section 24) no woman may be employed before 5-30 A.M. in the morning or after 7 P.M. or for more than eleven hours in any one day. No child (section 23) may be employed before 5-30 A.M. or after 7 P.M. or for more than seven hours in any one day [or for more than six hours, if it is a textile factory (section 32)]. Should there be any further limitation to these working hours?

VII. Should there be any discrimination in respect to working hours of children in textile and other factories.

VIII. The five points mentioned in paragraph 11 of Government of India No. I-812, dated the 11th May 1920.

IX. The six points mentioned in paragraph 18 of the same and the question: what should be the minimum age of employment for children in mines and quarries?

Reply to letter No. L-812, dated 17th May 1920.

No. 5165-S. (C. and I.), dated Simla, the 3rd September 1920.

FROM—The HON'BLE MR. L. FRENCH, C.I.E., C.B.E., I.C.S., Officiating
Financial Secretary to Government, Punjab,

TO—The Secretary, Board of Industries and Munitions.

In continuation of my letter No. 4788-S. (C. & I.), dated the 27th August 1920, I am desired to refer to your letter No. L-812, dated the 17th May 1920, dealing with the Draft Conventions and Recommendations concerning unemployment and the recommendation concerning reciprocity of treatment of foreign workers, which were adopted by the International Labour Conference at Washington, 1919.

After considering the replies received from those consulted and the opinions (copy enclosed) of the Provincial Committee of which mention was made in my previous letter, the Lieutenant-Governor instructs me to reply as follows on the points on which his views are sought.

2. He agrees with the Provincial Committee that, in the Punjab, unemployment in the sense used by the Conference does not exist. Of the total population of the province, about one-tenth lives in towns, while according to the last Annual Report on the

working of factories under the Factories Act, 1911, little more than 40,000 men, women and children are engaged in industrial labour. During the last two decades the Province has at times suffered severely from plague, malaria and influenza epidemics which have left their mark on the population but with the marked development during this period of agriculture there has always been and still is an unsatisfied demand in all quarters for all kinds of labour. Further, enterprising and vigorous elements of the population are fond of emigrating to foreign countries where they are well able to hold their own and add materially to their resources.

His Honour recognises indeed that there is a considerable proportion of the agricultural community whose time is not fully employed in the intervals between those agricultural operations which absorb all their energies, and that advantage might well be taken by sections of this community of the periods of leisure referred to for the purposes of supplementing their means of livelihood. But as suggested by the Provincial Committee, this is a matter which may be left to the newly created Director of Industries or Board of Economic Enquiries who will be requested to undertake investigations on the subject. Statistics of temporary unemployment, even if it existed, could not at present be collected owing to the absence of the necessary machinery.

3. The Lieutenant-Governor agrees entirely with the view expressed in paragraph 3 of your letter under reply.

4. As to your paragraph 4, I am to explain that as far as labour is concerned there are in the Punjab no employment agencies of any importance or standing. It is, however, desirable in any circumstances that the local Government should have some power of control over any such agencies as may spring up in the future, and this might be secured by legal provisions empowering these Governments to compel registration or licensing if necessary.

Recruitment for lascars, etc., from the northern part of the Province is on an appreciable scale, but as far as His Honour is aware, there are no organised agencies undertaking this kind of recruitment: and in any case, the advantages and disadvantages of service with shipping companies are well understood by the class of Punjabis who are venturesome enough to go to sea.

5. His Honour associates himself with the views expressed in your paragraphs 5—8.

Extract from the Proceedings of a Committee convened at Simla in the Financial Commissioner's office on the 16th and 17th July 1920, to consider the recommendations adopted by the International Labour Conference at Washington.

* * * * *

AGENDUM X.

It was admitted that unemployment did not exist in the Punjab. Lala Lajpat Rai proposed that statistics should be collected regarding different professions including the agricultural and the clerical classes and that an enquiry should be made into the question of unemployment generally. After discussing this proposal the Committee came to the conclusion that it was desirable that an enquiry should be made to ascertain whether it was necessary to supplement agricultural work by cottage industry or otherwise, and that this could best be done by the Director of Industries or by the Board of Economic Enquiry. In the absence of organised labour, the Committee felt that the question whether India should accept the obligation to communicate certain information to the International Labour Office could not be answered; it was not feasible at present to furnish statistics.

AGENDUM XI.

The Committee recorded that it was desirable that all employment agencies (including agencies recruiting for emigration and for tea industries) should be registered or licensed.

AGENDUM XII.

The Committee understood the proposal contained in this Agendum to refer obviously not to cases of ordinary individual emigration. On this assumption the Committee saw no objection to the proposal.

AGENDUM XIII.

The Committee was of the opinion that the time was not ripe for a scheme of this kind in India.

AGENDUM XIV.

It was agreed that the recommendation in question was not applicable to the condition of the Punjab.

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UNITED PROVINCES.**Reply to letters Nos. I-812, dated 11th May 1920, and L-812, dated 17th May 1920.**

No. 1883-XVIII, dated Naini Tal, the 4th September 1920.

FROM—The HON'BLE MR. J. C. NELSON, I.C.S., Secretary to Government,
United Provinces,

To—The Secretary, Board of Industries and Munitions.

I am directed to reply to Mr. Rudman's letter No. I-812, dated the 11th May 1920, in which the opinion of this Government was invited on certain questions connected with the Draft Conventions of the International Labour Conference which met at Washington in October and November last.

2. In paragraphs 7 and 8 of Mr. Rudman's letter the question is raised whether the principle of a 60-hour week for factories as defined in the Indian Factories Act and for mines should not be embodied in the law, subject to exceptions—

- (1) in the case of definite classes of work, and
- (2) in the case of overtime under conditions to be specified by law or rule.

In this province the principle of a 60-hour week for factories has already been adopted by most of the mills in Cawnpore, and both the Upper India and the United Provinces Chambers of Commerce who were consulted by the local Government are in favour of a statutory limitation of the working week to 60 hours. Official and non-official gentlemen whose opinion was invited are also in favour of such statutory limitation, the only dissentient being Pandit Hirday Nath Kunzru of the Servants of India Society who would further limit the weekly and daily hours of work to 54 and 9 respectively. His Honour is in agreement with the majority.

3. As regards the proposal to limit the working day to 10, 10½ or 11 hours, the representatives of industry and commerce are entirely against it. The Inspector of Factories and Boilers, however, thinks that if a ten-hour day has been decided on physiological considerations no overtime should be allowed, and the Hon'ble Mr. Fremantle suggests that the working day should now be limited to 11 hours. But even a gentleman of advanced political views like the Hon'ble Mr. Chintamani considers a further statutory limitation

of the working day to be unnecessary. His Honour agrees with this view which is also shared by the two Chambers of Commerce. For as pointed out by the Upper India Chamber, the reduction from the present 12 to 10 hours means a concession of 600 hours or over two months in the working year and any further restriction would only tend to affect production adversely, as it would not result in any immediate improvement in the worker's output. Habit and climatic conditions alike stand in the way of the Indian workman adopting at present more intensive methods. Nor is it true that the Indian workman receives no holidays. For the observance of his minor religious festivals these already amount to 10 full and 9 half holidays in the Cawnpore mills.

4. Differentiation in favour of women as regards the hours of work is not generally favoured. Both the Upper India and the United Provinces Chambers of Commerce are strongly opposed to any such differentiation. They agree with the view expressed by the Government of India that it may introduce complications in the working of shift systems in industries in which both men and women are employed and may not be welcomed by women workers. His Honour sees no reason to differ from this view. The Director of Industries and the Hon'ble Mr. C. Y. Chintamani however favour the limitation of working hours for women to 10 per day: the latter also recommends that women should get the same wages as men. Mr. Kunzru would further reduce their working hours to eight.

5. The question of further reducing the hours of work for children has elicited different views. The Upper India Chamber of Commerce are of opinion that there should be no change in the present law by which the working hours of children under 14 are limited to six in the case of textile factories and seven in others. They consider that with a ten-hour day for adults, boys who are classed as half-timers, will not be required to work for more than five hours, and that any rigid limitation of the working hour for them to five may be extremely inconvenient to the mills. The United Provinces Chamber of Commerce are in favour of removing the present discrimination in respect of textile factories, but they would not reduce the lower limit of six hours which the law at present prescribes for children. This is also the opinion of the Director of Industries and the Inspector of Boilers. His Honour is inclined to agree that a uniform six-hour day should be prescribed for children irrespective of the class of factory in which they work.

6. The cognate question of raising the age-limit for the employment of children has been discussed from different points of view. Educational and non-official opinion favours the raising of the age to 12, but Sir Harcourt Butler thinks it better to go slowly in the matter and to raise the age to 11. This will affect only 6 per cent. of the total factory population at present but will mark a definite advance. Local bodies will be asked to meet the educational requirements of the situation with assistance, where necessary, from Government.

7. In paragraphs 10 and 11 of Mr. Rudman's letter reference is made as to the practice in regard to the employment of women before and after childbirth. The Upper India Chamber of Commerce state that ordinarily it is the practice for women of the working classes, whenever possible, to abstain from work for a month before and a month after childbirth. The United Provinces Chamber consider that the period of abstention from work varies from 3 to 4 weeks after childbirth, but as regards the prepuerperal period they give no definite information. In His Honour's opinion these views do not represent the common practice. There is no custom which compels a woman worker to abstain from working for any period before childbirth and as pointed out by the Inspector-General of Civil Hospitals women sometimes continue to work until immediately before delivery, and after childbirth they are absent from work only for a short time. A Hindu mother of the higher castes is considered unclean for a period of 40 days after the birth of her child, but the custom is not very strictly followed among the lower classes from which factory workers are mainly drawn, and in their case the period of abstention seldom exceeds a fortnight.

Women employed in factories find no difficulty in retaining their employment, particularly as the absence is short. They are, however, allowed no wages for the period that they are away, and both the Chambers of Commerce report that it is not customary to provide women employées with medical assistance during confinement. During this period their maintenance is a charge on the income of the husband and other male earning members of the family.

Non-official opinion is in favour of making statutory provision to prohibit the employment of women for definite periods both before and after childbirth, and of their receiving a maternity allowance during this period of enforced absence from work. The adverse

effect of the present practice on child-mortality and the health of women alike is obvious, and Medical experts would welcome some action. His Honour is of opinion that the recommendation of the Conference that a woman should not be permitted to work for six weeks following her confinement should be worked up to and during that period some maternity allowance or medical aid or both should be provided, but social prejudice would seem to be an obstacle in the way of a more extended use of qualified midwives, even if these were supplied by employers. Among the lower classes in particular the feeling against novel medical methods is as strong as their faith in the indigenous *dais* is unfaltering and implicit. Women have no difficulty in nursing their infants during working hours.

8. Paragraph 13 of Mr. Rudman's letter deals with the desirability of prohibiting the employment of women workers during the night. The protection suggested in Articles 2 and 7 of the Draft Conventions is secured by section 24 read with section 21 of the Indian Factories Act. The Inspector of Boilers and Factories, however, has pointed out that, so far as textile factories employing shifts are concerned, the present Factories Act does not prevent the employment of women at night, and suggests altering the Act so as to make the employment of women in any class of factories at night illegal. Mr. Fremantle considers that section 27 of the present Act is not covered by Article 4 (b) of the Convention and is of opinion that in ginning mills women should not be allowed to work between 11 P.M. and 5 A.M. The United Provinces Chamber, however, think that some relaxation should be allowed in the case of factories whose operations are of a seasonal character. With this exception, however, practically all those that were consulted are against the employment of women at night.

9. Paragraphs 14 and 15 of Mr. Rudman's letter deal with the recommendations made by the Labour Conference concerning the prevention of anthrax and the protection of women and children against lead poisoning. The principles underlying these recommendations are wholly unexceptionable; but as pointed out by the Government of India, those concerning anthrax cannot be given effect to until the experiments now being made in the United Kingdom on the disinfection of imported wool have yielded some results: while as regards the protection of women and children against lead poisoning neither the local Government nor those consulted by it are in a position to give any useful opinion in the absence of actual ex-

perience, there being no such dangerous industry at present in this province. Any protective measures that the Government of India may decide on will, however, be welcomed by every class of opinion.

10. In His Honour's opinion it would be premature at this stage to establish Government Health Services. As indicated in the Government of India's letter under reference, industries, where lead, arsenic or any other poisonous substance is used or in which grinding, glazing or polishing on a wheel is carried on by which dust, or any gas vapour or other impurity, is generated or inhaled, are few in India and practically non-existent in this province. The protection of workmen, however, in other unhealthy trades where these exist can easily be ensured by augmentation of the existing medical services, and with this view the Chambers are in agreement.

The same, however, is not true of factory inspection. The present staff is small and not specially qualified for sanitary inspection. Under the old Act the Civil Surgeon of a district had the power to make inspections: the present law does not give him such powers. As to the desirability of empowering medical officers, whether of the Civil or Sanitary department, there can be no dispute. They alone are qualified alike for the duties of inspection and to make suggestions, and in His Honour's opinion provision for this should be made in the new Act. It is proposed in this province to improve both the municipal and rural health services and these should be fully competent to cope with the work that the proposed legislation might throw on the medical or sanitary staff.

11. Paragraph 23 of Mr. Rudman's letter deals with the general question of altering the definition of a factory in order to make it applicable to industries smaller than those that come within the purview of the present Act. With the proposed alteration the Upper India Chamber of Commerce and most of the gentlemen, official and non-official, consulted by this Government are in cordial agreement. The United Provinces Chamber, however, is opposed to such extension. Although under the present Act local Governments have powers to extend its operation to factories employing 20 persons no such use has ever been made in this province, and the general consensus of opinion is that statutory provision should be made to extend the definition to factories employing ten or more workers as it is in the smallest industries that abuses are most likely. The only difficulty would appear to be presented by cottage industries

where the workers are either members of the same family or relations of the owner, but such exceptional cases can be dealt with by powers specially taken for the purpose under the Act. His Honour is aware that the proposed alteration would involve a considerable addition to the strength of the present inspecting staff but is quite prepared to face this. Definite proposals in the matter, however, cannot be made until the necessary statistical data become available on publication of the Census Commissioner's report.

Another point which deserves to be considered in this connection is the definition of the word "power" as applied to factories. Under the present Act the word "factory" cannot be applied to mills employing machinery driven by men. An instance in point is a large oil mill near Allahabad where the presses are driven by hand. This is exempt from the provisions of the Factories Act because it is not a factory within the meaning of section 2 (3) of the Act. But it is evident that it is labour employed in concerns of this class that stands most in need of protection. His Honour would therefore make the definition of "power" sufficiently comprehensive to include such cases.

12. *Paragraph 9 (3).*—On the subject of the employment of labour in mines only the United Provinces Chamber of Commerce and two non-officials have given an opinion. The first two are in favour of a limitation of the working hours to 54 a week. Mr. Kunzru favours a 48-hour week on the analogy of England. All are unanimous against allowing women and children to be employed in them.

13. *Paragraph 9 (6)* deals with article 10 of the Draft Convention which recommends that any modification of the 60-hour limitation made by competent authority shall be subject to the provision of Article 6 of the Convention. The Upper India Chamber of Commerce consider it essentially desirable to retain all the provisions made in the present Factory Act in the matter of exceptions and modifications and suggest that full power should be retained to local Governments in this behalf. Mr. Fremantle alone, however, is explicit as to the necessity of retaining these in the Act. Others are silent on the question whether these provisions should form part of the Act or be incorporated in rules framed under it. His Honour would not disturb the present elastic provisions of the law in this respect.

14. In conclusion, I am directed to refer to Mr. Rudman's letter No. L-812, dated the 17th May 1920, in which the opinion of this

Government was invited as regards certain recommendations made by the Washington Conference concerning unemployment. Nobody or individual consulted has expressed the belief that any such organization is required at present. If anything, there is a shortage of labour in India and no one who is prepared to work has any difficulty in finding employment. In the circumstances it appears premature to give effect to the recommendations of the Conference.

**DESPATCHES FROM THE GOVERNMENT OF INDIA TO THE
SECRETARY OF STATE.**

(1) Draft Conventions and Recommendations.

Despatch to His Majesty's Secretary of State for India, No. 16-Industries, dated Delhi, the 25th November 1920.

We have the honour to address you regarding the Draft Conventions and Recommendations adopted at the meeting of the International Labour Conference held at Washington in 1919 and the action we propose to take upon them.

2. We propose to lay those conventions that may necessitate legislative action, before the Indian Legislature in February next, in the form of resolutions in the first instance, for the decision of the Legislature as to ratification, and in this despatch we discuss the merits of each convention, showing the advice which we propose to give the Legislature. The conventions have been framed, on the whole, in a reasonable spirit, and, apart from our natural desire to avoid alienating opinion abroad, we believe that, with the exceptions noted below, their ratification will be beneficial to the interests of Indian industry and labour. We have endeavoured to give the widest publicity to the whole question, and our conclusion has been reached after consideration of all sections of public, as well as official, opinion in India. We enclose for your information copies of our correspondence with local Governments.

3. One convention is not intended for immediate application to India, *viz.*, that relating to the employment of women before and after childbirth. This was supplemented by the following resolution passed by the Washington Conference:—

“That the Indian Government be requested to make a study of the question of the employment of women before and after confinement, and of maternity benefits, before the next Conference, and to report on these matters to the next Conference.”

We are making the necessary inquiries and hope to be in a position to transmit the required information to you before the assembly of the Geneva Conference.

4. The convention relating to the night-work of young persons employed in industry involves no legislative action. In the application of this convention to India, the term "industrial undertaking" includes only such factories as come under the operation of the Indian Factories Act, and the convention applies only to males of less than 14 years of age and females of less than 18 years. By sections 23 and 24 of the Indian Factories Act, both classes are prevented from working by night. We, therefore, propose to ratify the convention without reference to the legislature. It should be noted that in this connection the Washington Conference recommended an extension of the meaning of the term "factory" as defined in our Act. We have considered proposals for the general revision of the Act, and are addressing you separately on the subject. The question of the definition of a "factory" to be adopted is of importance, in connection not merely with this convention, but also in view of its direct bearing upon the question of the ratification of the draft convention fixing the minimum age for admission of children to industrial employment. Under the latter convention, the minimum age is to be fixed at 12 years for children employed in certain industrial undertakings, including manufactories working with power and employing more than 10 persons. Under the present Factories Act, the minimum age for children is 9, and the Act extends, in the first place, only to factories using power and employing more than 49 persons; local Governments can lower the minimum to 20 for particular areas or industries. It would, therefore, be preferable if we could so amend the definition of a factory as to cover this convention. But we do not think that it will be possible to extend the operation of the Factories Act at once to all factories using power and employing more than 10 persons. While it is true that abuses are more likely in small factories than in large ones, the problem of adequate inspection is already serious, and we are not prepared to impose on local Governments with immediate effect the heavy increase in the staff that an extension to factories as defined in the convention would involve. We consider that such a large and sudden increase in the work of the inspecting staff would result in an actual diminution of the protection that our legislation gives to factory workers. Moreover, no information is at present available regarding the number and nature of the establishments that will be brought under the Factories Act if the definition included all factories employing 10 persons or more, irrespective of the use

of power. We have however arranged for the securing of the necessary statistics during the course of the forthcoming census and they will be available as soon as the figures can be tabulated. Our present intention is to extend the operation of the Factories Act to all factories employing not less than 20 persons in which power is used, and to provide that local Governments may include any factory employing not less than 10 persons, whether it works with power or not. This will make it possible for local Governments to bring within the operation of the Act any factory employing not less than 10 persons, in which any appreciable number of children is employed, and we should thus be able to secure all that is involved in the application of the convention.

5. The convention relating to the employment of women by night can be ratified without immediate legislative action. By Article 5 of this convention, the Government of India may suspend its operation in respect to any industrial undertaking except factories as defined by the Factories Act. This Act already prohibits the night work of women. Of industrial undertakings outside the Factories Act, the most important are mines, regarding which enquiries are now being made with a view of revising the Indian Mines Act of 1901. We also propose to make enquiries as to the possibility of applying the convention to other undertakings, such as docks and railways. The use of Article 5 will enable us to suspend the operation of the convention in respect of each such class of undertakings till the necessary legislation has been passed. We are therefore in a position to ratify the convention at once, and we propose to do so.

6. The draft convention limiting the hours of work in industrial undertakings applies to India, but in a modified form. The convention is to extend only to industries at present covered by the Factories Act, to mines and to such branches of railway work as shall be specified by the competent authority. In such undertakings the principle of a sixty-hour week has to be adopted. The proposal to legislate for a sixty-hour week in factories has met with opposition of importance. Those employers (and they are probably a minority) who dislike this limitation have regarded it as inevitable and the workers, in so far as they are articulate, are not opposed to it. In a large number of factories, the hours of work do not exceed 60 at present, and in the others no serious diminution of output is expected. In the proposals we have prepared for the revision of the

Factories Act, we are observing closely the terms of Articles 6 and 10 of this convention and we anticipate no difficulty in furnishing the returns required by Article 7.

7. As regards mines, our inquiries lead us to believe that the hours of work seldom, if ever, reach 60 per week. The Committee of the Washington Conference which dealt with the application of this convention to special countries suggested that it should be possible in India to limit the hours of underground work in mines to 54 or even lower. We have borne this recommendation in mind in our inquiries with regard to the regulation of labour in mines referred to in paragraph 5 above. We shall communicate our views on the subject when we are in a position to address you with regard to the amendment of the Mines Act. Meanwhile, provided that the daily hours are not limited, the adoption of the draft convention as it stands will scarcely affect mines at all. In respect of railways, we anticipate greater difficulties, but it should be possible to include important branches of railway work from the start and to extend the operation of the convention rapidly. We are at present making further inquiries in this direction. It may be necessary to supplement the Railway Act in this connection.

8. The draft convention fixing the minimum age for admission of children to industrial employment has also been modified to suit the special conditions of India (see Article 6). The minimum age is to be fixed at 12 years for children employed—

- (a) in manufactories working with power and employing more than 10 persons ;
- (b) in mines, quarries and other works for the extraction of minerals from the earth ;
- (c) in the transport of passengers or goods, or mails, by rail or in the handling of goods at docks, quays, and wharves, but excluding transport by hand.

In our proposals for the revision of the Factories Act we intend to recommend to the Legislature the raising of the minimum age for children from 9 to 12 years, but to make transitory provisions to permit of children at present working to continue in their employment. We further propose to take advantage of Article 11 of the Draft Convention and intend to provide in the Bill that no children under 11 be admitted to a factory from the commencement of the revising Act and that no children under 12 be admitted on or after

the first of July 1922. Judging by the opinions collected by the local Governments, whilst there is a general willingness to accept a minimum age of 11, there will be strong opposition to the adoption of 12; and in any case, our ratification of the convention in this respect will be subject to the modification that we have discussed in paragraph 3. As regards the industrial undertakings included in sub-head (b) of this convention, we anticipate less difficulty. On the other hand we have at present no law regulating labour coming under sub-head (c) and there may be some difficulty in framing suitable regulations. We hope, however, to be able to overcome the difficulties and we propose to ratify the convention without further modification. It will then be necessary to amend the Mines Act, and further to consider special legislation to deal with transport workers.

9. The provisions included in the Draft Convention concerning unemployment require the regular furnishing of all available information regarding unemployment and the creation of free public employment agencies with representatives of employers and of workers to advise regarding their operation. In the present unorganised state of Indian labour, it would be impossible to furnish returns of the kind expected in Western countries, where labour is fully organised; though information of a general nature could doubtless be given regarding wages and demand for labour, and regarding famine measures. The creation of free public employment agencies in India has hitherto been thought unnecessary, since the demand for industrial labour has for long exceeded the supply, and the unemployment of agricultural labour is unknown in ordinary seasons, although in a few congested areas wages remain relatively low owing to the outside demand for industrial labour failing to reach these areas effectively. Here we think that the institution of unemployment agencies might facilitate migration to areas where the demand for industrial labour is never fully met. But, when serious injury is caused to agriculture by seasonal calamities, we find it necessary to go much further than merely giving applicants information of existing openings for employment; we provide actual employment or other suitable relief for those who need it and provide an agency for searching them out. Our famine organisation, as is well known, is devised to deal with unemployment on a most extensive scale. Although this organisation is only called into active operation when the need arises, and works for the most part through the agency of

Government officials who are entrusted also with other duties, yet every province of India has an elaborate Famine Code which has been progressively improved in the light of past experience: the officers who have to work under it, should need arise, are familiar with its provisions, and the experience of many years past has shown that this organisation is capable of dealing economically with unemployment on a scale for which few Western countries could show a parallel. It is true that unemployment in the strict sense in India under any conditions that can be foreseen must arise only from one cause, that of serious and widespread injury to agriculture; and when this occurs ordinary unemployment agencies would not meet the emergency. But our famine organisation deals not only with the agriculturist and the agricultural labourer, but with the village artisan whose livelihood depends on the custom of the agriculturists. We not only provide employment for labourers thrown out of work, but for the small cultivator who has been deprived of the crops of the season; and so far as possible we place him in a position, by an extensive system of loans on specially easy terms and, if necessary, by other measures, to cultivate his fields when the famine season closes. The organisation is thus in effect a famine prevention system designed to prevent shortage in the year following actual failure of the crops. In view of the fact that our industrial labour is almost entirely recruited from rural tracts, the only circumstance that is likely to overstock the industrial labour market at any time is the agricultural unemployment due to famine, and our machinery for the relief of famine thus largely helps to maintain the relatively favourable position in which industrial labour stands at present, and so far is in accordance with the policy indicated in the convention. As we have indicated above, however, it is desirable to encourage the migration of agricultural labour from certain congested areas; and we have under consideration the desirability of creating regular public employment agencies in such cases. We have, moreover, no objection to associating these agencies, when created, with advisory bodies representative of employers and workers; and we are undertaking an examination of the possibility of collecting further information regarding unemployment. In the belief that the measures which, as explained above, we are either taking or propose to take, will constitute an effective compliance with the provisions of the convention, we propose to recommend it to the Legislature for permission to ratify it.

3

BULLETINS OF INDIAN INDUSTRIES & LABOUR

No. 17

CORRESPONDENCE

RELATING TO

**THE ACTION TO BE TAKEN IN INDIA
ON THE PROPOSALS**

OF THE

GENOA LABOUR CONFERENCE

REGARDING

EMPLOYMENT AT SEA



Published by order of the Government of India

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1921

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BULLETINS
OF
INDIAN INDUSTRIES AND LABOUR

No. 17]

1921

[September

GENOA CONFERENCE CORRESPONDENCE

INTRODUCTION

BULLETIN No. 17 of this series gives an account of the Genoa Labour Conference and includes the text of the Draft Conventions and Recommendations adopted by it concerning employment of labour at sea. The present Bulletin indicates the action taken in India on the proposals made at Genoa up to the opening of the autumn session of the reformed Legislature at Simla in September 1921. Except that the formal headings and the concluding phrases have been omitted, the correspondence has been printed *verbatim*.

No. 16, dated Delhi, the 4th January 1921.

FROM—O. A. Innes, Esq., C.I.E., I.C.S., Secretary to the Government of India, Department of Commerce,

TO—The Secretary to the Government of Madras, Revenue (Special) Department.

„ Secretary to the Government of Bombay, Marine Department.

„ Deputy Secretary to the Government of Bengal, Marine Department.

„ Secretary to the Government of Burma, Commerce Department.

[With reference to the correspondence ending with my letter [] To all, except No. 1483, dated the 26th April 1920,] I am now directed to forward, for the information of the Government of

of the Government of

Madras
Bombay
Bengal
Burma

, copies of three Draft Conventions and four Recommendations concerning employment at sea adopted by the General Conference of the International Labour Organization at its second session held at Genoa from the 15th June to the 10th July last. The Draft Conventions and Recommendations will be found in Appendix II to this letter.

2. India was represented at this Conference by the following delegation :—

I. Government delegates :

Mr. L. J. Kershaw, C.S.I., C.I.E., Secretary, Revenue and Statistics Department, India Office, London; and

Captain D. F. Vines, O.B.E., R.I.M., late Presidency Port Officer and Shipping Master, Calcutta.

Advisers :

Commander Hodgkinson, R.N., and

Mr. J. E. P. Curry, Shipping Master, Bombay.

II. Employers' delegate :

Mr. A. Cameron of Messrs. Gray, Dawes and Company, London.

Advisers :

Mr. J. C. Melville, Senior Assistant, Irrawaddy F otilia Com-
pany of Burma ;]

Captain C. S. Penny, Marine Superintendent, British India
Steam Navigation Company, Bombay ; and

Mr. Taylor.

III. *Workers' delegate :*

Mr. A. M. Mazarello, President of the Asiatic Seamen's Union,
Bombay.

Advisers :

Bhikha Ahmed, Lascar ; and
Habiboolia Ellamdeen, Fireman.

I am to enclose, for information, a copy of the answers presented by the Government of India to the questionnaire circulated before the Conference by the International Labour Office (Appendix I).

3. Before dealing with the Draft Conventions and the Recommendations adopted by the Conference I am to make certain preliminary remarks. The most important question discussed by the Conference was that of the limitation of hours of work. This question was remitted for preliminary examination to a Commission of thirty members, and this Commission finally presented to the full Conference a Draft Convention, the main provisions of which were as follows:—The preamble declared that the 8-hour day or 48-hour week was the standard to be aimed at ; Article 1 limited generally the effective working hours to 8 in the day or 48 in the week ; Article 2 fixed for large vessels the working hours at 48 hours at sea and at 45 hours in port with compensating rest and payment for extra hours worked ; Article 4 stated that for smaller vessels hours should be fixed on similar principles in consultation with shipowners and seamen ; and Article 5 provided that a reduction in the working hours of Indian seamen should be made in consultation with organizations of shipowners and Indian seamen. This Draft Convention, the full text of which is given in Appendix III to this letter, failed to obtain the necessary majority by a fraction of a vote, but the proceedings of the Conference cannot fail to strengthen the seamen's claim to an 8-hour day or a 48-hour week, and already a Bill has been presented at Home by certain members

of the Labour party for the amendment of the Merchant Shipping Act. Clause 11 of this Bill reads as below :—

“ Except in case of grave emergency (proof whereof shall in any penal proceedings under this section rest upon the accused persons), no seaman or apprentice to the sea service shall be employed on or in connection with, any British ship for longer than 8 hours a day or for longer than 48 hours a week, and if the master of any British ship causes or allows any contravention of this section he shall be liable to a fine not exceeding ten pounds and to a further fine not exceeding one pound for every day on which such contravention occurs, and if the owner of the ship causes or is a party to the offence he shall be liable to a fine not exceeding fifty pounds and to a further fine not exceeding five pounds for every day on which such contravention occurs, but without prejudice to the liability of the master.”

It is thus an important question for consideration whether action should not now be taken in India to limit the hours of work of seamen. The principle was recognized at the Conference that Indian seamen must be accorded special treatment, and that the Government of India, in consultation with shipowners and seamen, should be left free to determine what reductions in the existing hours of work should be made. In their answers to the questionnaire the Government of India, following the precedent of the Washington Conference, expressed their willingness to adopt the principle of the 60-hour week. It would probably be necessary, however, to distinguish in any legislation which might be undertaken between the hours of work of deck-hands, engine-room crews, and saloon crews; respectively, and Mr. Kershaw, with the full concurrence of Mr. Cameron and Mr. Mazarello, offered to agree to a week of 48-hours for firemen, 60 hours for deck-hands, and 70 hours for stewards. A solution of the question might be found on these lines, but it is a matter for consideration whether a final decision can be arrived at until a settlement has been effected at Home. It is perhaps, doubtful whether clause 11 of the private Bill referred to above will be passed into law in its present form, but it seems certain that, whether by negotiation or otherwise, a revision in the near future of the hours of seamen's labour on ships registered in the United Kingdom is

inevitable. It is true that the Conference only just failed to adopt a Convention which would have given the Government of India discretion to decide in conjunction with shipowners and seamen what reduction should be made in the hours of work of Indian seamen. But the strength of feeling displayed at the Conference against Indian seamen and the action already taken by certain Seamen's Unions at Home, notably the Stewards' Union, to place definite limits on the proportion of Asiatic seamen which may be employed on ships registered in the United Kingdom, show that Asiatic seamen are regarded with apprehension by the seamen of European countries generally, and particularly by those of the United Kingdom. They come into direct competition with British seamen, and the fear evidently exists that by their willingness to work longer hours for smaller rates of pay they may deprive British seamen of their employment. On the other hand, it has been said that Indian seamen, by reason of their inferior physique and lower level of education, are less efficient on board ship than British seamen, and, if this statement is well founded, there is undoubtedly a danger that, if allowance is not made for this factor in such matters as hours of labour and rates of pay, lascars may find it increasingly difficult to find employment in an avocation for which they have shown marked aptitude. This result would be a great misfortune, not only for the lascars themselves, but also for India and the Empire. The question, therefore, is one of great complexity. The Government of India are satisfied that special consideration must be shown to lascars, and that it would be unfair to place them on the same level as British seamen in the matter of hours of work. At the same time, they doubt whether it is wise, in the interests of the lascars themselves, that there should be too great a disparity in this matter between the regulations applying to Indian seamen and those applying to British seamen. They are disposed to think, therefore, that it would be prudent to postpone any final decision as to the action which should be taken in the direction of reducing hours of labour in India until a settlement has been arrived at at Home. When the hours of seamen's labour have been revised in the United Kingdom, the revised hours, with such modifications as may be deemed suitable, may be applied also in India. In the meantime, however, there is no objection to the whole question being discussed with shipowners and seamen's unions in India. As no Draft Convention requires ratification the matter is not one

of any great urgency, and the reply to the rest of this letter need not be delayed in order that the question of reducing hours of labour may also be dealt with.

4. I am now to offer certain remarks on the Draft Conventions and Recommendations adopted by the Conference. It will be understood that the views of the Government of India at this stage are purely provisional and that, in formulating them, the Government of India have kept in mind the principle already referred to, namely, that in the interests of lascars themselves it is unwise to allow too marked a difference in standard between the conditions of service in India and those in other countries.

5. *Recommendation concerning the limitation of hours of work in the fishing industry.*—This recommendation suggests that each Member of the International Labour Organization should enact legislation limiting in the direction of an 8-hour day or a 48-hour week the hours of work of all workers employed in the fishing industry, with such provisions as may be necessary to meet the conditions peculiar to the fishing industry in each country. It is further suggested that in framing such legislation each Government should consult the organizations of employers and the organizations of workers concerned.

I am to explain that the Conference decided not to adopt any Convention regarding hours of work in the fishing industry. In the first place, the industry was not itself represented on the Conference. Secondly, it was felt that the subject was one of such complexity and difficulty that it could hardly be regulated by international convention. It was pointed out, for instance, that sea fishing falls broadly into two main categories, coast or in-shore fishing and deep-sea fishing carried on usually in trawlers or drifters. The conditions under which both classes of fishing are carried on vary greatly in different countries. The fishing boats and tackle are frequently owned or partly owned by a family or by partners, and the men that work them are frequently both employers and employés. In many countries, again, both in-shore and deep-sea fishing are co-operative ventures. The owners of the fishing boat or trawler engage a crew, and the catch is shared between the owners and the crew. Even in deep-sea trawlers and drifters the men are frequently paid partly by money and partly by a share of the catch. In view of these difficulties it was at first proposed that the Conference

should exclude labour on fishing vessels from the scope of its deliberations, but eventually it was decided that, while each nation must be left to decide what legislation was necessary in order to protect workers in the fishing industry, the Conference should endeavour to lay down principles, and this Recommendation was finally adopted. From the speech of one of the delegates of the French Government, at whose suggestion this action was taken, it appears probable that the Conference in framing this Recommendation had deep-sea fishing chiefly in mind.

6. As at present advised, the Government of India do not think it necessary to take any action on this Recommendation. Indeed, it would be premature to do so pending a decision on the general question of the hours of seamen's labour. They excluded all consideration of sea fishing from their answers to the questionnaire, and they think that they are correct in saying that practically no deep-sea fishing by means of steam trawlers or drifters is at present carried on in India or Burma. Sea fishing in this country, it is believed, is almost exclusively in-shore fishing, the fishing boats and tackle are usually of a primitive description, and the fishermen, though they may be financed by merchants, frequently own the boats and tackle and remunerate their employés, if any, by a share in the catch. In the circumstances, the Government of India doubt whether legislation on the lines of the Recommendation would be either useful or possible, but they will await advice on the subject. I am to add that much stress was laid at the Conference on the necessity of Governments consulting organizations of employers and of workers. The Government of India are not aware that any such organizations exist in connection with the sea-fishing industry of India. But, if this belief is not correct, I am to ask that this part of the Recommendation may be acted on.

7. *Recommendation concerning the imitation of hours of work in inland navigation.*—In dealing with this subject the Conference was at once confronted with the difficulty that inland navigation differs enormously in different countries and even in parts of the same country. In some countries the term connotes the navigation of barges on artificial canals of no great length. In others it connotes the navigation of big steamers on inland seas, like the Caspian or Lake Superior, or on great rivers often traversing several countries, like the Danube and the Amazon. In view of the inherent difficulties of the subject, therefore, the Conference decided that it was impossi-

ble to frame any Draft Convention of general application, and that each Member of the League should be left to deal with the matter, in the first instance, on such lines as might seem best suited to the conditions of the particular country concerned. Certain general principles, however, have been laid down for guidance. It has been suggested that the standard of an 8-hour day or a 48-hour week adopted by the Washington Conference for industrial employment generally should be applied as far as may be to inland navigation. Each Member has been left to decide for itself in consultation with organizations of employers and workers how inland navigation should be distinguished from maritime navigation, and, finally, the progress made in giving effect to the Recommendation has to be reported within two years to the International Labour Office.

8. The subject of inland navigation is not complicated in India by the existence of waterways common to this and other countries, and Article 2 of the Recommendation need not be considered. Nor, it is thought, should there be much difficulty in distinguishing in India inland from maritime navigations. "Inland water" is defined in the Inland Steam-vessels Act, 1917 (I of 1917), as including "any canal, river, lake, or other navigable water in British India," and "inland steam-vessel" means a steam-vessel which ordinarily plies on any inland water. For practical purposes, these definitions seem sufficient, but the Government of India would be glad of advice on the question.

9. In their answers to the questionnaire the Government of India declined to commit themselves on the subject of the conditions of service in inland navigation on the ground that the question was a novel one in India, that it raised issues of great importance and that they had not been given sufficient time to consider it. Provisionally, they are inclined to clear the ground by excluding from consideration for the present all forms of inland navigation other than navigation by inland steam-vessels as defined in the Inland Steam-vessels Act, 1917. Subject to any remarks which this letter may elicit, they are disposed to think that in the present state of development in India it would serve no useful purpose to endeavour to frame regulations limiting the hours of work on such classes of vessels as the barges which ply on the Irrawaddy and on creeks in Burma or on canals like the Buckingham Canal in Madras and the 'dug-outs' which are used for conveying produce along the canals and back-waters of the west coast. {If any

legislation is undertaken at all in the direction of limiting the hours of work in respect of inland navigation it should probably take the form of an amendment of the Inland Steam-vessels Act, 1917, and should apply only to these vessels. In regard to factory employment generally in India, the Government of India have decided to ratify the Draft Convention adopted by the Washington Conference, and, in accordance with Article 10 of that Draft Convention, to adopt the principle of a 60-hour week for all workers in industries at present covered by the Factories Act. The Government of India incline to the view that the same principle might be applied to the crews of inland steam-vessels, a daily limit of hours of work being probably out of the question. The Government of India do not possess full information with regard to the actual practice that prevails on inland steamers in different parts of the country regarding the hours of work, but they think that a maximum limit of 60 hours will not probably affect the existing system very prejudicially. The Government of India, however, have an open mind upon the subject and have no objection to a lower limit of hours being fixed. They attach more importance to getting the principle of limitation of hours of work being accepted, and they would be content as a beginning to fix the maximum number of working hours at 60 per week. If this proposal is accepted it would presumably be unnecessary to differentiate between deck crews, saloon crews, and engine-room crews, but if a lower limit is thought necessary for the last class the Government of India are prepared to receive suggestions. The Government of India also presume that the legislation, which it would be necessary to undertake and which might suitably be incorporated in the Inland Steam-vessels Act, 1917, should provide for payment at enhanced rates for work done in excess of the 60-hour limit. The alternative would be to provide a penalty for any master who, except in case of emergency, required any member of the crew of his vessel to work more than 60 hours in a week, and it would probably be difficult to enforce a provision of this kind. In dealing with the questions raised organizations of workpeople should be consulted, where they exist, as well as employers.

10. *Recommendation concerning the establishment of a National Seamen's Code.*—The Government of India do not think it necessary at present to consider the establishment of a Seamen's Code. In their opinion the codification of the Indian law regarding Mer-

chant Shipping must precede the compilation of any special code relating to the rights and obligations of seamen, and they have already this question under their consideration.

11. *Draft Convention fixing the minimum age for the admission of children to employment at sea.*—The minimum age is fixed at 14 years, an exception being made in respect of school ships and training ships and of vessels in which only members of the same family are employed. For the purpose of the Draft Convention 'vessel' includes all ships and boats of whatever description engaged in maritime navigation, except ships of war, and it is also prescribed that every shipmaster should be required to keep a register of all persons under the age of 16 years employed on board the vessel and of the dates of their birth.

12. It will be observed that the Draft Convention contains no article of special application to India similar to Article 6 of the corresponding Draft Convention passed by the Washington Conference with regard to industrial employment. The insertion of a special article was proposed, and the attention of the Conference was drawn, not only to the precedent of the Washington Conference, but also to the express provisions of Article 405 of the Treaty of Peace with Germany. The proposal, however, was negatived. The Conference decided that it was not advisable in this matter to consider the particular needs of particular countries, and that backward countries should be urged along the path of progress. However unexceptionable these sentiments may be, they are not in accordance with the terms of the Peace Treaty, and the Government of India hold themselves free to ratify the Draft Convention or not as may seem advisable. At the same time, they are not aware that the question is of much importance in India. From the reports of maritime local Governments on the questionnaire it is understood that children under 14 years of age are rarely employed on board ship in India, and that, in the comparatively few instances where children below this age are permitted to sign on, they are almost invariably the sons of serangs and seacunnies who are anxious to keep their sons under their eye. The delegates of the Government of India at the Conference state that the Reporter of the Commission, when presenting the report to the Conference, gave an assurance that the Draft Convention was not intended to interfere with the Indian custom of sending young

boys to sea on nominal wages in the charge of their relatives, and, this being so, the Government of India, as at present advised, are disposed to ratify the Draft Convention. It will be necessary, however, to modify Article 1. The Government of India do not think that it would be advisable to bring mere fishing boats within the scope of the legislation that would be necessary, and they are inclined to think that the application of the Draft Convention should be confined to ships engaged in the foreign trade and to ships of more than 300 tons burden engaged in the coasting trade. In this connection section 26 of the Indian Merchant Shipping Act, 1883, may be referred to. If this suggestion is accepted that Act will require amendment, and it will also be necessary to amend the Apprentices Act, 1850 (XIX of 1850).

1.3 *Recommendation concerning unemployment insurance for seamen.*—The remarks of the Government of India on the subject of unemployment of lascars and unemployment insurance in their answers to the questionnaire may be referred to. The Government of India adhere to their opinion that the question of unemployment among Indian seamen is not at present one of practical importance, and that it would be premature even to consider the question of establishing a system of insurance against unemployment. They have decided to take no immediate action on the recommendation of the Washington Conference in regard to unemployment insurance, and, as at present advised, they propose to adopt the same attitude in regard to this Recommendation.

14. *Draft Convention concerning unemployment indemnity in case of loss or foundering of the ship.*—This Draft Convention prescribes that in every case of loss or foundering of a vessel the owners or persons with whom the seaman has contracted for service on board the vessel shall pay to each seaman employed on the vessel an indemnity against unemployment resulting from such loss or foundering. The indemnity takes the form of payment of the seaman's wages until the seaman obtains fresh employment, but is limited to two months' wages. It should be noticed that 'vessel' is defined to include all ships and boats engaged in maritime navigation, excluding ships of war, and the term 'seaman' includes all persons employed on any vessel engaged in maritime navigation.

This Draft Convention was accepted unanimously by the Conference. It was considered unquestionably fair that this obliga-

tion should be laid upon the owners of the ship, and that the owners would have no difficulty in insuring against the risk.

15. The law on this subject in India is contained in section 51 of the Indian Merchant Shipping Act, 1859. This section provides that, in the event of a seaman's service being terminated by reason of the wreck or loss of the ship in which he is employed, the seaman's legal right to wages terminates from the date of such wreck or loss. The principle of the Draft Convention seems clearly sound as is evidenced by the fact that it was unanimously adopted, but it is possible that there may be difficulties in applying it to ships registered in India. It is believed, for instance, that in India seamen do not always earn their living solely on the sea, and that they prefer in certain months of the year to work in their villages, either on their own land or as agricultural labourers. If this belief is correct it would be difficult to work Article 2 of the Draft Convention with fairness to the shipowners, since during the two months for which the seaman would be entitled to wages after shipwreck he might make no attempt to find fresh employment on board ship. It would seem necessary, therefore, if this Draft Convention is ratified, also to ratify the Draft Convention for establishing facilities for finding employment for seamen. The Draft Convention which is dealt with below recommends the establishment of public employment offices, and it would tend to guard against the abuse of Article 2 of this Draft Convention if a seaman claiming the benefit of the Article were required to show that he had registered his name at a public employment office and had been unable to obtain employment. The Government of India would prefer to ratify the Draft Convention in respect of vessels of the classes referred to at the end of paragraph 12 above, but the question is one of some difficulty, and I am to ask that it may be carefully considered in consultation with shipowners and such Seamen's Unions as exist in India.

16. *Draft Convention for establishing facilities for finding employment for seamen.*—The main object of this Draft Convention is to abolish 'crimping' in any shape or form, and the terms of Article 2 have purposely been made very wide. It prohibits the business of finding employment for seamen, however carried on; it prescribes that no fees may be charged directly or indirectly for finding such employment; and it suggests that the infringement of this Article should be made a penal offence. Article 3, however, recognizes

that there are still places and parts of the world where the employment of private agencies must be regarded as rendering service to the community, and it sanctions the continuance, as a temporary measure, of such private agencies, provided that:

- (1) recruitment by such agencies is carried on under [Government inspection and supervision; and
- (2) all practicable measures are taken to abolish as soon as possible the practice of finding employment for seamen as a commercial enterprise for gain.

Article 4 recommends that public employment offices should be organized and maintained, and that such offices should be maintained, either by representative associations of shipowners and seamen jointly under the control of a central authority, or, in the absence of such joint action, by the State itself. It is also suggested that, presumably in cases where the State has to assume responsibility for organizing these employment offices, advisory committees consisting of an equal number of representatives of shipowners and seamen should be formed to advise on matters concerning the management of the offices. The Draft Convention also deals with the articles of agreement and the collection of statistics concerning unemployment among seamen and the work of the proposed employment agencies.

17. The engagement of seamen is at present carried on in India through shipping brokers who are licensed under section 18 of the Indian Merchant Shipping Act, 1859. These brokers are paid not by the seamen, but by the shipowners. The brokers, however, come within the terms of Article 2 of the Draft Convention, and, if the Government of India ratify the Convention, it will be necessary, though the broker system may be allowed to continue temporarily, to set up as early as possible public employment offices on the lines suggested by the Conference. The Government of India believe that the broker system has hitherto worked sufficiently well in India, and that it is free from flagrant abuse. At the same time, they are in sympathy with the desire of the Conference to abolish agencies which make a business of recruiting seamen, and they recognize that the shipping broker system, though it may be suited to the present conditions of India, is open to objections of principle. They have arrived at the conclusion that

in most parts of India unemployment agencies would serve no useful purpose, but seamen's labour is *sui generis*. It gravitates for employment, it is believed, either to Calcutta or Bombay, and seeks that employment in the vicinity of the docks. It is possible, therefore, that employment agencies of the kind contemplated in Article 4 of the Draft Convention might be established with some hope of success in the two places named, and if this belief is well founded, the Government of India would welcome the experiment. It is doubtful, however, whether at present employment offices could be organized and maintained by joint committees of shipowners and seamen, and probably the State would, in the first instance, have to make itself responsible. In that case the Shipping Master would presumably manage the employment office, assisted by an Advisory Committee of the type indicated in Article 5. These views, however, are purely provisional. It is understood that a large proportion of the lascars who engage at Bombay is recruited from Daman and other places further up the coast, and the view may perhaps be taken that, in order to secure the requisite supply of seamen, some more dynamic form of recruitment than is afforded by employment offices is still required in India. The Government of India will await the replies to this letter before coming to a final decision, but if it is thought that the shipping broker system must continue for some time longer, I am to enquire whether the Government of India should still ratify the Draft Convention. Perhaps it might be possible to establish employment agencies at Bombay and Calcutta while not interfering for the present with the shipping brokers. Articles 7 to 10 of the Draft Convention do not seem to require comment at this stage. The Government of India think that they may safely accept the principles of all these articles, though, unless employment agencies are established, Article 10 would probably remain a dead letter in so far as it relates to the collection of statistics of unemployment. It is, perhaps, unnecessary at present specially to consider Article 9. A description of the organizations existing in the United Kingdom and in Norway for the supply of seamen will be found in Appendix IV to this letter. Here again Seamen's Unions as well as shipowners should be consulted.

18. Under Article 405 of the Peace Treaty with Germany the Government of India are bound to lay such Recommendations and Conventions of the Conference as will involve legislation before

the Legislature within one year, or at the latest within eighteen months of the closing of the session of the Conference. The Government of India are informed that, for the purpose of this Article, the Genoa Conference closed on the 10th July last. I am to ask, therefore, that a reply to this letter may be furnished as early as possible, and in any case not later than the 1st April next.

APPENDIX I**League of Nations****LABOUR ORGANIZATION CONFERENCE OF SEAMEN****Questionnaire****PRELIMINARY NOTE**

In your answers to these inquiries you are requested to bear the following points in mind :

1. Careful allowance should be made in every answer for the distinctions drawn by legislation or custom in your country between the various kinds of vessels ; for instance :

- (1) Foreign-going merchantmen :
 - (a) Steamers and other mechanically-driven vessels.
 - (b) Sailing ships.
- (2) Coasting vessels.
- (3) Tugs and barges not self-propelled.
- (4) Fishing boats.
- (5) Vessels employed on inland waterways.

2. In your replies, which are invited in order that International Agreements and Recommendations may be drawn up, you are requested to state how far you think it possible, or advisable, to apply the same general regulations to the various classes of ships, or whether separate arrangements should be made for them.

3. As regards navigation of inland waterways :

- (a) Does your Government think that this should be subject to the same regulations as maritime navigation ?
- (b) Does your Government think it possible to make a distinction between persons employed in mechanically-driven vessels on large lakes or rivers, whose duty is continuous, and those employed in vessels confined to canals or canalized rivers ?

[It will be recalled that at the Washington Conference during the debate on the Report of the Commission on Hours of Work (Provisional Record, pages 314—322) attention was drawn by several delegates to the peculiar conditions affecting inland navigation on the great lakes of Northern America, the Swedish fiords and the great rivers of Asia, on which voyages often continue without interruption for several days. In defining the application of the Conventions which may be drawn up in regard to the various items of the agenda, it will be necessary to take these special conditions into account and perhaps to distinguish them from those of river and canal navigation in Europe.]

ITEM I OF THE AGENDA

Hours of labour and their effect on manning and accommodation

A.—Hours of labour

1. Please explain fully the nature of any existing regulations (i) in the national law, (ii) in agreements between organizations of ship-owners and seamen prescribing the hours of duty for foreign-going seamen.

N.B.—The reply should, where necessary, distinguish between the various classes of seamen (deck hands, engine-room staff and general service) and between the hours of labour while at sea and in port.

2. What arrangements and adjustments does your Government consider necessary for the application to seamen of the eight hours' day and the forty-eight hours' week, as adopted by the Washington Conference?

B.—Manning

1. Are there any manning regulations in your national legislation, at any rate for foreign-going vessels?

2. If the principle of the eight hours' day and the forty-eight hours' week were adopted in the Mercantile Marine:

(a) What modifications do you anticipate in your manning regulations, if you have any?

(b) Does your Government see any objection to the adoption of international manning scales, at any rate for foreign-going vessels?

C.—Accommodation

1. What provision, if any, is made :

- (a) by your national law ;
- (b) by agreements between organizations of shipowners and seamen ;

in regard to the amount of cubic space to be allotted to seamen and in regard to their general accommodation ?

2. As the application to seamen of the principle of the eight hours' day would probably involve larger crews, what steps would you propose to take, and within what period, to adapt their accommodation to these new requirements ?

3. Is it advisable to establish by Agreement the international regulation of accommodation for seamen on board ship ?

Does your Government think it advisable to fix by International Agreements uniform standards of accommodation for seamen on board ship ?

ITEM II OF THE AGENDA

A.—Articles of Agreement

Under what system are seamen in your country engaged ?

- (a) Are all seamen required to sign articles of agreement ?
If so, please give particulars of the legal requirements as to the signature of articles.
- (b) What provisions exist for ensuring the observance of agreements :
 - (1) by State supervision,
 - (2) by Trade Unions,
 - (3) by other means ?

B.—Facilities for finding employment for seamen

1. Have you in your country any system for registering the service of seamen ?

2. Does your national law provide employment exchanges for seamen ?

- (a) If so, how are they constituted and controlled ?
- (b) What connexion have they with the official authorities who control seamen's employment ?

C.—Washington Conventions and Recommendations on unemployment and unemployment insurance

What provisions or modifications, if any, do you consider necessary for the application to seamen :

- (a) of the Draft Convention ;
- (b) of the Recommendations adopted at Washington in regard to unemployment and unemployment insurance ?

ITEM III OF THE AGENDA

Prohibition of the employment of children under 14 years of age

1. What limitations are imposed by your national law on the age at which children may be employed on board ship ?
2. What arrangements and adjustments does your Government consider necessary for the application to the mercantile marine of the Draft Convention adopted at Washington prohibiting the employment of children under 14 years of age ?

ITEM IV OF THE AGENDA

The possibility of establishing an International Code for Seamen

1. Do you think it possible to establish a kind of International Code for Seamen ?
2. If so, what does your Government consider should be the general principles of an International Maritime Code as regards the conditions of service at sea ?

In particular, should the seamen's contract of employment be brought into line or not with that obtaining in the case of other workers. For instance, for discipline, the right to leave their ship in a foreign port, the payment of wages before discharge, etc. ?

N.B.—The Governing Body of the International Labour Office, at its meeting in January when the Agenda of this questionnaire was drawn up, had this important question brought before it.

The Governing Body considered it so vast and bound up with so many other problems that the coming International Conference would hardly be able to deal with it. In spite of this, it deemed it necessary to retain the question in that agenda for general examination. We should be glad if you would send us forthwith the

most complete information available on this subject, particularly on those points which might ultimately give rise to International Agreements, in order that the work which will be subsequently necessary may be put in hand.

Answers to Questionnaire

The Government of India desire to point out that they received notice of this special meeting of the Labour Conference only in the middle of February last, and that, though a brief summary of the questionnaire reached them by cable in the beginning of March, they did not receive the full text till the middle of that month. This short notice, which is particularly short for the Government of India, since their answers have to be sent by mail to London to be considered there by their representatives, probably caused little inconvenience in countries where the questions to be discussed at the Conference are familiar, where the shipping and labour interests are both highly organized, and where an authoritative opinion can readily be obtained from either interest. But conditions are entirely different in India. Many of the questions raised in the questionnaire, while they raise issues of far-reaching importance, are novel in India and have not previously been considered. The country is very large and is divided into provinces under local Governments which have large powers and which must be consulted. Owing to imperfect industrial organization, there are no ready means of ascertaining the views of employers and employees on the questions raised. Labour is particularly ill-organized and inarticulate, and its interests, which in European countries can safely be left to Trades Unions, in India must be safeguarded mainly by Government and their officers. Nor have the Government of India had time, through the local Governments, fully to consult the various shipping companies, which are vitally interested in the subject for discussion and which ordinarily have to refer questions of this kind to their head offices in London. For these reasons, the Government of India feel that before they can definitely commit themselves on the questions raised in the questionnaire they require more time for consideration than has been given them, and they would have preferred that any Conventions or Recommendations which may be agreed to by the Conference should not apply to India, but that the case of India should be reserved for consideration by a future meeting of the Conference. At the same time, recognizing, as they do, the great importance of the subjects for discussion

they have sent delegates to represent them at the Conference, and, as will be seen below, are prepared in respect of the first item of the agenda, to agree, with certain exceptions and reservations, to the principle of a 60 hours' week.

2. The replies now given to the questionnaire embody all the information which the Government of India have been able to collect in the short time given. In respect of such of the questions, however, as require an expression of the views of the Government of India as to future policy, the answers below must be regarded as provisional, and as subject to further consideration when the Government of India have had time to make more detailed enquiries. The Government of India also desire to re-affirm the general statement of policy in regard to organized labour in India expressed in paragraph 18 of their memorandum for the Washington Conference. They deprecate any attempt to bring Indian labour conditions into line with those of Western countries by violent legislative changes. But they fully recognize the necessity of improving labour conditions in India.

3. Before stating their answers to the questionnaire, the Government of India desire to make the following points clear:

- (1) Their answers relate only to 'lascars and other native seamen.' British seamen engaging in foreign-going and home-going ships in Indian ports usually engage on British articles of agreement. Their case need not be considered with special reference to India.
- (2) The most important legislative provisions in India dealing with the conditions of employment of seamen are contained in Chapter IV of the Indian Merchant Shipping Act, V of 1883, read with Act I of 1859. These provisions do not apply to the crews of ships of a burden not exceeding 300 tons employed in the coasting trade, and nothing in the answers below should be regarded as applying to the crews of tugs, barges, native craft employed in the coasting trade or in the trade with Persian Gulf ports and of fishing vessels. These classes of vessels, so far as India is concerned, should be excluded from the operations of any Conventions or Recommendations adopted by the Conference. The Government of India have not sufficient information regarding

conditions of employment on such vessels to justify their making any recommendations concerning them, and for the present they prefer to concentrate on the main issue, and to confine their attention to the case of lascars and other native seamen employed on foreign-going and coasting steamers.

(3) For the same reason the Government of India do not propose to deal in these answers with inland navigation. Hitherto, as regards inland navigation, legislation has been undertaken only in respect of such matters as the survey of inland steam vessels and the qualifications of masters and engineers. Whether legislation is required for the protection of the crews on steamers navigating inland waters is a matter which requires separate consideration. The Government of India are quite prepared to give it that consideration and to pay careful attention to any views which the Conference may express. But the Government of India are not prepared to commit themselves on the question. One local Government which is closely interested in inland navigation has already expressed the opinion that it is quite unnecessary to introduce for inland navigation the provisions of section 18 *et seq* of Act I of 1859 and of Chapter IV of Act V of 1883, and has stated that the labour involved would be quite disproportionate to the advantages to be gained. It is obvious, of course, that the conditions of inland navigation differ entirely from those of navigation by sea, and the Government of India, as at present advised, doubt whether the same regulations could suitably be applied to both forms of navigation. They also think that it would be impossible to apply the same regulations—

- (1) to the large steamers and flats which navigate the Irrawaddy and Ganges; and
- (2) to the small tugs, launches and barges which ply on such rivers as the Godavary and Kristna, on navigable canals and on the back-waters of the West Coast.

4. Having made the above preliminary points clear, the Government of India proceed to answer the questions in the questionnaire.

ITEM I OF THE AGENDA

*Hours of labour and their effect on manning and accommodation**A.—Hours of labour*

1. There are no regulations in the Indian Merchant Shipping Acts prescribing the hours of duty of foreign-going seamen. As far as is known, there are no agreements between organizations of shipowners and seamen on the subject. It is believed that there is only one organization of seamen in India. It is a Union of Goanese stewards (who are not British subjects) and has been only recently established.

2. "Lascars and other native seamen" fall into three main classes :

- (1) Deck hands.
- (2) Engine-room staff.
- (3) Stewards or saloon crews.

Their hours of labour vary, not only for each class, but also with the port of engagement and the class of vessels. But the following scale of hours of duty, which is reported to be ordinarily in force at Bombay, may be taken as typical.

Deck hands.—At sea, from about 5-30 A.M. to 5-30 P.M.—with two intervals of one hour each for meals and one hour's duty on look-out. Shorter hours are worked on Saturdays and Sundays. In port, from 6 A.M. to 5-30 P.M., with the same intervals for meals and shorter hours on Saturdays and Sundays.

Engine-room crew.—At sea the crew is divided into watches. Each watch is four hours on duty and 8 hours off duty. In port the hours of duty are from 7 A.M. to 5 P.M., with intervals for meals as above. Shorter hours are worked on Saturdays, and no work is done on Sundays except that necessary to maintain lighting and sanitary services.

Saloon crews.—The duties performed by this section of the crew are so various that any general statement regarding hours of work would be misleading. Broadly speaking, men are required to be on duty during service hours, which vary with the class of employment and the rating of the individual.

It will be seen that the hours of labour are considerably longer than the standard 8 hours day and 48 hours week recommended by the Washington Conference. In pursuance of the terms of Article

405 of the Peace Treaty with Germany, however, the Washington Conference agreed that India was entitled to special treatment, and Article 10 of the Draft Convention limiting hours of work in industrial undertakings prescribes that in British India the principle of a 60-hour week should be adopted in all industries at present covered by the Factory Acts, in mining and in such branches of railways as shall be specified for the purpose by the competent authority. British India is equally entitled to special treatment in respect of seamen's labour, and if the principle of an 8 hours day be adopted for maritime workers generally, the Government of India would be prepared to accept the principle of a 60 hours week for Indian maritime workers. As stated above, however, the Government of India cannot at present commit themselves regarding workers on inland vessels, and in view of the facts stated in paragraph 3 (2) above, the possibility of applying this principle to vessels in the coasting trade will require very careful consideration. Even on ocean-going vessels the principle will require modification in its application to the various sections of the crews.

B.—Manning

1. No.

2. If hours of labour are fixed, masters will naturally engage sufficiently large crews to allow for the necessary relief, and the Government of India are not at present satisfied that specified manning regulations are necessary. The necessity for them has not so far made itself felt. But in any case, as any Convention regulating hours of work would contain special provisions applicable to Indian seamen, an international manning scale could not be applied to India.

C.—Accommodation

1. (a) An extract of section 70 of Act I of 1859 is appended:—

“70. A place or places of shelter shall be provided below a well caulked and substantial deck for the men engaged under this Act; such place or places shall be so arranged as to allow for the men the following spaces:

“(1) for each European seamen or apprentice or other person shipped on the same footing as a European seaman, ten superficial feet, if the place be not less than six feet in height from deck to deck, or sixty cubic feet if the height from deck to deck be less than six feet;

“(2) for each lascar or native seaman or other person shipped on the same footing as a lascar, six superficial and thirty-six cubic feet; and if the place allotted be under the top gallant forecastle, such forecastle deck shall not be less than four feet six inches above the one below it.

“Every such place shall be kept free from stores or goods of any kind, not being the personal property of the crew in use during the voyage; and if any such place in any ship is not in the whole sufficiently large to give such space for each seaman and apprentice as hereinbefore required, or is not properly caulked, and in all other respects securely and properly constructed and well ventilated, the owner shall, for every such failure to comply with the provisions of this section, incur a penalty not exceeding two hundred rupees; and if any such space as aforesaid is not kept free from goods and stores as aforesaid, the master shall, for every such failure to comply with the provisions of this section, incur a penalty not exceeding one hundred rupees.”

In practice, however, the more liberal scale (12 superficial and 72 cubic feet) prescribed by the British Merchant Shipping Act of 1894 is applied, not only to ships of British registry, but also in practically all cases to ships of Indian registry. The British Act of 1906, which further increased the scale to 15 superficial and 120 cubic feet, specifically provides that the new scale does not apply to lascars.

(b) None.

2. If larger crews are necessitated by the ratification by the Government of India of the Convention adopted by the Conference, it would be necessary—

- (1) to amend section 27 of Act V of 1883 so as to prescribe that the agreement between masters and seamen should contain particulars as to the maximum hours of labour;
- (2) to frame rules as to the hours of labour to be entered in the agreements;
- (3) to allow the shipping companies reasonable time to carry out the necessary alterations in the accommodation provided for seamen.

Section 71 of Act I of 1859 enables a shipping master or his deputy to enter on ships to see if the prescriptions of the Act, to accommodation for seamen are observed.

3. No. The habits of life of "lascars and other native seamen" differ so entirely from those of European seamen as to make it impossible to apply the same standards of accommodation to both classes of seamen.

ITEM II OF THE AGENDA

A.—Articles of Agreement

The relevant sections of the Merchant Shipping Acts are sections 18 to 35 of Acts I of 1859 and sections 25 to 30 of Act V of 1883. A form of lascar agreement will be available at the Conference.

(a) Yes. See Section 22 of Act I of 1859, sections 26 to 29 of Act V of 1883 and section 115 of Act I of 1859.

(b) (1) Provision is made in the agreement itself that any member of the crew who considers himself aggrieved by any breach of the agreement or otherwise, if he does not get satisfaction from the master or officer in charge of the ship, may represent his grievance to a Lascar Transfer Officer on the arrival of the ship at a port in the United Kingdom or to a British Consul on arrival at a foreign port or to the British Shipping Master at a British Colonial port. Enquiry is then made.

(2) }
(3) } None.

B.—Facilities for finding employment for seamen

1. Under section 43 of the Indian Merchant Shipping Act, I of 1859, the master is compelled to sign and give to a seaman discharged from his ship a certificate of his discharge in a form approved and sanctioned by Government. These discharge certificates specify the period of service and the time and place of engagement and discharge, and also the seaman's rating and character. They form a complete record of the seaman's seafaring career. Expired articles of agreement are kept for future references in the shipping office where they were originally opened.

2. No. Seamen are engaged in India through licensed brokers, and the shipping masters' offices at the principal ports also serve as a centre where seamen can obtain employment.

C.—Unemployment and unemployment insurance

(a) The question of unemployment of lascars has not yet assumed practical importance in India. Some classes of lascars prefer to

work on land during the four monsoon months, and during that period return to their villages, where they obtain work either on their own lands or as agricultural labourers. There is practically no unemployment problem, and India is scarcely interested at all in the Draft Convention adopted by the Washington Conference.

(b) The Government of India see no necessity at present to introduce any system of unemployment insurance, which, in the circumstances explained in the previous paragraph, would be entirely premature. As regards the recommendation of the Washington Conference that measures should be taken to prohibit the establishment of employment agencies which charge fees or which carry on their business for profit, and that where such agencies already exist they should be permitted to operate only under Government licences, and that all practicable measures should be taken to abolish such agencies as soon as possible, the Government of India observe that shipping brokers already work under Government licences—*vide* section 18 of Act I of 1859. So far as is known, the shipping broker system has not given rise to any complaint and is suited to a country where labour is so ill-organized as in India. Shipping brokers are useful in that they protect the labour from crimping, and it should be noticed that the fees paid to the brokers are paid not by the lascars themselves but by the shipowners. It would be premature at once to abolish the licensed broker system, but the question will be kept constantly in view.

ITEM III OF THE AGENDA

Prohibition of the employment of children under 14 years of age

1. The Apprentices Act XIX of 1850 prescribes that children between the ages of 10 and 18 may be bound as apprentices, and provision is made in the Act for sea service. But the Act, it is believed, is practically a dead-letter, at any rate in regard to sea service. The Merchant Shipping Acts do not impose any limitations on the age at which lascars may be employed on board ships. By executive instructions, however, shipping masters have been instructed not to permit the engagement in the engine-rooms of foreign-going steamers of lascars of less than 18 years of age, and not to permit the employment in the engine-rooms of coasting steamers of lascars of less than 16 years of age. In India, of course, it is extremely difficult to get accurate information as to the age of lascars

applying for employment. The shipping masters, therefore, have been warned to pay particular attention to the physique of young lascars seeking employment in the engine-rooms of steamers, and where candidates appear to be physically unfit by reason of their youth, either to refer the matter to the decision of the Port Health Officer or to refuse employment, as they think fit.

2. The Government of India, as at present advised, see no objection to applying to sea labour the provisions of Article 6 of the Draft Convention adopted by the Washington Conference regarding the employment of young children. Occasionally, however, young boys are employed as deck hands in coasting steamers on nominal wages. These boys are usually the sons or relatives of serangs, tindals and leading hands, and are looked after by them. In India, there is no form of compulsory education at present, and it is a great convenience to serangs and tindals, especially those who are widowers, to take their sons on board with them. It is regarded as a privilege and the Government of India presume that the practice need not be objected to.

ITEM IV OF THE AGENDA

The possibility of establishing an International Code for Seamen

The Government of India have not had time to deal with the important question raised in this item of the Agenda. It is presumed that the intention is to draw up uniform Articles of Agreement for seamen all the world over and to bring contracts of employment as far as possible into line with those obtaining in the case of workers on shore. The Government of India note that, in any case, lascars' agreements must be in a special form owing to the necessity of providing for their repatriation from foreign ports. But, as already mentioned, they are not in a position at present to discuss the question raised in this part of the Agenda.

10. We now return to the consideration of the *recommendations* of the Washington Conference. One of these has been acted on already; for in October last, *vide* our Department of Commerce and Industry Despatch No. 26 of 1919, we signified the adherence of India to the Berne Convention of 1906 on the prohibition of the use of white phosphorus in matches.

11. The recommendation concerning the reciprocity of treatment of foreign workers, if accepted, would involve no immediate action on our part. Foreign workers in India are given the full benefit of all laws and regulations made for the protection of Indian workers, and are in the same position as regards the rights of lawful organisation. It is possible that this recommendation may enable Indian workers in foreign countries to obtain more adequate protection; but, as far as conditions in this country are concerned, nothing remains to be done. The question is one which will be discussed at the forthcoming meeting of the International Commission on Emigration. In the meantime, there appears to be no reason why we should not accept the recommendation.

12. In respect of two more recommendations we propose to insert provisions in the new Factories Act. We intend to embody the substance of the recommendation concerning the protection of women and children against lead poisoning, though we are satisfied that the provision will be inoperative until lead industries develop. By inserting it we expect to obtain without opposition protection against a danger that might become real in years to come. The question of the prevention of human anthrax is more difficult. Our information, both as to the prevalence of human anthrax and the practicability of taking steps for its prevention, is far from complete. We propose to insert in the Bill a section giving power to the Government of India to frame the rules that may be necessary to carry out this recommendation.

13. The recommendation concerning unemployment cannot be accepted in its entirety. We are strongly of opinion, and all local Governments who have stated their views are in agreement with us, that no system of unemployment insurance is practicable in India at present. And while our Famine Codes contemplate the free use of public works to relieve the initial phases of distress, we think it impracticable, in view of the large size of the country and of the comparative immobility of much of our unskilled labour to make further advances in the direction of the fourth section of this recom-

mentation. There is, moreover, the fact that the Government of India's powers in this direction are somewhat limited. The first two sections of the recommendation present less difficulty. That relating to the recruiting of bodies of workers in other countries might be accepted. But consultation with workers on this matter is by no means so simple in India as in most other countries, and we shall be in a better position to discuss this question after the meeting of the International Commission on Emigration. In respect of the prohibition of particular types of employment agencies, we are not yet in a position to say what the effect of accepting the recommendation would be. The result then as regards this recommendation is that we propose to take no immediate action, but we trust that it will be possible in the near future to give effect to the recommendation at least in part.

14. We are not prepared to accept the recommendation concerning the establishment of Government Health Services at present. We have already a system of efficient factory inspection, and unhealthy trades in India are few. We believe that the medical services of the country, if augmented in areas where unhealthy industries are situated, will be able to safeguard the health of the workers for some time to come. At the same time the possibility of establishing a special service will receive our attention.

15. If the proposals made above are accepted, immediate legislation will be required in respect only of two draft conventions—those relating to the limitation of the hours of work and to the minimum age of children—and in respect of two recommendations—those relating to anthrax and to lead poisoning. The necessary legislation involves the amendment of the Factories Act, the Mines Act and probably fresh legislation dealing with labour on railways. Legislation may also be required in respect of children's labour at ports, docks, wharves, etc. We have already considered possible amendments to the Factories Act in detail, but proposals for the remaining Acts required are not yet ready. We intend, therefore, in the case of the conventions that involve new legislation, to proceed in the first instance, by resolution and to place the necessary resolutions before the reformed legislature as soon as it has met. It should, thus, be possible to notify our ratifications to the International Labour Office before the third meeting of the International Conference at Geneva.

16. We request your sanction to the action we propose to take on the Draft Conventions and Recommendations, and to the procedure we intend to follow. In view of the short time now at our disposal, and the necessity of preparing the necessary resolutions and completing the work upon the draft Factories Bill before the new Legislature assembles in February next, we should be glad to have your sanction by cable.

(2) **Revision of the Factories Act.**

Despatch to His Majesty's Secretary of State for India, No. 17-Industries of 1920, dated Delhi, the 26th November 1920.

WE have the honour to address you regarding our proposals for the revision of the Factories Act (XII of 1911). The ratification of the Draft Conventions and the acceptance of the Recommendations adopted by the International Labour Conference at Washington, have been discussed in our Despatch No. 16-Industries of 1920. The proposals made there will involve a considerable amount of fresh legislation, the most important part of which will be the revision of the Factories Act. We have already considered the main principles of this revision, and we hope to be able to introduce the necessary Bill (or Bills) early in the first session of the new Legislature.

2. The changes that will arise directly or indirectly out of the draft conventions and recommendations of the Washington Conference have already been indicated in our Despatch No. 16-Industries of 1920. The important changes are three in number:—

- (1) We propose to insert provisions enforcing the 60 hour week including regulations for the exceptions permitted by Article 6 of the Draft Conventions and a provision for the rate of pay for overtime as required by the same article. This proposal has been prominently before the public for many months, and has received considerable support and no serious opposition.
- (2) We propose to raise the minimum age for children from 9 to 12 with transitory provisions to allow of all children employed in factories when the Act comes into force, to continue working. As stated in our previous despatch,

we further propose to provide that no children under 11 be admitted to a factory from the commencement of the revising Act and that no children under 12 be admitted on or after the first July, 1922. We anticipate some opposition to this reform. All local Governments and most public bodies recognise that the present minimum age can be raised with advantage. At the same time, we must admit that there are few opinions in favour of raising the minimum to 12 years; but our international obligations make it impossible for us to advocate any lower age, and we believe that the change we propose is in itself not merely beneficial, but urgently required.

- (3) We propose to amend the definition of a "factory" so as to include all factories employing not less than 20 persons and using power; and to give local Governments power to extend the application of the Act to any factory employing not less than 10 persons, whether power is used or not. We propose also to repeal the exceptions at present made in favour of electrical generating and transforming stations and indigo, tea and coffee factories, and to grant exemption to such factories only in respect of certain provisions of the Act.

3. The minor changes, consequent on the decisions of the Washington Conference, include—

- (a) the prohibition of the employment of women and young persons in certain lead processes;
- (b) the assumption of power to make rules for the disinfection of anthrax infected wool;
- (c) the alteration in the scheme of exceptions in the present Act. In this connection, we propose to delete all the present schedules, and to substitute more general exceptions regulated by principles similar to those specified in Articles 2, 3 and 6 of the Draft Conventions limiting the hours of work. The power of granting exemption will be delegated to local Governments as at present, but will be limited by the general principles laid down.

4. We recognise that in some respects the changes detailed above exceed the requirements of the Draft Conventions and Recommendations. The possible extension of the Act to factories that do not

employ power is a case in point. But it has been brought to our notice that it is urgently necessary to have powers to regulate the conditions of labour in several factories that do not employ mechanical power; and in some such factories very grave abuses are said to exist at present. The revision of the whole scheme of schedules also goes somewhat beyond the requirements of the International Conference. The schedules at present grant exemptions principally from the provisions for the daily interval and for the weekly holiday. The exemptions granted are, in our opinion, much too wide; and in any case it is preferable to regulate the principles on which exceptions should be allowed rather than to exempt particular industries *in toto*, e.g., it is scarcely possible to justify provisions whereby the manager of a tannery can work all his men 7 days in every week and the manager of a printing press can work the whole staff from morning to night without any interval.

5. But we do not propose to confine the revision of the Factories Act to the changes suggested above, as we believe that the time is now ripe for a considerable advance in this form of legislation. Not only has there been a great increase in the size and the number of industrial undertakings in India, but public opinion has made a large advance, and reforms, which could not have been contemplated 10 years ago, will now, in our opinion, commend themselves to most of the industrial population and to the public at large. At the same time, the experience of ten years has indicated certain defects in the present Factories Act and has suggested various improvements. We propose here to put before you the changes we contemplate, except those that are mere alterations of language or are very trifling in their effect.

6. We propose to extend the statutory definition of a child so as to include all children between the ages of 12 and 15 years. In our opinion, the present provision whereby young persons of 14 years of age are treated as adults can no longer be defended. Few boys of 14 are able to work for 12 hours, which is the maximum daily limit for male adults that we are proposing below. However unfit or undeveloped a boy is, he can be employed as a full-timer if he is 14 years of age. A visitor to Indian factories is often struck with the low stature and lack of muscle among many children who are about to pass from the stage of half-timers to that of whole-timers. The alternative lies between raising the age for a child or the intro-

duction of a class of young persons. The possibility of introducing a class of young persons was carefully considered when the proposals of the Factory Commission of 1908 were reviewed and the serious objections then made to this proposal have, in our opinion, lost little of their force. In view of the fact, moreover, that we propose to afford much greater protection to adult labour than has hitherto been possible, the arguments in favour of a "young persons" class lose much of their force, and we believe that the extension of the age of childhood will be sufficient. We do not regard the present proposal to raise the minimum age to 15 as a final solution of the question. But no proposal for alteration of the Act in this respect has yet been before the public and we recognise that the changes we are making in other directions will arouse no little opposition and may cause some temporary dislocation of industry. We consider that our proposals in this respect represent the most that is possible at the present time, and, taken in conjunction with our proposals for the further regulation of the hours for children and for adults, will afford adequate protection to young persons. Slight amendments in the provisions relating to certification, including the grant of power to certifying surgeons to revoke certificates on the ground of physical incapacity, will, we hope, afford still further protection.

7. A further important change that we propose is the abolition of the distinction at present made between textile and non-textile factories. We consider that the most important of the restrictions at present imposed on textile factories can be applied with advantage to non-textile factories, and that the remainder are no longer necessary. Thus, we propose to extend to non-textile factories—

(a) the limitation of the daily hours of work for male adults to 12 hours;

(b) the limitation of the daily hours of children to 6;

and we propose to remove the present limitations of the hours between which a person may be employed and within which the machinery may be used. We believe that, if provision is made for a register detailing the hours of work each person was employed, the necessity for these restrictions will disappear.

8. We propose to amend the section relating to daily intervals so as to provide for an interval of at least an hour after every 6 hours' work in the case of adults and of at least half an hour for all children who work more than 5 hours.

9. Certain improvements are called for in the provisions relating to health and safety. The most important of these is the insertion of a provision taking power to regulate artificial humidification. We are proposing to take steps to secure a comprehensive enquiry into this question, but we cannot hope to obtain any results until after the new Act has come into force. But it is important that we should have power to make rules as soon as our enquiries have disclosed what is necessary in this respect. Other new provisions that are necessary, include a section designed to prevent accidents that may be caused by defects in the structure of factory buildings, and a section on the lines of section 17 of the British Factories and Workshops Act to prevent the use of dangerous machinery. We also contemplate further restrictions on the presence in factories of children who are below working age.

10. The present scale of maximum fines which dates from 1891 is no longer adequate. Many factories now work on so large a scale that even the maximum fines at present possible will probably prove to be no longer deterrent; there has been at the same time a considerable depreciation in the value of money. We propose to substitute for Rs. 200, where this is the maximum, Rs. 1,000 and for Rs. 20, Rs. 50.

11. The existing provisions for the weekly holiday are far from satisfactory. Large classes of workers get no weekly holiday at all, and in the case of others the present cumbrous provision makes evasion a simple matter. We believe that more stringent proposals for a weekly holiday are necessary and that they will meet with very general approval. We desire to provide for a statutory holiday on Sunday, and to allow managers to substitute another day of the week only over periods of considerable length. At the same time, we intend to cut down the present exceptions and exemptions as far as possible.

12. The last reform that is required is the abolition of the exceptions at present made by section 27 in favour of ginning and pressing factories. This section has proved quite unworkable in practice and has been condemned by every factory inspector who has attempted to work it. The report of the Indian Cotton Committee has disclosed serious abuses in such factories and has added a further argument for the withdrawal of the latitude at present allowed.

13. We trust that these proposals will receive your approval. The preparation of the necessary drafts is now being undertaken, and they will be forwarded to you as soon as possible. In view of our desire to introduce the new legislation as soon as the Legislative Assembly and Council of State meet, we request your sanction by cable to our proposals.

**REPLIES FROM THE SECRETARY OF STATE TO THE GOVERN-
MENT OF INDIA.**

*Telegram from His Majesty's Secretary of State for India, No. 248,
dated the 12th (received 14th) January 1921.*

Your letter dated 25th November. Washington Labour Conference. I accept your proposals.

*Telegram from His Majesty's Secretary of State for India, No. 327,
dated the 14th (received 17th) January 1921.*

Revision of the Factories Act. Reference your letter of November 26th. I cordially approve your proposals.

THE FIRST RATIFICATION.

Telegram No. L-812, dated Delhi, the 26th January 1921.

From—The Viceroy (Board of Industries and Munitions),

To—His Majesty's Secretary of State for India.

Washington Labour Conventions. Your telegram dated 12th January, 248, to Viceroy (Board of Industries and Munitions). Please communicate to Secretary General, League of Nations, in suitable form our ratification of two conventions, *viz.*, (1) relating to night work of young persons employed in industries and (2) relating to employment of women by night and intimate to him that recommendations relating to prohibition of white phosphorus and to reciprocity of treatment of foreign workers are already in force. Further communication will be sent regarding other Draft Conventions and Recommendations after they have been laid before Legislature.

APPENDIX.

Press Communiqué issued on 18th December 1920.

The Government of India intend to introduce legislation to amend the Indian Factories Act early in the first session of the new legislature. Many of the changes proposed are based on the recommendations made at the Washington meeting of the International Labour Conference. The Bill will include a provision altering the limits of age of children employed as half-timers in factories. A suggestion at present under consideration is not only to raise the lower limit of age which is nine years under the existing law but to raise the upper limit also from fourteen to fifteen years.

CALCUTTA
SUPERINTENDENT GOVERNMENT PRINTING, INDIA
8, HASTINGS STREET

APPENDIX II

Draft Conventions and Recommendations adopted by the International Labour Conference at Genoa

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Recommendation concerning the limitation of hours of work in the fishing industry

The General Conference of the International Labour Organization of the League of Nations,

Having been convened at Genoa by the Governing Body of the International Labour Office, on the 15th day of June, 1920, and

Having decided upon the adoption of certain proposals with regard to the "Application to seamen of the Convention drafted at Washington, last November, limiting the hours of work in all industrial undertakings, including transport by sea and, under conditions to be determined, transport by inland waterways, to 8 hours in the day and 48 in the week. Consequential effects as regards manning and the regulations relating to accommodation and health on board ship," which is the first item in the agenda for the Genoa meeting of the Conference, and

Having determined that these proposals shall take the form of a recommendation,

adopts the following Recommendation, to be submitted to the Members of the International Labour Organization for consideration with a view to effect being given to it by national legislation or otherwise, in accordance with the Labour Part of the Treaty of Versailles of 28th June, 1919, of the Treaty of St. Germain of 10th September, 1919, of the Treaty of Neuilly of 27th November, 1919, and of the Treaty of the Grand Trianon of 4th June, 1920 :

In view of the declaration in the Treaties of Peace that all industrial communities should endeavour to adopt, so far as their special circumstances will permit, "an eight-hours' day or a forty-eight hours' week as the standard to be aimed at where it has not already been attained," the International Labour Conference recommends that each Member of the International Labour Organization enact legislation limiting in this direction the hours of work of all workers employed in the fishing industry, with such special provisions as may be necessary to meet the conditions peculiar to the fishing industry in each country; and that in framing such legislation each Government consult with the organizations of employers and the organizations of workers concerned.

Recommendation concerning the limitation on hours of work in inland navigation

The General Conference of the International Labour Organization of the League of Nations,

Having been convened at Genoa by the Governing Body of the International Labour Office on the 15th day of June, 1920, and

Having decided upon the adoption of certain proposals with regard to the "Application to seamen of the Convention drafted at Washington, last November, limiting the hours of work in all industrial undertakings, including transport by sea and, under conditions to be determined, transport by inland waterways, to 8 hours in the day and 48 in the week. Consequential effects as regards manning and the regulations relating to accommodation and health on board ship," which is the first item in the agenda for the Genoa meeting of the Conference, and

Having determined that these proposals shall take the form of a recommendation,

adopts the following Recommendation, to be submitted to the Members of the International Labour Organization for consideration with a view to effect being given to it by national legislation or otherwise, in accordance with the Labour Part of the Treaty of Versailles of 28 June, 1919, of the Treaty of St. Germain of 10 September, 1919, of the Treaty of Neuilly of 27 November, 1919, and of the Treaty of the Grand Trianon of 4 June, 1920 :

In view of the declaration in the Treaties of Peace that all industrial communities should endeavour to adopt, so far as their special circumstances will permit, "an eight hours' day or a forty-eight hours' week as the standard to be aimed at where it has not already been attained," the International Labour Conference recommends :—

I

That each Member of the International Labour Organization should, if it has not already done so, enact legislation limiting in the direction of the above declaration in the Treaties of Peace the hours of work of workers employed in inland navigation, with such special provisions as may be necessary to meet the climatic and industrial conditions peculiar to inland navigation in each country, and after consultation with the organizations of employers and the organizations of workers concerned.

II

That those Members of the International Labour Organization whose territories are riparian to waterways which are used in common by their boats should enter into agreements for limiting, in the direction of the aforesaid declaration, the hours of work of persons employed in inland navigation on such waterways, after consultation with the organizations of employers and the organizations of workers concerned.

III

That such national legislation and such agreements between riparian countries should follow as far as possible the general lines of the Draft Convention concerning hours of work adopted by the International Labour Conference, at Washington, with such excep-

tions as may be necessary for meeting the climatic or other special conditions of the countries concerned.

IV

That, in the application of this Recommendation, each Member of the International Labour Organization should determine for itself, after consultation with the organizations of employers and the organizations of workers concerned, what is inland navigation as distinguished from maritime navigation, and should communicate its determination to the International Labour Office.

V

That each Member of the International Labour Organization should report to the International Labour Office, within two years after the adjournment of the Genoa Conference, the progress which it has made in the direction of this Recommendation.

Recommendation concerning the establishment of National Seamen's Codes

The General Conference of the International Labour Organization of the League of Nations,

Having been convened at Genoa by the Governing Body of the International Labour Office, on the 15th day of June, 1920, and

Having decided upon the adoption of certain proposals with regard to a "Consideration of the possibility of drawing up an International Seamen's Code," which is the fourth item in the agenda for the Genoa meeting of the Conference, and

Having determined that these proposals shall take the form of a recommendation,

adopts the following Recommendation, to be submitted to the Members of the International Labour Organization for consideration with a view to effect being given to it by national legislation or otherwise, in accordance with the Labour Part of the Treaty of Versailles of 28 June, 1919, of the Treaty of St. Germain of 10 September, 1919, of the Treaty of Neuilly of 27 November, 1919, and of the Treaty of the Grand Trianon of 4 June, 1920 :

In order that, as a result of the clear and systematic codification of the national law in each country, the seamen of the world, whether engaged on ships of their own or foreign countries, may have a better comprehension of their rights and obligations, and in order that the task of establishing an International Seamen's Code may be advanced and facilitated, the International Labour Conference recommends that each Member of the International Labour Organization undertake the embodiment in a seamen's code of all its laws and regulations relating to seamen in their activities as such.

Draft Convention fixing the minimum age for admission of children to employment at sea

The General Conference of the International Labour Organization of the League of Nations,

Having been convened at Genoa by the Governing Body of the International Labour Office, on the 15th day of June, 1920, and

Having decided upon the adoption of certain proposals with regard to the "application to seamen of the Convention adopted at Washington last November prohibiting the employment of children under 14 years of age," which is the third item in the agenda for the Genoa meeting of the Conference, and

Having determined that these proposals shall take the form of a draft international convention,

adopts the following Draft Convention for ratification by the Members of the International Labour Organization, in accordance with the Labour Part of the Treaty of Versailles of 28 June, 1919, of the Treaty of St. Germain of 10 September, 1919, of the Treaty of Neuilly of 27 November, 1919, and of the Treaty of the Grand Trianon of 4 June, 1920:

Article 1

For the purpose of this Convention, the term 'vessel' includes all ships and boats, of any nature whatsoever, engaged in maritime navigation, whether publicly or privately owned; it excludes ships of war.

Article 2

Children under the age of fourteen years shall not be employed or work on vessels, other than vessels upon which only members of the same family are employed.

Article 3

The provisions of Article 2 shall not apply to work done by children on school-ships or training-ships, provided that such work is approved and supervised by public authority.

Article 4

In order to facilitate the enforcement of the provisions of this Convention, every shipmaster shall be required to keep a register of all persons under the age of sixteen years employed on board his vessel, or a list of them in the articles of agreement, and of the dates of their births.

Article 5

Each Member of the International Labour Organization which ratifies this Convention engages to apply it to its colonies, protectorates, and possessions which are not fully self-governing:

- (a) Except where owing to the local conditions its provisions are inapplicable: or
- (b) Subject to such modifications as may be necessary to adapt its provisions to local conditions.

Each Member shall notify to the International Labour Office the action taken in respect to each of its colonies, protectorates, and possessions which are not fully self-governing.

Article 6

The formal ratifications of this Convention under the conditions set forth in Part XIII of the Treaty of Versailles of 28 June, 1919, of the Treaty of St. Germain of 10 September, 1919, of the Treaty of Neuilly of 27 November, 1919, and of the Treaty of the Grand Trianon of 4 June, 1920, shall be communicated to the Secretary-General of the League of Nations for registration.

Article 7

As soon as the ratifications of two Members of the International Labour Organization have been registered with the Secretariat, the Secretary-General of the League of Nations shall so notify all the Members of the International Labour Organization.

Article 8

This Convention shall come into force at the date on which such notification is issued by the Secretary-General of the League of Nations, but it shall then be binding only upon those Members which have registered their ratifications with the Secretariat. Thereafter this Convention will come into force for any other Member at the date on which its ratification is registered with the Secretariat.

Article 9

Subject to the provisions of Article 8, each Member which ratifies this Convention agrees to bring its provisions into operation not later than 1 July, 1922, and to take such action as may be necessary to make these provisions effective.

Article 10

A Member which has ratified this Convention may denounce it after the expiration of ten years from the date on which the Convention first comes into force, by an Act communicated to the Secretary-General of the League of Nations for registration. Such denunciation shall not take effect until one year after the date on which it is registered with the Secretariat.

Article 11

At least once in ten years, the Governing Body of the International Labour Office shall present to the General Conference a report on the working of this Convention, and shall consider the desirability of placing on the agenda of the Conference the question of its revision or modification.

Article 12

The French and English texts of this Convention shall both be authentic.

Recommendation concerning unemployment insurance for seamen

The General Conference of the International Labour Organization of the League of Nations,

Having been convened at Genoa by the Governing Body of the International Labour Office, on the 15th day of June, 1920, and

Having decided upon the adoption of certain proposals with regard to the "Supervision of articles of agreement, Provision of facilities for finding employment for seamen, Application to seamen of the Convention and Recommendations adopted at Washington in November last in regard to unemployment and unemployment insurance," which is the second item in the agenda for the Genoa meeting of the Conference, and

Having determined that these proposals shall take the form of a recommendation,

adopts the following Recommendation, to be submitted to the Members of the International Labour Organization for consideration with a view to effect being given to it by national legislation or otherwise, in accordance with the Labour Part of the Treaty of Versailles of 28 June, 1919, of the Treaty of St. Germain of 10 September, 1919, of the Treaty of Neuilly of 27 November, 1919, and of the Treaty of the Grand Trianon of 4 June, 1920:

The General Conference, with a view to securing the application to seamen of Part III of the Recommendation concerning Unemployment adopted at Washington on 28 November, 1919, recommends that each Member of the International Labour Organization should establish for seamen an effective system of insurance against unemployment arising out of ship-wreck or any other cause, either by means of Government insurance or by means of Government subventions to industrial organizations whose rules provide for the payment of benefits to their unemployed members.

Draft Convention concerning unemployment indemnity in case of loss or foundering of the Ship.

The General Conference of the International Labour Organization of the League of Nations,

Having been convened at Genoa by the Governing Body of the International Labour Office, on the 15th day of June, 1920, and

Having decided upon the adoption of certain proposals with regard to the "Supervision of articles of agreement, Provision of facilities for finding employment for seamen; Application to seamen of the Convention and Recommendations adopted at Washington in November last in regard to unemployment and unemployment insurance," which is the second item in the agenda for the Genoa meeting of the Conference, and

Having determined that these proposals shall take the form of a draft international convention,

adopts the following Draft Convention for ratification by the Members of the International Labour Organization, in accordance with the Labour Part of the Treaty of Versailles of 28 June, 1919, of the Treaty of St. Germain of 10 September, 1919, of the Treaty of Neuilly of 27 November, 1919, and of the Treaty of the Grand Trianon of 4 June, 1920:

Article 1

For the purpose of this Convention, the term 'seamen' includes all persons employed on any vessel engaged in maritime navigation.

For the purpose of this Convention, the term 'vessel' includes all ships and boats, of any nature whatsoever, engaged in maritime navigation, whether publicly or privately owned; it excludes ships of war.

Article 2

In every case of loss or foundering of any vessel, the owner or person with whom the seaman has contracted for service on board the vessel, shall pay to each seaman employed thereon an indemnity against unemployment resulting from such loss or foundering.

This indemnity shall be paid for the days during which the seaman remains in fact unemployed at the same rate as the wages payable under the contract, but the total indemnity payable under this

Convention to any one seaman may be limited to two months' wages.

Article 3

Seamen shall have the same remedies for recovering such indemnities as they have for recovering arrears of wages earned during the service.

Article 4

Each Member of the International Labour Organization which ratifies this Convention engages to apply it to its colonies, protectorates and possessions which are not fully self-governing:

- (a) except where owing to the local conditions its provisions are inapplicable; or
- (b) subject to such modifications as may be necessary to adapt its provisions to local conditions.

Each Member shall notify to the International Labour Office the action taken in respect of each of its colonies, protectorates and possessions which are not fully self-governing.

Article 5

The formal ratifications of this Convention, under the conditions set forth in Part XIII of the Treaty of Versailles of 28 June, 1919, of the Treaty of St. Germain of 10 September, 1919, of the Treaty of Neuilly of 27 November, 1919, and of the Treaty of the Grand Trianon of 4 June, 1920, shall be communicated to the Secretary-General of the League of Nations for registration.

Article 6

As soon as the ratifications of two Members of the International Labour Organization have been registered with the Secretariat, the Secretary-General of the League of Nations shall so notify all the Members of the International Labour Organization.

Article 7

This Convention shall come into force at the date on which such notification is issued by the Secretary-General of the League of Nations, and it shall then be binding only upon those Members which have registered their ratifications with the Secretariat. Thereafter this Convention will come into force for any other Member at the date on which its ratification is registered with the Secretariat.

Article 8

Subject to the provisions of Article 7, each Member which ratifies this Convention agrees to bring its provisions into operation not later than 1 July, 1922, and to take such action as may be necessary to make these provisions effective.

Article 9

A Member which has ratified this Convention may denounce it after the expiration of five years from the date on which the Convention first comes into force, by an act communicated to the Secretary-General of the League of Nations for registration. Such denunciation shall not take effect until one year after the date on which it is registered with the Secretariat.

Article 10

At least once in ten years, the Governing Body of the International Labour Office shall present to the General Conference a report on the working of this Convention, and shall consider the desirability of placing on the agenda of the Conference the question of its revision or modification.

Article 11

The French and English texts of this Convention shall both be authentic.

Draft convention for establishing facilities for finding employment for seamen

The General Conference of the International Labour Organization of the League of Nations,

Having been convened at Genoa by the Governing Body of the International Labour Office, on the 15th day of June, 1920, and

Having decided upon the adoption of certain proposals with regard to the "Supervision of articles of agreement, Provision of facilities for finding employment for seamen, Application to seamen of the Convention and Recommendations adopted at Washington in November last in regard to unemployment and unemployment insurance," which is the

second item in the agenda for the Genoa meeting of the Conference, and

Having determined that these proposals shall take the form of a draft international convention,

adopts the following Draft Convention for ratification by the Members of the International Labour Organization, in accordance with the Labour Part of the Treaty of Versailles of 28 June, 1919, of the Treaty of St. Germain of 10 September, 1919, of the Treaty of Neuilly of 27 November, 1919, and of the Treaty of the Grand Trianon of 4 June, 1920 :

Article 1

For the purpose of this Convention, the term 'seamen' includes all persons, except officers, employed as members of the crew on vessels engaged in maritime navigation.

Article 2

The business of finding employment for seamen shall not be carried on by any person, company, or other agency, as a commercial enterprise for pecuniary gain; nor shall any fees be charged directly or indirectly by any person, company or other agency, for finding employment for seamen on any ship.

The law of each country shall provide punishment for any violation of the provisions of this Article.

Article 3

Notwithstanding the provisions of Article 2, any person, company or agency, which has been carrying on the work of finding employment for seamen as a commercial enterprise for pecuniary gain, may be permitted to continue temporarily under Government licence, provided that such work is carried on under Government inspection and supervision, so as to safeguard the rights of all concerned.

Each Member which ratifies this Convention agrees to take all practicable measures to abolish the practice of finding employment for seamen as a commercial enterprise for pecuniary gain as soon as possible.

Article 4

Each Member which ratifies this Convention agrees that there shall be organized and maintained an efficient and adequate system

of public employment offices for finding employment for seamen without charge. Such system may be organized and maintained, either :

- (1) by representative associations of shipowners and seamen jointly under the control of a central authority, or,
- (2) in the absence of such joint action, by the State itself.

The work of all such employment offices shall be administered by persons having practical maritime experience.

Where such employment offices of different types exist, steps shall be taken to co-ordinate them on a national basis.

Article 5

Committees consisting of an equal number of representatives of shipowners and seamen shall be constituted to advise on matters concerning the carrying on of these offices ; the Government in each country may make provision for further defining the powers of these committees, particularly with reference to the committees' selection of their chairmen from outside their own membership, to the degree of state supervision, and to the assistance which such committees shall have from persons interested in the welfare of seamen.

Article 6

In connection with the employment of seamen, freedom of choice of ship shall be assured to seamen and freedom of choice of crew shall be assured to shipowners.

Article 7

The necessary guarantees for protecting all parties concerned shall be included in the contract of engagement or articles of agreement, and proper facilities shall be assured to seamen for examining such contract or articles before and after signing.

Article 8

Each Member which ratifies this Convention will take steps to see that the facilities for employment of seamen provided for in this Convention shall, if necessary by means of public offices, be available for the seamen of all countries which ratify this Convention, and where the industrial conditions are generally the same.

Article 9

Each country shall decide for itself whether provisions similar to those in this Convention shall be put in force for deck-officers and engineer-officers.

Article 10

Each Member which ratifies this Convention shall communicate to the International Labour Office all available information, statistical or otherwise, concerning unemployment among seamen and concerning the work of its seamen's employment agencies.

The International Labour Office shall take steps to secure the co-ordination of the various national agencies for finding employment for seamen, in agreement with the Governments or organizations concerned in each country.

Article 11

Each Member of the International Labour Organization which ratifies this Convention engages to apply it to its colonies, protectorates and possessions which are not fully self-governing :

- (a) except where owing to the local conditions its provisions are inapplicable; or
- (b) subject to such modifications as may be necessary to adapt its provisions to local conditions.

Each Member shall notify to the International Labour Office the action taken in respect of each of its colonies, protectorates and possessions which are not fully self-governing.

Article 12

The formal ratifications of this Convention, under the conditions set forth in Part XIII of the Treaty of Versailles of 28 June, 1919, of the Treaty of St. Germain of 10 September, 1919; of the Treaty of Neuilly of 27 November, 1919, and of the Treaty of the Grand Trianon of 4 June, 1920, shall be communicated to the Secretary-General of the League of Nations for registration.

Article 13

As soon as the ratifications of two Members of the International Labour Organization have been registered with the Secretariat, the

Secretary-General of the League of Nations shall so notify all the Members of the International Labour Organization.

Article 14

This Convention shall come into force at the date on which such notification is issued by the Secretary-General of the League of Nations, and it shall then be binding only upon those Members which have registered their ratifications with the Secretariat. Thereafter this Convention will come into force for any other Member at the date on which its ratification is registered with the Secretariat.

Article 15

Subject to the provisions of Article 14, each Member which ratifies this Convention agrees to bring its provisions into operation not later than 1 July, 1922, and to take such action as may be necessary to make these provisions effective.

Article 16

A Member which has ratified this Convention may denounce it after the expiration of five years from the date on which the Convention first comes into force, by an act communicated to the Secretary-General of the League of Nations for registration.* Such denunciation shall not take effect until one year after the date on which it is registered with the Secretariat.

Article 17

At least once in ten years, the Governing Body of the International Labour Office shall present to the General Conference a report on the working of this Convention, and shall consider the desirability of placing on the agenda of the Conference the question of its revision or modification.

Article 18

The French and English texts of this Convention shall both be authentic.

APPENDIX III

Draft Convention limiting working hours on Board ship

The General Conference of the International Labour Organization of the League of Nations,

Having been convened at Genoa by the Governing Body of the International Labour Office on the 15th day of June 1920, and

Having decided upon the adoption of certain proposals with regard to the "Application to Seamen of the Convention drafted at Washington last November, limiting the hours of work in all industrial undertakings, including transport by sea, and, under conditions to be determined, transport by inland waterways to 8 hours in the day and 48 in the week. Consequential effects as regards manning and the regulations relating to accommodation and health on board ship," which is the first item in the agenda for the Genoa meeting of the Conference, and

Having determined that these proposals shall take the form of a Draft International Convention, adopts the following Draft Convention for ratification by the members of the International Labour Organization, in accordance with the Labour Part of the Treaty of Versailles of 28 June 1919, of the Treaty of St. Germain of 10 September 1919; of the Treaty of Neuilly of 27 November 1919; and of the Treaty of the Grand Trianon of 4 June 1920.

In view of the declaration in the Treaty of Versailles of 28 June 1919, that all industrial communities should endeavour to adopt, so far as their special circumstances will permit, an eight hours' day or a forty-eight hours' week, as the standard to be aimed at, where it has not already been attained, which declaration is hereby recognized as applying to seamen, the International Labour Conference adopts the following Draft Convention.

Article I

For the purpose of this Convention,

- (a) the term 'working hours' shall include only effective working hours, that is to say, the time during which a person on board a vessel is engaged, under the orders of

the master, outside of the quarters which serve as his accommodation on board the vessel;

- (b) the term 'vessel' includes all ships and boats, of any nature whatsoever engaged in maritime navigation, whether publicly or privately owned, and whether employed in commerce or for purposes of technical instruction or otherwise; it excludes ships of war; and
- (c) each member of the International Labour Organization will determine for itself what is maritime navigation as distinguished from inland navigation, and will communicate its determination to the International Labour Office.

Article 2

The working hours of all persons, without distinction of nationality or race, employed on board any vessel, excluding masters and supervising officers who do not keep a watch, shall be limited either to eight hours in the day or to forty-eight hours in the week, or to a maximum not exceeding eight hours in the day or forty-eight hours in the week for periods of time other than a week, subject to the provisions and exceptions contained in the following articles.

Article 3

On mechanically-propelled vessels of 2,000 tons gross and over the working hours at sea shall not exceed 48 hours *per* week for all ratings. Work on Sunday shall be continued by the crew, who will receive compensatory rest or remuneration, unless extra hands have been shipped for the purpose of providing one day's rest in seven for the whole crew.

On these vessels, when in port, the working hours for all ratings shall not exceed forty-eight *per* week or a less number where already in force, subject to regulations which may be made in each country limiting the working hours on its own ships in port, provided that such regulations shall not allow more working hours than those fixed for industrial undertakings on shore by the Draft Convention on hours of work adopted by the International Labour Conference at Washington in November 1919.

Overtime which may be ordered by the master on arrival and sailing days, or for other necessity, not including overtime ordered

by reason of the circumstances described in paragraph (a) of article 8 of this Convention, shall not exceed fourteen hours *per* week or sixty hours *per* month; and extra hours worked shall be paid for, or shall be compensated by time off.

On such vessels the three-watch system shall be maintained in the deck and engine-room departments, where the nature of the work is such as to require a system of work by watches.

Article 4

The manner in which the principles laid down in this Convention for mechanically-propelled vessels of 2,000 tons gross and over are to be applied shall be determined by regulations made after consultation with organizations of shipowners and organizations of seamen in each country.

Article 5

The regulations as to working hours on all classes of vessels other than those covered by article 3 shall be made after consultation with organizations of shipowners and organizations of seamen, and shall be on principles similar so far as circumstances will permit, to the principles to be applied under article 3 to mechanically-propelled vessels of 2,000 tons gross and over.

Article 6

Regulations as to the working hours of Indian seamen shall be made after consultation with organizations of shipowners and organizations of Indian seamen. These regulations shall provide for a reduction in the present working hours of Indian seamen.

Article 7

The contract of engagement for service on any vessels shall in every case contain a statement of the hours to be worked, and such statement shall form an essential part of the contract.

The national law shall provide that seamen shall be able to sue the master or owner of the vessel for redress if this part of the contract is not carried out.

Article 8

(a) The limit of working hours provided for in this Convention may be exceeded in the following circumstances, of which the master shall be the sole judge:

- (1) when the safety of the vessel, or the life of any person on board, is threatened by fog, stranding, fire, or other emergency; or
- (2) when it is necessary for the salvage of another vessel, or for the purpose of saving life.

(b) The limit of working hours provided for in this Convention may also be exceeded when, as a result of sickness or physical injury or *force majeure* during the course of the voyage, the crew of the ship has been reduced and cannot be completed immediately by the engagement of other seamen.

Article 9

Any changes in accommodation which may result from additions to crews or increased manning scales following the reduction in hours as provided for in this Convention shall not diminish the hygienic protection of the seamen employed, and no derogation shall be made from the standards now established by law

Each member which ratifies this Convention shall communicate to the International Labour Office full information concerning the accommodation provided for seamen on its vessels.

Article 10

The provisions of this Convention do not apply to persons employed as wireless operators.

The provisions of this Convention do not apply to persons employed as cattle-men.

Article 11

Each member of the International Labour Organization which ratifies this Convention agrees to make an annual report to the International Labour Office on the measures which it has taken to give effect to the provisions of this Convention, and these reports will be communicated by the International Labour Office to all other members of the International Labour Organization.

Article 12

Each member of the International Labour Organization which ratifies this Convention engages to apply it to its colonies, protectorates, and possessions which are not fully self-governing—

- (a) except where, owing to the local conditions, its provisions are inapplicable; or
- (b) subject to such modifications as may be necessary to adapt its provisions to local conditions.

Each member shall notify to the International Labour Office the action taken in respect of each of its colonies, protectorates, and possessions which are not fully self-governing.

Article 13

The formal ratifications of this Convention, under the conditions set forth in part XIII of the Treaty of Versailles of 28 June 1919, of the Treaty of St. Germain of 10 September 1919, of the Treaty of Neuilly of 27 November 1919, and of the Treaty of the Grand Trianon of 4 June 1920 shall be communicated to the Secretary-General of the League of Nations for registration.

Article 14

As soon as the ratifications of two members of the International Labour Organization have been registered with the Secretariat the Secretary-General of the League of Nations shall so notify all the members of the International Labour Organization.

Article 15

This Convention shall come into force at the date on which such notification is issued by the Secretary-General of the League of Nations, but it shall then be binding only upon those members which have registered their ratifications with the Secretariat. Thereafter this Convention will come into force for any other member at the date on which its ratification is registered with the Secretariat.

Article 16

Subject to the provisions of article 15, each member which ratifies this Convention agrees to bring its provisions into operation

not later than one year after its ratification, and to take such action as may be necessary to make these provisions effective.

Article 17

A member which has ratified this Convention may denounce it after the expiration of five years from the date on which the Convention first comes into force by an Act communicated to the Secretary-General of the League of Nations for registration. Such denunciation shall not take effect until one year after the date on which it is registered with the Secretariat.

APPENDIX IV**Description of the organizations for the supply of seamen in the United Kingdom and Norway****UNITED KINGDOM**

Special Employment Exchanges for seamen are not provided under the Labour Exchanges Act of 1909. Under this Act Labour Exchanges were established by the Board of Trade at various places in the United Kingdom for the purpose of registering persons seeking employment, and furnishing information to employers in regard to workpeople out of employment. The administration of these exchanges was taken over by the Ministry of Labour under the Ministries and Secretaries Act of 1917, and the exchanges are now known as Employment Exchanges. The staff of these exchanges is appointed by the Minister of Labour and their policy and procedure in carrying out the functions is controlled by the Minister of Labour. The Minister is, however, advised with regard to the administration of the exchanges by Local Employment Committees consisting of representatives of employers and workpeople in the district, with an independent chairman appointed by the Ministry. One of these committees exists in connection with each of the larger exchanges.

The Mercantile Marine Offices, established by the Board of Trade under Section 246 of the Merchant Shipping Act, 1894, are the only places at which seamen may be signed on for engagement on board ship. The Employment Exchanges do not, therefore, deal with seamen who require work in their capacity as seamen. The Employment Exchanges may, however, place a workman whose normal occupation is that of seaman in a vacancy of any other description notified to the exchange which he is willing to accept, and for which he would appear suitable.

In 1918 a system was set up for the supply of seamen under the joint control of the Shipowners' Association and the Seamen's Unions. A special joint-supply office was set up at each of the ports in the United Kingdom, these being under the control of the local officers of the Shipowners' Association and the Seamen's Unions. This joint-supply system was not under the control of the Govern-

ment, but the Superintendent of the Mercantile Marine Office kept closely in touch with them and they were, as a rule, established at the Mercantile Marine Office. The central organization at the head of this joint-supply system was the National Maritime Board created in its first form as an official committee by the Shipping Controller during the autumn of 1917.

We extract from the report of the work of this Board during the years 1917 and 1918, presented to Parliament by its Chairman, Mr. Leslie Wilson, who is also Parliamentary Secretary of the Ministry of Shipping, the following information. The National Maritime Board consisted of four panels: one for navigating officers, one for engineering officers, one for sailors and firemen, and one for the catering departments. Their chief object as regards the supply of sailors and firemen was—

- (1) equal rights of registration and employment must be secured for all seamen; raw recruits to be registered as such;
- (2) the shipowner shall have the right to select his own crew at any time through a jointly-controlled supply office; and
- (3) the seamen shall have the right to select their ship.

The National Maritime Board included representatives of nearly all the important associations, chiefly the Imperial Merchant Service Guild, the National Sailors and Firemen's Union, the National Union of Ships' Stewards, Cooks, etc., the Marine Engineer's Association, and the Shipping Federation.

It was an integral part of the constitution of the Board that there should be set up District Boards for the purpose of dealing with local difficulties, and a further devolution was provided by the appointment by the Shipping Federation and the Sailors' and Firemen's Union in all the principal ports of two officers known as port consultants, who were to act jointly in matters affecting personnel with which they were concerned. Their duties fell under two main heads, namely, those in connection with (1) the prevention and adjustment of disputes and grievances; and (2) the supply of seamen. On the first point their primary endeavour was to arrive at some decision, temporary or permanent, which would enable a vessel to sail without delay. It is impossible to exaggerate the importance of the work done by the port consultants.

Towards the end of 1919 facilities ceased to be provided by Mercantile Marine Offices for these joint-supply systems; in fact,

seamen now find employment, and shipowners secure seamen, merely through agencies outside the State Employment Offices, *i.e.*, outside the ordinary Employment Exchanges and the Mercantile Marine Office. Both seamen and shipowners were, however, completely satisfied with the results obtained by the joint-supply arrangement of the National Maritime Board. These arrangements worked almost perfectly, especially on the Thames, where there were four offices, and also in other ports. Elsewhere there were certain difficulties, *e.g.*, the Liverpool shipowners were not members of the Shipping Federation; but these difficulties tended to disappear, and in the end the supply arrangement, as well as the services of the National Maritime Board, have given very satisfactory results. It was, therefore, decided to reconstitute the National Maritime Board on the lines of a Whitley Council.

"In the spring of 1919" writes Mr. Wilson, Parliamentary Secretary of the Ministry of Shipping, in his report to Parliament already mentioned, "it was the wish of the parties to the Board that they should resolve themselves into a Joint Industrial Council on the lines proposed in the report of the Whitley Committee. The constituent bodies on the employés' side of the Board had in the meantime agreed upon the formation of the Seafarers' Joint Council for the purpose of bringing about greater co-operation during the reconstruction following upon the war. On the employers' side the Liverpool Employers' Association, which, as already stated, was not a party to the Board, now expressed their willingness to take part in a Joint Industrial Council.

"The parties thereupon met to consider a constitution, but certain difficulties immediately appeared, notably the inclusion of masters within the purview of the new Council. This led to a suspension in the negotiations. The services of the Ministry were sought with a view to overcoming the difficulties, and after much correspondence a further meeting of the parties was arranged under the auspices of the Ministry. At the request of both parties in November 1919, I acted as Chairman of the Committee appointed to consider the drafting of a constitution for the new Council. A provisional agreement was soon reached, and the first meeting of the new Council, consisting of five panels, each comprising 12 employers and 12 employees, took place on the 19th December 1919, when the constitution was formally approved and an agreement reached that the new Council should be constituted as from the 1st January 1920."

The constitution of the new National Maritime Board is almost identical with the old one as far as arrangements for the supply of seamen are concerned. These arrangements have given such satisfaction that the offices continue to function as actively, if not so officially, as under the former constitution. From the reports furnished to the International Labour Office by the Secretary of the National Maritime Board, in agreement with the employers' and workers' delegates, it appears that the system is yielding results quite satisfactory, whereas in London one can count on the good-will and complete co-operation of the associations concerned, and in many instances masters have expressed their very high appreciation of the services thus rendered.

During the first complete year of working, 1919, about 70,000 seamen were supplied to about 6,000 ships; of these more than 5,000 had been transferred from one port to another. The operations of these offices are distinguished by their simple and practical character. On the appointed date for the embarkation of the crew sailors of all kinds who desire to be engaged present themselves at the office; they are called in the order in which their names appear on the rolls, and are presented to the captain or his representative. The choice is free on both sides. The master only takes the men who suit him and sailors refuse, if they please, to embark on any particular vessel. Once agreement is arrived at, necessary endorsements are made on their papers, the articles of agreement are read over to them, the necessary signatures are made at the office, and the crew is ready. If any sailors of the kind required are missing, the sailors' clubs or hostels in the locality are telephoned to or, if necessary, other districts are telegraphed to so as to obtain the men necessary. Sailors going from one district to another are paid their travelling expenses.

In principle the offices of the National Maritime Board deal only with seamen on British vessels, but in fact, they do not refuse to supply foreign vessels. They are also concerned in supplying crews to British ships abroad, and travelling expenses are advanced to the men in such cases. All these operations are carried out under the supervision of the port consultants, whose long experience in working together leads them to reasonable and practical solutions of all difficulties.

Finally, it should be noted that the services are free for shipowners as well as for seamen. The expenses of these joint-supply offices

are divided equally between the employers' associations and the workmen's.

NORWAY

In Norway the system of finding employment for seamen forms part of the national system of labour registries which exists in that country. In the big seaport towns (Kristiania, Drammen, Bergen, and Trondhjem) special sections have been established in the public exchanges to deal with the employment of seamen under a specially-qualified staff. Circumstances, however, have caused the activities of these exchanges to consist, not only of the usual function of labour registries, viz., that of bringing employer and employé together, but also of additional functions which have assumed the character of actual engagement of seamen for service at sea. Everything necessary in connection with the signing on of seamen is undertaken, e.g., the offices issue contracts for the parties to sign, make all arrangements in connection with signing on, advance wages, if necessary, pay travelling expenses to the harbour, furnish passports, etc. No fees are charged to either employers or public. Wages, travelling expenses, etc., are repaid by the owners of the ship. In these special sections the Board of Control, consisting at each office of employers' and workpeoples' representatives, contains a representative of shipowners and seamen. At other exchanges the placing of seamen forms part of the ordinary work of the section for male employment. About one-fifth of the total activities of the Norwegian exchanges is in connection with seamen, as the following figures for the last four years show :

	Registration	Vacancies notified	Vacancies filled
1916—			
Seamen	16,199	11,703	9,030
All occupations	62,305	63,548	44,520
1917—			
Seamen	16,860	8,545	7,285
All occupations	65,808	62,140	45,008
1918—			
Seamen	18,916	6,418	5,662
All occupations	83,961	62,664	44,956
1919—			
Seamen	27,800	11,329	9,842
All occupations	1,00,107	63,037	47,886

In addition, however, the exchanges endeavour to provide work for seamen ashore where this is wanted. The figures for this class are not included in the above table, and amounted to 2,525 in 1917, 2,635 in 1918, and 2,202 in 1919.

In Kristiania the special department for seamen was established in May 1911, and by degrees met with such success among shipowners and other bodies interested that the bureau now undertakes practically all the employment of seamen and ship's officers in Kristiania and neighbourhood.

It will thus be seen that it is very similar to the British system whereby the whole supply of seamen is concentrated in the hands of one authority. The law does not establish any direct connection between the Employment Exchanges and the special institutions for controlling the engagement of seamen. The exchange co-operates with the special engagement office in such a manner that the staff of the exchange assist crews with the formalities, etc., of signing on.

Private bureaux—26 in number—still exist in Norway which are permitted to carry on the business of engaging seamen, but the work is very small as the work is gradually coming into the hands of the public bureaux, and no new permits are granted by local authorities.

REPLIES OF LOCAL GOVERNMENTS ADDRESSED

MADRAS

No. 88, dated Fort St. George, the 11th April 1921

FROM—M. R. RY. DIWAN BAHADUR R. RAMACHANDRA RAO AYARGAL,
Secretary to the Government of Madras, Revenue Department,

TO—The Secretary to the Government of India, Department of Commerce.

I am directed to reply to your letter No. 16, dated 4th January 1921, regarding the proceedings of the International Labour Conference held at Genoa last year.

2. The letter was referred to the Presidency Port Officer, the Chairman, Madras Port Trust, Director of Fisheries, the Commissioner of Labour with his Advisory Board and certain other officers. The statements and views in the following paragraphs are based on their reports.

3. *Limitation of the working hours of Indian seamen—paragraph 3 of the letter.*—The Government of India request that the question may be discussed with shipowners and Seamen's Unions. I am to state that there are no shipowners and no Seamen's Unions in the Madras Presidency with whom the subject can be discussed. This Government are advised that, although the lascar may be of inferior physique and has possibly a lower standard of education, he is capable of working, and does work, just as long hours as the British seaman, but in consequence of his inferior physique it is generally necessary, when a crew is composed mainly or entirely of lascars, to employ a larger number than would be needed if it were composed entirely of British seamen. The effect must be to distribute the work among this larger number and *pro tanto* to diminish the working hours. There is no doubt, however, that if the same limit were placed on the working hours of Indian as of British seamen, it would tend to diminish the demand for the former. This Government agree that there should be a limit but that the question of what the limit should be may well await the revision of the working hours of British seamen at home.

Whatever be the decision that is finally arrived at on this question, it should not apply to the seamen employed in small in-shore boats, such as motor launches used by the Madras Fisheries Department, in which work is seldom strenuous and many hours would be spent idly. As these boats do not go out in rough weather, it would also not be fair to fix their working hours on the weekly basis; it should be at least on a monthly basis if the enforced idleness caused by bad weather is to be allowed for in any way. The case in regard to these boats is wholly different from that of deep sea vessels which entail the crew being abroad for days together, and there is no valid or urgent reason to make any restrictive regulations in respect of them at present.

4. *Recommendations concerning the limitation of hours of work in the fishing industry—paragraphs 5 and 6 of the letter.*—The Government are advised that the attitude of the Government of India, as outlined in paragraph 6 of their letter, is correct. There is no deep-sea fishing off the coasts of the Presidency at present, nor is there any organization of employers or of workers. As the Government of India themselves observe, sea-fishing in this country is almost exclusively in-shore fishing and is carried on by small and primitive craft. The share system is largely in vogue and therefore the men themselves would consider it a grave injustice if the State attempted to impose any limitation of the number of hours of work. It has also to be remembered that in sea-fishing the time spent aboard the boats at sea is by no means all working hours, much of it being spent in sleep. For these reasons the Government consider that till a complete change comes over the methods of sea-fishing in India, there is no need whatever for legislation to restrict the hours of labour.

5. *Limitation of hours of work in inland navigation—paragraphs 7-9 of the letter.*—This Government agree with the Government of India that the definition of 'inland water' and 'inland steam vessels' as given in the Inland Steam Vessels Act, 1917, would, for all purposes, be sufficient.

As regards the hours of work, this Government are of opinion that, in view of the present state of development and the very small extent of inland navigation by power-driven vessels in this Presidency, no special legislation on the lines indicated in your letter seems necessary or desirable. This Government have no objection to the imposition of a 60 hour per week limit with over-

time rates in the case of Government and *quasi*-Government power-driven vessels, but they consider that such a concession would be entirely gratuitous and not necessitated by any demand on the part of the people most concerned in the matter.

6. *Establishment of a National Seamen's Code—paragraph 10 of the letter.*—This Government agree with the Government of India that there is no necessity for this in India at present.

7. *Minimum age for the admission of children for employment at sea—paragraphs 11 and 12 of the letter.*—The Presidency Port Officer points out that frequently children under 14 years of age are employed, but when so employed they are invariably the sons of serangs, seacunnies or men on board and that they are well fed and clothed. He considers that the application of the Draft Convention should be restricted to ships engaged in foreign trade only, and that in home trade vessels a boy under 14 years of age should be allowed to sign on ship *only* if there is a member of his family on board and after medical examination. This Government agree with the views of the Presidency Port Officer. They also agree that *mere* fishing boats should not be brought within the scope of legislation that may be necessary to give effect to the draft convention.

8. *Unemployment insurance for seamen—paragraph 13 of the letter.*—This Government agree with the Government of India that the question of unemployment of Indian seamen is not at present one of practical importance as the demand is generally greater than the supply.

9. *Unemployment indemnity in case of loss or foundering of the ship—paragraphs 14 and 15 of the Government of India letter.*—The Government of India refer to the fact that in India seamen do not always earn their living solely on the sea and prefer working on land in certain months of the year, and infer that, if a lascar whose ship is wrecked is allowed to claim to be paid for two months, he may not make any attempt to find fresh employment on board ship during those two months. The Presidency Port Officer points out that this probability is of equal application in the case of British seamen also; that it is as likely in one case as the other that if a seaman is paid two months wages for doing nothing he will make no effort to find fresh employment; also that shipwrecks may occur in months in which an Indian seaman cannot get work on land. He is therefore of opinion that an Indian seaman should

be treated in the same manner as a British seaman in the matter of indemnity, provided that he registers at a shipping office after shipwreck and can show that he is seeking employment. As already stated, there are no shipowners or Seamen's Unions with whom the subject can be discussed. This Government support the views of the Presidency Port Officer.

10. *Establishment of facilities for finding employment for seamen—paragraphs 16 and 17 of the letter.*—There is practically no deep-sea maritime population in the Madras Presidency. All crews for steamers, even when wanted in Madras, are engaged in Calcutta or Bombay. The question, therefore, does not affect this Presidency. The Presidency Port Officer considers that the broker system cannot suddenly be abolished, but that employment bureaux of the kind indicated by the conference, if established in Bombay and Calcutta, would very probably meet with great success.

BOMBAY

No. 1588, dated Bombay, the 14th July 1921

FROM—S. N. ZIMAN, Esq., I.O.S., Deputy Secretary to the Government of Bombay, Marine Department,

TO—The Secretary to the Government of India, Department of Commerce, Simla

I am directed by the Governor in Council to refer to the letter from the Government of India No. 16, dated the 4th January 1921, forwarding copies of three Draft Conventions and four Recommendations concerning employment at sea adopted by the International Labour Conference at its second session held at Genoa last year and inviting the views of the Government of Bombay thereon.

2. In reply I am to offer the following remarks with reference to the Draft Conventions and Recommendations in the order in which they are dealt with in the letter.

The limitation of hours of work.—In the first place I am to observe that the question of the limitation of the hours of work was the only item upon the agenda before the Conference in regard to which no definite agreement was reached. The Conference has, however, recognized the principle that Indian seamen must be accorded special treatment and that the Government of India

in consultation with shipowners and seamen should be left free to determine what reductions in the existing hours of work should be made. The question is undoubtedly of a complex nature, seeing that a demand has already been made by the Stewards' Union to place definite limits on the proportion of Asiatic seamen which may be employed on ships registered in the United Kingdom, as it is feared that by the latter's willingness to work longer hours for smaller rates of pay they might deprive British seamen of their employment. The Government of Bombay concur in the view expressed by the Government of India that it would be unfair to place Indian seamen on the same level as British seamen in the matter of hours of work, but that in the interests of the lascars themselves they feel that there should not be too great a disparity in this matter between the regulations applying to Indian seamen and those applying to British seamen. They also agree with the Government of India that the consideration of the question in the direction of reducing hours of labour in India should for the present be postponed until a settlement has been arrived at at home. When the hours of seamen's labour have been revised in the United Kingdom; I am directed to suggest for the consideration of the Government of India that the whole question should be discussed in a joint conference in India of seamen and shipowners, and the revised hours, with such modifications as may be decided on, be applied in India.

Recommendation concerning the limitation of hours of work in the fishing industry.—With reference to this recommendation, I am directed to say that the Government of Bombay concur in the remarks made by the Government of India in paragraph 6 of their letter. Having regard to existing conditions it appears to the Government of Bombay that action under this head would be impracticable, and any attempt at legislation would be strenuously opposed by the fishing community.

Recommendation concerning the limitation of hours of work in inland navigation.—With reference to this recommendation, I am to observe that there are no large inland water-ways, like those of Burma or Bengal, in the Bombay Presidency. The question of limiting the hours of work in inland navigation, therefore, does not arise so far as this Presidency is concerned. In view, however, of the considerations urged at the Conference in support of the recommendation the Government of Bombay have no objection

to action being taken on the lines proposed in paragraph 9 of the Government of India's letter.

Recommendation concerning the establishment of a National Seamen's Code.—Regarding this recommendation, I am directed to say that the Government of Bombay concur in the opinion expressed by the Government of India that it is not necessary at present to consider the establishment of a Seamen's Code.

Draft Convention fixing the minimum age for the admission of children to employment at sea.—With reference to this Draft Convention I am directed to say that the Government of Bombay concur in the view expressed by the Government of India in the matter and have no objection to the Draft Convention being ratified on the terms prescribed. They, however, observe that the practice of fathers taking their sons with them to sea should be definitely established with a few obvious safeguards, as an understanding not definitely expressed would not in their opinion be sufficient.

Recommendation concerning unemployment insurance for Seamen.—As regards this recommendation, I am directed to say that the Government of Bombay fully concur in the view expressed by the Government of India that the question of unemployment among Indian seamen is not at present one of practical importance and that it would be premature even to consider the question of establishing a system of insurance against unemployment.

Draft Convention concerning unemployment indemnity in case of loss or foundering of the ship.—With regard to this Draft Convention, I am directed to say that in the opinion of the Government of Bombay it should be ratified. As regards the observation of the Government of India that, if in order to claim two months' indemnity pay Indian seamen should make no attempt to find fresh employment, there would be difficulty in working article 2 of the Draft Convention with fairness to the shipowners, I am to invite consideration of the following points:—

- (1) The shipowner has to pay the cost of maintenance and repatriation of the crew to their proper return port in India after shipwreck.
- (2) The ship might be wrecked at a great distance from India, and probably the best part of two months may be taken up in getting the seaman back to India, thus entailing loss upon him, and on arrival the seaman

may or may not get employment within two months; ordinarily seamen have to wait longer."

- (3) It is possible that seamen might have lost all their personal effects, and there is no provision made in the Merchant Shipping Act whereby they can be compensated for their loss.

Draft Convention for establishing facilities for finding employment for seamen.—With reference to this Draft Convention I am directed to observe that the present system of securing the services of Indian seamen through licensed shipping brokers has been found to be satisfactory, and under it it is reported that crimping is reduced to a minimum, as these brokers work in the shipping offices and under the direct control of Shipping Masters. The Government of Bombay, therefore, recommend the continuance of the present system until more practicable means are found to take its place. In this connection the Shipping Master, Bombay, and the Bombay Chamber of Commerce have represented to this Government the necessity of establishing a home for lascar seamen. It is suggested that such a home, run on proper lines and managed by resident officers, well acquainted with all classes of Indian seamen and paid well enough to place them above temptation and licensed by Government as required under section 18 of the Indian Merchant Shipping Act, I of 1859, might ultimately develop into an employment agency. I am directed to say that the Government of Bombay strongly support the suggestion and recommend it for the favourable consideration of the Government of India.

BENGAL

No. 43T—Mne., dated Darjeeling, the 23rd June 1921

FROM—A. MARR, Esq., I.O.S., Secretary to the Government of Bengal
Marine Department,

TO—The Secretary to the Government of India, Department of Commerce

I am directed to refer to Commerce Department letter No. 16, dated the 11th January 1921, on the subject of the Draft Conventions and Recommendations relating to employment at sea adopted by the International Labour Conference held at Genoa from the 5th June to the 10th July 1920.

2. I am, in the first place, to express regret for the delay that has occurred in replying to this letter.

- (1) Port Officer, Calcutta
- (2) Bengal Chamber of Commerce
- (3) Bengal National Chamber of Commerce (no reply received)
- (4) Messrs. Macneill & Co., Agents, River Steam Navigation Co., Ltd.
- (5) Messrs. Kilburn & Co., Managing Agents, India General Navigation and Railway Co.
- (6) Messrs. Andrew Yule & Co., Managing Agents, Bengal-Assam Steamship Co., Ltd.
- (7) Shipping Master, Calcutta
- (8) Shipping Master, Chittagong.

The views of the several officers and bodies consulted (*vide margin*) were unfortunately not received in time to enable your letter to be dealt with before. Copies of their replies are now enclosed.

3. Before giving the views of this Government on the different Draft Conventions and Recommendations adopted by the Conference, I am to make the following general observations. The Government of Bengal consider that the Draft Conventions assume conditions that do not obtain in India, and they think that an attempt to apply them to India would be likely to disturb the existing relations between the seamen and the shipping interests. Enquiries made by the Local Government show that conditions of labour at sea are on the whole not severe, and not comparable with those of factory labour. Unemployment is practically non-existent, and the Indian seaman differs from his European fellow in that it is his practice on return from a voyage to return to his village for a holiday and not to look round at once for another ship. There are no representative unions of seamen in Bengal which this Government could consult on the various questions raised by the Government of India, but such enquiries as they have been able to make indicate that the lascar is content with his lot, that his simplicity is not unduly exploited, and that, until he is able to understand and voice his aspirations, it would be unwise to embark on a policy that will create a spirit of discontent and set him in antagonism to his employer.

4. *Draft Convention (not adopted) limiting working hours on board ship to 8 hours a day or 48 hours a week—paragraph 3 of the Government of India's letter.*—The Bengal Chamber of Commerce state that if an 8-hour day or a 48-hour week were introduced, payment of overtime would be unavoidable, and that opinion in shipping circles in Calcutta is distinctly opposed to the introduction of any restrictions which would necessitate the payment of overtime. It is contended that such a system would unavoidably lead to friction between the seamen and the executive staff, with

the result that discipline would be weakened. The Chamber believe that Indian seamen are perfectly satisfied with the existing hours of work, and that they do not press for, or even want, a change. The Shipping Master, Calcutta, considers that the hours of employment for Indian seamen need no revision. He says that the present usual working hours of deck crews, which exceed the 8-hour day or 48-hour week limit by a very small margin, are as below—

Mondays to Fridays	9 hours per day.
Saturdays	6 hours per day.
Sundays	3 hours per day.
Total hours per week	54

In the case of engine-room crews, where in the majority of vessels three watches are kept, the disparity is a little greater, eight hours being the average day's work with an extra hour three or four times a week; on an average a 60-hour week. In the saloon department, however, owing to the nature of the duties, the hours of work are necessarily greater, and at present the average period of work is 10 hours daily or 70 hours weekly, which, the Shipping Master thinks, it would be difficult to decrease. The saloon workers have, however, the advantage of a whole night's rest every night and usually a couple of hours' rest in the afternoon. The local Government generally agree in these views. As already mentioned, there are no representative unions of seamen in this Province, who could be formally consulted, but the Shipping Master, Calcutta, ascertained from seamen's representatives that the men are satisfied with the present working hours. The Government of Bengal concur in the view expressed by the Government of India that it would be prudent to postpone any final decision as to the action to be taken in the direction of reducing the hours of labour at sea in India until a settlement of the question has been arrived at in the United Kingdom. It is clear that the conditions of work are not so severe as to call imperatively for limitation of hours, nor is there any evidence that the men have any strong feeling in the matter.

5. *Recommendation regarding the limitation of hours of work in the fishing industry to an 8-hour day or a 48-hour week—paragraphs 5 and 6 of the Government of India's letter.*—The Government of Bengal agree with the Government of India that it is not necessary

to take any action on this Recommendation, and that it would be premature to do so pending a decision on the general question of the hours of seamen's labour. There is no deep-sea fishing in this Presidency and, though attempts have been made to form small co-operative societies among fishermen, no corporate organizations exist capable of expressing the views of the fishermen.

6. *Recommendation regarding the limitation of hours of work in inland navigation to 8 hours a day or 48 hours a week—paragraphs 7 to 9 of the Government of India's letter.*—The principal inland steamer companies in this Province are unanimously opposed to the introduction of any limitation on the hours of work in inland navigation. The Joint Steamer Companies (the River Steam Navigation Company and the India General Navigation and Railway Company) state that, under the present conditions, the average working hours in their lines are already actually below the 60-hour limit suggested by the Government of India. Attention is invited to the following remarks in the reply of the Joint Steamer Companies :

"The existing system allows the men to perform their religious ceremonies or to arrange their food in groups according to their various prejudices, or to relieve or assist each other as suits their natural inclination or physical stamina without prejudicing the work of the vessels.

* * * * *

"The average European factory worker on a 48-hour week is in the factory from 8 A.M. to 5 P.M., in addition to which he probably spends 2 hours daily going to and from his work, so that he spends 60-hours weekly incidental to his labour against something under 50 hours in the Indian inland steamer services.

"With the exception of the firemen, the work on our inland steamers is of a healthy open-air and agreeable nature and cannot be compared to the 8 hours' continuous grind in a factory.

"To fix regular hours might readily prejudice the safety of a vessel, as, in cases of emergency, it would be optional for the balance of the crew, not on duty, to turn out to assist in getting the vessel afloat and into safety, and, provided overtime was paid, it would be to their advantage to delay as much as possible the work of recovery.

"Whilst we have every sympathy with any well-intentioned proposal to ameliorate labour conditions where a necessity for amelioration exists, we respectfully beg to deprecate the introduction of a new element to a regime under which labour is perfectly contented."

The other steamer companies are entirely in agreement with these views, and the Bengal Chamber of Commerce and the Port Officer, Calcutta, share the same opinion. Moreover, they think

that it would be extremely difficult, and in fact practically impossible, to administer any rule of limitation of working hours on board inland steam-vessels plying in the waters of Bengal.

The views expressed above have the support of this Government. The conditions of work of the crews on inland steamers other than the engine-room staff are not similar to those of factory workers, and limitation of their working hours is neither necessary nor desirable and would lead to many difficulties in practice. For the engine-room crews 60 hours is probably in excess of the normal weekly duration of labour, but it is considered that more detailed inquiries than it has been possible for this Government to make in the time at their disposal should be made before recourse is had to legislation limiting the hours of work.

In regard to the definitions of the terms 'inland water' and 'inland steam-vessel' the Government of Bengal agree that the definitions suggested in the Government of India's letter will be sufficient for the purposes of this Recommendation. This Government also agree that, should legislation be undertaken in connection with this Recommendation, it should not apply to vessels other than steam-vessels.

7. *Recommendation regarding the establishment of a National Seamen's Code—paragraph 10 of the Government of India's letter.*—The Government of Bengal are in agreement with the view of the Government of India that it is not necessary at present to consider the question of the establishment of a Seamen's Code.

8. *Draft Convention fixing the minimum age for the admission of children to employment at sea—paragraphs 11 and 12 of the Government of India's letter.*—The Shipping Master, Calcutta, suggests that the minimum age should be fixed at 16 years, instead of 14 as in the Draft Convention. I am, however, to state that this Government agree with the Government of India that the Draft Convention may be ratified subject to the limitations proposed in paragraph 12 of the Government of India's letter. The Bengal Chamber of Commerce take no exception to this Draft Convention.

9. *Recommendation regarding unemployment insurance for seamen—paragraph 13 of the Government of India's letter.*—The Government of Bengal agree in the view expressed by the Government of India that the question of unemployment among Indian seamen is not at present one of practical importance and that no immediate action on the Recommendation is required.

10. *Draft Convention regarding unemployment indemnity in case of loss or foundering of the ship—paragraphs 14 and 15 of the Government of India's letter.*—The Draft Convention provides for the payment by the employer of an indemnity in the shape of payment of the contracted wages to a seaman until he obtains fresh employment up to a limit of 2 months' wages. In regard to this question, the Bengal Chamber of Commerce hold the opinion that a seaman should be entitled to his wages from the time of the loss of the ship until he reaches his home port, and further that some fixed allowance should be given him for the loss of his effects. The Chamber object to the payment of wages up to two months on the ground that the majority of Indian seamen on return to their original port leave for their homes, where they stay for some time spending their accumulated wages or working in their villages. The Shipping Master, Calcutta, suggests that the seamen's wages should continue until their arrival back at their home port and that they should be compensated for the loss of effects, if any, in the shape of one month's wages, but that no remuneration should be allowed for loss of employment. The Governor in Council accepts the suggestion of the Shipping Master, Calcutta, as being a fair arrangement, subject to the reservation proposed by the Government of India that it should be confined to the classes of vessels mentioned in paragraph 14 of their letter.

11. *Draft Convention for establishing facilities for finding employment for seamen—paragraphs 16 and 17 of the Government of India's letter.*—The Bengal Chamber of Commerce are of opinion that the present system of engaging seamen, either through licensed shipping brokers or through the machinery set up by the shipowners themselves under their own serangs, cannot be easily improved upon. The Chamber contend that the men are quite satisfied and, although the ship owner has to pay the broker's fee in cases of engagement through the shipping brokers, he is also satisfied. Under existing conditions Indian seamen usually sign on in groups under a serang who is generally a resident of the same village. The serang keeps in touch with the brokers at the sea ports and arranges for the men to arrive at the port at the required time. The establishment of labour bureaux at the ports would mean that seamen would often have to remain at the port, where the cost of living is high and quarters unobtainable. It might impose on Government the burden of providing homes for seamen while waiting for their ships. The

present system suits the habits of the Indian seaman and the Chamber of Commerce do not believe that he would derive any benefit from a change. They are accordingly in favour of the retention of the existing arrangement. The Shipping Master, Calcutta, is entirely in agreement with these views and he recommends the continuance of the present system as being one which cannot be improved upon and which is satisfactory to both the employers and the employees.

The question of improving the present system of engaging seamen has from time to time been considered by this Government in connection with complaints regarding the levy of illegal fees at the time of engaging the seamen. The Government of Bengal, on enquiry, have usually found these complaints to be groundless. In this connection, I am to invite a reference to the opinion already expressed by this Government in their letter* No. 2369-Mne., dated the 27th September 1918, on the subject, in which the question of a change in the existing practice relating to the engagement of seamen was fully discussed. The enquiries made in 1918 failed to establish the existence of any serious abuses in connection with the present system, and no definite complaints have been made since, although, under the orders contained in Mr. Elliott's letter* No. 12606, dated the 11th November 1918, the Shipping Master was instructed carefully to observe the practices of individual serangs and butlers in making up crews and to check any abuse. A body styled the Indian Seamen's Union has, however, recently made general allegations of the existence of abuses, and has asked that it should be given a license for the engagement of seamen. The Shipping Master reports that the Union has only a small membership, and that none of the seamen employed by the principal shipping concerns belong to it. A further enquiry is being held into the Union's allegations and claims, but as this reply is already overdue, it is undesirable to delay it further. The Government of India will be addressed again on the subject, if necessary. As at present advised, the Governor in Council adheres to the opinion expressed in 1918, and does not recommend any change in the present system. If employment offices were established, the State would have to assume responsibility for their management, but the State would have to work through Sardars, and this would be no improvement on the present system.

* Not included in this Bulletin.

In existing conditions, it is impossible to dispense with the employment of middlemen in some form. It is admitted by the Government of India that the present system is free from flagrant abuse, and it would be doubtful policy to substitute another system, which would be equally liable to abuse and which would at the same time involve costly and probably inefficient State intervention. For these reasons, the Governor in Council is of opinion that the Draft Convention should not be ratified at present.

Enclosures to the letter from the Government of Bengal

I

No. S.-591, dated the 9th March 1921

FROM—The Shipping Master, Calcutta,

TO—The Secretary to the Government of Bengal, Marine Department

In reply to your letter No. 580-Mne., dated the February 15th,

Messrs. James Finlay and Company
 Messrs. Jardine Skinner and Company
 Messrs. Mackinnon Mackenzie and Company
 Messrs. Hoare Miller and Company
 Messrs. Graham and Company
 Messrs. Gladstone Wyllie and Company
 Messrs. Turner Morrison and Company

1921, I have the honour to inform you that at a meeting of representatives of all the principal shipping firms noted in the margin, and of the steam, firemen and saloon departments, the various points were fully discussed and the following are the opinions of the employers and the employees, with all of which I agree.

- (1) Draft Convention regarding minimum age for admission of children to employment at sea:—That the minimum age be sixteen years.
- (2) Draft Convention regarding unemployment indemnity in case of loss or foundering of the ship:—That the seamen's wages should continue until their arrival back at their home port, and that they be compensated for their effects, if lost, (one month's pay being suggested) but that no remuneration for loss of employment be given.
- (3) Draft Convention regarding facilities for finding employment for seamen:—Unanimously agreed that the present system could not be improved on, and was satisfactory to employers and employees.

II

No. S.-683, dated the 14th March 1921

From—The Shipping Master, Calcutta,

To—The Secretary to the Government of Bengal, Marine Department

In reply to your letter No. 589-Mns., dated the 15th February 1921, I have the honour to report that a conference has been held at which representatives were present, both of the liner companies and of the seamen, and the questions arising from the Draft Convention regarding the hours of employment at sea were fully discussed.

The liner representatives unanimously agreed that they were opposed to even consider the 8-hour-day suggestion, and the seamen's representatives expressed themselves as being satisfied with the present working hours.

In my opinion the hours of employment for Indian-manned vessels need no revision, and it can be safely left to the discretion of Masters of ships, against whom in this respect there have been no complaints made in the past.

The present usual working hours of deck crews exceed the 8-hour-day or 48 hours week by a very small margin; they being

Mondays to Fridays	. . . . .	9 hours per day
Saturday	. . . . .	6 .. "
Sunday	. . . . .	3 .. "

TOTAL HOURS PER WEEK 54.

In the engine room, where, in the majority of vessels, three-watches are kept, the disparity is a little greater; eight hours being the average day's work, with an extra hour three or four times a week, or averaging a 60 hours week.

In the saloon department, owing to the nature of their duties, the hours of work must necessarily be greater, and at present the average daily hours worked is 10, giving a 70 hours week which it would be difficult to decrease.

The saloon department have the advantage of an unbroken night's sleep every night, and usually a couple of hours' rest in the afternoon.

III

No. S.-211, dated the 12th March 1921

From—The Shipping Master, Chittagong,

To—The Secretary to the Government of Bengal, Marine Department

I have the honour to invite reference to your letters Nos. 581-Mne., and 590-Mne., dated the 15th February 1921, forwarding a copy of Draft Conventions and Recommendations regarding employment at sea adopted by the International Labour Conference held at Genoa from the 15th June to the 10th July last, and requesting for an expression of my views on the subject in communication with the workpeople concerned.

2. I beg to state that there is no regular shipping and discharging of seamen at this port. When the crew of a ship is paid off, they invariably leave for Calcutta on the same night as they are paid off.

There are no reliable representative men from the deckhands, engine-room and saloon crews at Chittagong to move in the matter.

All seamen joining ships here (except native craft) are sent from the Calcutta Shipping Office. There are no seamen's boarding houses at this port and it is not recognized as a shipping and paying off port by the Indian seamen.

As regards the crew employed under the Port Commissioners, Chittagong, I beg to state that none of them work over 8 hours per day, and, if they do so, they are paid for overtime. From enquiries made, it is ascertained that they do not seem to have anything to do with outside societies.

No children are sent to sea from this port nor have I heard of any on the steamers calling here.

IV

No. G.-2661
C.-2463, dated the 10th March 1921

From—The Managing Agents, India General Navigation and Railway Company, Limited and the Agents, River Steam Navigation Company, Limited,

To—The Secretary to the Government of Bengal, Marine Department

THE INTERNATIONAL LABOUR CONFERENCE

We have the honour to acknowledge receipt of your letter No. 585-Mne., dated 15th ultimo, with its enclosures.

Since receipt of your letter we have received a communication from the Port Officer of Calcutta, dated 28th idem, in which a 60 hours a week limit in respect of inland vessels is indicated as the provisional views of the Government of India, and in respect of which we are asked to give our views. These are clearly stated in our reply of date to the Port Officer, a copy of which we beg to send you herewith.

V

Dated the 21st March 1921

FROM—The Managing Agents, Bengal Assam Steamship Company, Limited,

To—The Secretary to the Government of Bengal, Marine Department

Your No. 1025 of 19th March 1921.

We are in agreement with the Joint Steamer Companies' views which we believe have been already communicated to you.

VI

No. 2297, dated the 24th March 1921

FROM—The Port Officer of Calcutta,

To—The Secretary to the Government of Bengal, Marine Department

With reference to the correspondence accompanying your letter No. 591-Mne., dated the 15th February last, regarding the limitation of hours of work on inland vessels, I have the honour to submit for the information of Government the views expressed by the principal inland companies on the Recommendation, and to state that I am in agreement with their opinions and consider it will be most difficult, in fact practically impossible, to administer any question of limitation of working hours on board vessels employed in the inland waters of Bengal.

2. The Joint Steamer Companies, River Steam and India General Navigation Companies have no organization through which the corporate views of their crews could be obtained. A number of Serangs of inland vessels, both deck and engine-room, were sent to this office for their opinion on the question and stated that the average duty on some launches is 12 hours and on ferry steamers 7½ daily. In addition the employees of the Port Commissioners

receive one month's leave with full pay every year, and consider that 60 hours a week is fair and reasonable for average duty.

3. With reference to paragraph 3 of your letter, I am of opinion that the definitions of the expressions 'Inland Water' and 'Indian Steam Vessels' as inserted in paragraph 8 of the letter from the Government of India will be sufficient for the purpose mentioned in that letter.

No. 15919, dated Calcutta, the 15th March 1921

FROM—Messrs. HOARE MILLER and Company, Limited, Managing Agents,
To—The Port Officer, Calcutta

INTERNATIONAL LABOUR CONFERENCE

In acknowledging your favour of 28th ultimo, we have to say that we not only fail to see why it is necessary to introduce a 60 hours limit of work on inland steamers, but we cannot conceive any practical method of procedure by which such a system could be successfully operated.

The existence and methods of work of a factory hand in an English town differ so radically from those of a lascar on an Indian river that it is impossible to imagine any method of placing them on a common basis, even if a reason for so doing actually existed. We cannot see any such reason.

The immediate result of such an attempt would be to foster discontent amongst a class of labour which is at present contented and certainly not overworked. We may cite a few problems which present themselves.

What does a sixty hour week mean? Does it mean 60 hours a week during which a man's hand is actually on a job? A factory hand works from the time his factory opens till it closes; a lascar lives on his steamer and works as jobs come to hand. In order to ascertain how many hours work any one lascar did *per diem* it would be necessary to have a checker for almost every lascar, and since presumably the checking staff would be entitled to overtime, the time that they worked would also have to be checked by others till the thing was reduced to an absurdity.

The next point that occurs is that such a measure would immediately interest all the Indian crew on board a steamer in bringing their steamers in late and thus securing overtime. In order to coun-

ter this it would be necessary for the agents to have on board persons sufficiently well acquainted with the technicality of machinery to be able to discover whether some alleged defect in machinery which caused the steamer to be late was true or not.

In the same way as stated above these persons would themselves be interested in securing overtime and the result would be chaotic.

We could cite many more instances which in our opinion would render the practice suggested utterly impracticable, and we would point out that, even when possible to maintain such a system, the result would not only cause discontent amongst the class hitherto contented, but enormously increase the working costs on account of the wages of travelling checkers, and very largely reduce the accommodation on account of the space occupied by these travelling checkers.

The immediate result of increased working costs would increase the fares, the burden of which will fall on the public. We regret that the only conclusion that we can draw is that the measures suggested are both unnecessary and impracticable.

Dated Calcutta, the 21st March 1921

From—Messrs. Bengal Assam Steamship, Company, Limited,

To—The Port Officer of Calcutta

THE INTERNATIONAL LABOUR CONFERENCE

Your No. 2165, of 18th instant to hand.

As we are in full accord with the views expressed by the Joint Steamer Companies, Messrs. The River Steam Navigation Company and the India General Navigation and Railway Company, Limited, in their letter No. 2560 of 10th instant addressed to you, there is no need for us to go further into the matter.

No. ^{G.-2560}
_{C.-2463}, dated Calcutta, the 10th March 1921

From—Messrs. The India General Navigation and Railway Company,

To—The Port Officer, Calcutta

THE INTERNATIONAL LABOUR CONFERENCE

We have the honour to acknowledge the receipt of your letter No. 1337, dated 28th ultimo and in reply to furnish you with our

views in the matter of the proposal to limit hours of work on inland vessels to 60 hours a week.

In putting forward the proposal for a 60 hour week on inland steamers the Government have omitted to state whether in doing so

- (1) working hours are intended to cover the period during which the men are liable to be called upon to perform certain duties, or whether
- (2) working hours refer to the time only during which the men are actually working.

If the intention is to formulate certain regular hours daily amounting in all to 60 hours weekly, during which the services of the men are at the command of the employer, the proposal, so far as Inland steamers are concerned, is impracticable, as the work is irregular and spasmodic, the working hours depending on conditions of service, tides, fog and channels.

It will also entail the entire reconstruction of the system of employment, and the scrapping of a system which in the past by its very elasticity has proved most successful.

Under existing conditions the serangs and engine drivers are responsible for their respective staffs who are engaged by them direct, and unless Government are prepared to hold these officers directly responsible for the due performance of any regulations introduced, we fail to see how it is proposed to enforce such regulations.

If the intention is that the hours during which the men actually work be restricted to 60 hours weekly, we are of opinion that the only result of such a measure would be to necessitate the employment of a clerical staff on each steamer to keep accurate account of all work done by each individual employee, and prove a fact with which we are already familiar, that the average working hours of our employees is much below the 60 hours suggested.

A reference to the figures of the past two years, 1919-20, shows that the average running time of our steamers is 10 hours daily, and with two sets of men employed, as at present, works out at 5 hours daily, provided the work is allotted evenly.

In addition to the above the engine-room crew and the navigating staff work about two hours daily doing necessary petty repairs or other odd jobs, making a 7 hours day or 49 hours week.

As regards the lascars not engaged upon the navigation of the steamer, their work is difficult to calculate, being dependent on whether the steamer is on a passenger or a cargo run, and in many cases entails practically no work for days on end, with periods of a few hours rush and then a long spell, but in no case does it, in our opinion, approach an average of 60 hours weekly.

The existing system allows the men to perform their religious ceremonies, or to arrange their food in groups, according to their various prejudices, or to relieve or assist each other as suits their natural inclination or physical stamina without prejudicing the work of the vessel.

It is only necessary to compare these conditions with those of the workers in any European factory to convince one of the favourable conditions of service under which the crews of an inland vessel work.

The average European factory worker on a 48 hours week is in the factory from 8 A.M. to 5 P.M., in addition to which he probably spends 2 hours daily going to and from his work, so that he spends 66 hours weekly incidental to his labour, against something under 50 hours in the Indian inland steamer services.

With the exception of the firemen, the work on our inland steamers is of a healthy open-air and agreeable nature, and cannot be compared to the 8 hours continuous grind in a factory.

To fix regular hours might readily prejudice the safety of a vessel, as in cases of emergency it would be optional for the balance of the crew, not on duty, to turn out to assist in getting the vessel afloat and into safety, and, provided overtime were paid, it would be to their advantage to delay as much as possible the work of recovery.

Whilst we have every sympathy with any well-intentioned proposal to ameliorate labour conditions where a necessity for amelioration exists, we respectfully beg to deprecate the introduction of a new element to a regime under which labour is perfectly contented.

We trust that you will accept these views as a sufficient recommendation that the proposed limitation of hours of work on inland vessels need not be further considered.

Dated Calcutta, the 14th March 1921

FROM—Messrs. Calcutta Landing and Shipping Company, Limited,
TO—The Port Officer, Calcutta

THE INTERNATIONAL LABOUR CONFERENCE

We have the honour to acknowledge receipt of your letter No. 1337, dated the 28th ultimo, and beg to furnish you with our views on the proposal to limit the hours of work on inland vessels to 60 hours a week.

The Company has four launches. Two are engaged in towing boats during the day about the harbour, and as the work is spasmodic, they are employed on an average below 60 hours a week.

The other two are manned by a double crew and are fitted with search lights to enable them to work at night if necessary. They are principally engaged in towing boats to and from the mills, and share the night work between them, by only one launch towing alternately at night. Each of the launches, therefore, works on an average 15 hours a day with a double crew, which represents 7½ hours' work for a single crew.

This arrangement allows the men to observe their religious ceremonies and to arrange the food in groups according to their various prejudices, or to help each other as suits their inclination, without prejudice to the work of the vessel.

With the exception of the firemen, the work on a launch is an open air life and is not to be compared with an 8 hours' toil in the confined atmosphere of a factory.

While we are in sympathy with any proposal to assist labour conditions, where a necessity exists, we respectfully beg to deprecate the introduction of a change in the existing conditions of work under which labour is perfectly contented and happy.

VII

No. S-844, dated the 29th March 1921

FROM—The Shipping Master, Calcutta,

TO—The Secretary to the Government of Bengal, Marine Department

In reply to your letter No. 935-Mne., dated the 14th March 1921, and its enclosures, I have the honour to inform you that the whole question of the methods of recruiting seamen was gone into at the

meeting held under circumstances already reported to Government in my letter No. S.-591, dated the 9th March 1921, and that it was unanimously agreed by all the liner representatives present that the present system by means of the licensed shipping brokers, the Shipping Office, and their own office machinery could not be improved upon.

The men's representatives also expressed themselves as satisfied with that system and none but a very few anonymous complaints have ever been received.

It is my opinion that, were labour exchanges introduced, they would tend to increase rather than to diminish whatever bribery exists by reason of the increase in the number of subordinates and clerks which setting up these exchanges would involve.

- Also the employment of persons such as the shipping brokers and the *ghat* serangs would still be necessary under labour exchanges to keep the latter in touch with the men and the men in touch with the requirements of shipping.

I can foresee no benefit to the men by the introduction of any other system than that which at present exists.

VIII

No. 836-1921, dated the 2nd April 1921

From—The Secretary to the Bengal Chamber of Commerce,

To—The Secretary to the Government of Bengal, Marine Department

I am directed to acknowledge the receipt of your letters Nos.

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| <p>(1) Draft Conventions and Recommendations adopted by the Conference</p> <p>(2) Answers by Government of India to questionnaire issued by the Conference</p> <p>(3) Proposed Draft Convention (not adopted) limiting working hours on board ship</p> <p>(4) Description of the organizations for the supply of seamen in the United Kingdom and Norway</p> | <p>582-Mne., and 587-Mne., dated 15th February 1921, with which you forward copies of the marginally cited papers, with reference to the Draft Conventions and Recommendations adopted at the second meeting of the International Labour Conference held at Genoa from the 15th June to the 10th July 1920.</p> |
|--|---|

2. You ask the Chamber to consider, and to express an-opinion upon the following:

- (a) Draft Convention regarding the minimum age for the admission of children to employment at sea;

- (b) Draft Convention regarding unemployment indemnity in case of loss or foundering of the ship;
- (c) Draft Convention regarding facilities for finding employment for seamen;
- (d) Proposed Draft Convention (not adopted) for limiting the hours of work on board ship to 8 hours in the day and 48 hours in the week;
- (e) Recommendation concerning limitation of hours of work in inland navigation.

3. The Committee instruct me to submit the following remarks upon the questions raised in these papers:

- (a) *Draft Convention regarding the minimum age for admission of children to employment at sea.*—Article 2 of this Draft Convention fixes the minimum age for the employment of children on board ship at fourteen. The Chamber does not take exception to this, but I am to point out that Indian boys are occasionally taken to sea by their relations—serangs for instance. This practice works well, and any interference with it would be greatly to be deprecated.
- (b) *Draft Convention concerning unemployment indemnity in case of loss or foundering of the ship.*—It is provided by this Convention that an indemnity against unemployment shall be paid to a seaman whose ship has been lost or has foundered. The indemnity is to be paid for the days during which the seaman remains unemployed; and it is to be at the same rate as his wages, but it may be limited to a sum equal to two months' wages.

The Chamber is of the opinion that a seaman should be entitled to his wages from the time of the loss of his vessel until he reaches his home port; and, further, that some fixed allowance should be given him for the loss of his effects. But they do not agree that he should be paid wages for two months (if he has not found employment in the meantime) as is proposed by the Convention. For, as is suggested in paragraph 4 of your No. 582-Mne., the majority of Indian seamen, on their return to their original port, leave for their homes, where they stay for some time spending their accumulated wages or working in

their villages. When they are again in need of funds they return to the port to seek further employment at sea.

(c) *Draft Convention regarding facilities for finding employment for seamen.*—With reference to this Convention, it is, I am to say, the opinion of the Chamber that the present system of engaging Indian seaman, through Indian shipping brokers appointed by the local Government, could not be easily improved upon. The men are quite satisfied, and although the shipowner has to pay the broker's fee he is satisfied also. Indian seamen generally sign on in groups under a serang who is often a resident in the same village. The serang keeps in touch with the brokers at the sea ports, and arranges for the men to arrive at the port at the required time. The establishment of labour bureaux at the ports would mean that seamen would often have to remain at the port, where the cost of living is high, and quarters often unobtainable. It might even involve the possibility of Government being forced to provide homes for seamen while waiting for their ships. The present system suits the habits of the Indian seaman; and the Committee of the Chamber do not believe that he would derive any benefit from a change. They accordingly recommend that the system be retained.

(d) *Proposed Draft Convention (not adopted) for limiting the hours of work.*—Although this proposed Convention was not adopted by the Conference, there is no objection, you state, to the question of limitation being examined now, in the light of the views held by shipowners and seamen generally in this country. For you go on to say that the British Labour Party has already proposed to amend the English Merchant Shipping Act of 1894 on the lines of this Convention. It is obvious that the payment of overtime would be unavoidable if an 8 hour day and a 48 hour week were introduced, and opinion in shipping circles in Calcutta is distinctly opposed to any restriction which would necessitate the payment of overtime. For such a system would unavoidably lead to friction, as between the seamen and the executive

staff, with the result that discipline would be weakened. It is believed to be a fact that Indian seamen are perfectly satisfied with the existing hours of work, and that they do not press for, or even want, a change. That this is their attitude was clear from a statement made by representative seamen at a meeting held on the 4th March 1921 at the office of the Calcutta Shipping Master. It is very undesirable, therefore, that any attempt should be made to introduce restrictions; and it seems to the Chamber that the object of the British Labour Party is really to force British owners to abstain from employing Indian seamen. This attempt ought to be resisted, and the Committee of the Chamber think that, when dealing with proposals put forward at the instance of European labour, the Government of India should give first consideration to the rights of the lascars to be employed on their own terms on steamers trading to India.

- (e) *Recommendation concerning the limitation of the hours of work in inland navigation.*—In regard to this Recommendation, the Committee of the Chamber agree with, and support, the views expressed by the India General Steam Navigation and Railway Company, Limited and the Rivers Steam Navigation Company, Limited, in their letter, dated 10th March 1921, to the Port Officer of Calcutta. To introduce a limitation in the working hours of the crews of inland vessels would seem to be both unnecessary and impracticable; and the Committee hope that any such attempt will be resisted by the Government.

BURMA

No. 999—4 S.-8, dated Rangoon, the 28th March 1921

FROM—W. B. BRANDER, Esq., C.B.E., I.C.S., Secretary to the Government of Burma,

To—The Secretary to the Government of India, Department of Commerce

I am directed to refer to your letter No. 16, dated the 4th January 1921, forwarding copies of three Draft Conventions and four Recommendations concerning employment at sea adopted by the General

Conference of the International Labour Organization at its second session held at Genoa from the 15th June to the 10th July last.

2. Before dealing in detail with the various questions raised in the Government of India's letter, the Lieutenant Governor considers that the time is not inopportune to suggest that the apparently very prevalent idea that only through legislative activities on the part of Government can social inequalities be removed and conditions of employment be improved requires careful consideration. A perusal of the Draft Convention and Recommendations leaves him with the conviction that the proposals made for the limitation of hours of work, for fixing the minimum age for admission of children to employment and for granting unemployment insurance to seamen, if they had been advanced some years ago, would have been condemned on the ground that the inevitable result would be not only a serious encroachment upon the liberty of the subject, but a serious interference with the growth and expansion of industry. While His Honour has every sympathy with the efforts that modern Governments are making to improve the conditions of the labouring classes, he is inclined to view with suspicion suggestions which, in his opinion, can only spell in the long run disaster to those very classes for whose amelioration it is desired to take action. Reports from the United Kingdom make it abundantly evident that unemployment is general because it has been impossible to fit in to the industrial system theories regarding periods of labour and amounts of wages in such a way as to secure an economic equipoise. Cases have come to light in which wages have actually been more than reduced by the amount of increases recently sanctioned, owing to the fact that the industries concerned have had to work short time. Shipping has been disorganized by measures very similar to those which it is proposed to introduce into India. Costs of production have been raised to a point at which the commodities produced become unsaleable, and the present day disorganization of industry is, in the Lieutenant Governor's view, largely the outcome of the belief that Governments are a better judge of what is in a man's own interest than he is himself. The riotous extravagance of social legislation neglects the fundamental fact that, as few men are prepared to do more work than they need do, shorter hours and higher pay, if combined, can lead only to industrial stagnation.

3. From this point of view many of the suggestions made at the Genoa Conference are not likely to be of any material value

in improving Indian labour conditions, nor does it appear that any demand exists in India itself for the variety of restrictions which it is suggested should be introduced by means of legislation. The Indian labourer has not the same capacity for concentrated and prolonged toil as his European confrère. Statisticians have, over and over again, proved that, although his wages may be small, his labour is dear, because many workers are required in this country where few would be employed in western countries. In this connection His Honour notes with approval the remarks made by Mr. S. A. Smyth, Commissioner of the Irrawaddy Division, to the effect that "the labour system of a country, in the same way as its political system, must be framed to suit the country itself. If long hours and light work suit the Indian lascar, it is unfair to reduce his efficiency by limiting his hours of work because short hours of intensive work suit the British seaman."

4. That the Government of India have recognized the inadvisability of proceeding too fast and of being hustled along the lines laid down by the Genoa Conference is apparent from their decision to postpone consideration of the proposal to fix the hours of labour at sea until a settlement in respect of the period of work on board ships has been reached at home. With their view, too, in regard to the limitation of the hours of work in the fishing industry, His Honour is also in agreement. In Burma, there is practically no deep-sea fishing and the fishing industry is mainly of the village type. A fisherman owns a boat and employs a few fishermen to man it. The catch is generally sold to a middle-man who arranges for its transport to the nearest town. These fishermen engage in their labours at times when they think they are likely to make a catch. They keep a careful watch upon natural phenomena; and legislation which would curtail their operations to so many fixed hours a day or week would, even if it were desirable to introduce it, be almost impossible to enforce. Again, in Burma the fishing industry is very often confined to what may be called land operations. The estuaries and the *sheets* of the country provide the greater proportion of the fish sold within its borders, and so scattered are these fishing operations that it would be impossible to make applicable to those engaged in this kind of work any recognized system of control.

5. Much the same arguments apply to the Recommendations concerning the limitation of hours of work in inland navigation

Steamers, launches, motor vessels of all sizes, pass to and fro through the innumerable creeks of the Delta and up and down the great navigable rivers of the province. Difficulties in navigation frequently present themselves which involve the necessity of working during several days in the week for longer periods than those it is proposed to prescribe. Careful enquiries have been made by the Port Officer at Moulmein, who reports that, after studying the log books of the inland steam-vessels belonging to Messrs. the Irrawaddy Flotilla Company, Limited, he has come to the conclusion that ordinarily a 60-hour week limit would not affect the existing system prejudicially. This is confirmed by Messrs. the Irrawaddy Flotilla Company themselves, who write that if the term 'working hours' includes only the time during which an employee is actively engaged in work, the hours of labour are well within the 60-hour week. The Port Commissioners of Rangoon state, that seldom are their launches actually under weigh for more than 60 hours per week. On the other hand, the Port Police and Survey launches have to be at work for longer periods than this, but here the question of urgent necessity seems to preclude any definite limitation of hours. It would not be in the interest of administration if the crew of a Port Police launch who had been at work for 60 hours during any one week could not be employed on the last day of of the week when their services were urgently required. As conditions then are not such in this province as to render it essential to restrict hours of labour by legislation, the Lieutenant-Governor would prefer to defer action until the necessity is established, and he is confirmed in this view by the protests of the Irrawaddy Flotilla Company, who observe that, since the Delta of the Irrawaddy is navigated by thousands of native manned boats of all descriptions, they hold that any legislation limiting the working hours of native crews on steam-vessels should also apply to these crafts. Otherwise the steam-vessel would be unfairly handicapped. This they consider important. Inland steamers in this country are manned on a generous scale, and in their opinion crews are not over-worked, nor do they recollect ever having received any serious complaints on these grounds. They are inclined, therefore, to think that it is less the alleviation of hours of labour than the means of obtaining increased remuneration by means of overtime that will appeal to the native rating. This point of view, they would respectfully suggest, should be borne in mind in the event of new

legislation being introduced. If, however, it is intended to introduce the proposals outlined in paragraphs 8 and 9 of the Government of India's letter, His Honour is prepared to accept the definition of 'Inland Water' and 'Inland Steam-vessel' contained in the Inland Steam-vessels Act, 1917, as sufficient for the purpose of any legislation that may be introduced. While he agrees that all forms of inland navigation, other than navigation by 'Inland Vessels' as defined in the Inland Steam-vessels Act, 1917, should be excluded from consideration because of the difficulties in the way of imposing a limit of working hours for small craft, in the light of the remarks made by the Irrawaddy Flotilla Company he considers that it is essential that any provisions for payment at enhanced rates for work done in excess of a fixed limit should be as little burdensome as possible.

The Port Commissioners of Rangoon suggest for consideration the question as to what actually constitutes working hours. They think that it will be necessary to lay down whether time under weigh, or time ready for duty must be included, as the crews of river craft in Burma are generally composed of men from India who have no families with them and who live on board their vessels. They, therefore, as well as the Irrawaddy Flotilla Company, represent the utmost importance of a specific and clear definition of the term 'working hours.' This difficulty might be got over by declaring that the 60-hours limit shall only include time under weigh.

As for the alternative suggested by the Government of India to paying overtime, His Honour agrees that it will probably be difficult to enforce the provision of a penalty for any master who, except in case of emergency, required any member of the crew of his vessel to work more than 60 hours in a week.

6. The Recommendations concerning the establishment of a National Seamen's Code and concerning unemployment insurance the Government of India do not propose to accept. The codification of the Indian law regarding Merchant Shipping must certainly precede the compilation of any special code relating to the rights and obligations of seamen, and unemployment amongst seamen in India has not reached that acute stage at which it might be necessary to introduce a complicated system as a measure of relief.

7. Provided that the Draft Convention fixing the minimum age for the admission of children to employment at sea is not made applicable to fishing boats, and provided that the Indian custom

of sending young boys to sea on nominal wages in the charge of their relatives is not interfered with, no objections have been or are likely to be raised in Burma against the fixation of a minimum age. His Honour presumes that it is not intended to impose the age of 14 as a minimum in respect of employment on inland steam-vessels.

8. The two Draft Conventions, one concerning unemployment indemnity in case of loss or foundering of a ship and the other for establishing facilities for finding employment for seamen, are to this extent dependent, that if public employment bureaux are not established it will not be possible to grant an unemployment indemnity. His Honour is disposed to agree with the Principal Port Officer, Burma, that any hardship to Indian seamen that arises through the cessation of their wages from the date of the loss of their vessel might be mitigated by a provision entitling them to the payment of wages up to the date of their arrival at their home port or port of engagement to which owners are bound to repatriate them.

9. As regards the creation of employment bureaux, the Principal Port Officer, Burma, makes certain observations which are deserving of consideration.

He writes as follows:

“Indian seamen will seldom join a vessel without receiving an advance of one month's pay, and, under the present system, the licensed Shipping Broker disburses this to them in full, standing surety in consideration of the $7\frac{1}{2}$ per cent. commission he receives from the owners on disbursement. He is paid no fee for finding employment for a man. If, on the other hand, men receive work aboard ships through a Public Employment Office, it is unlikely that Masters would make advances, except by the 'Advance Note' system, in endeavouring to cash which the seamen might fall a prey to the class from whom it is desired to protect them.”

In Burma, all arrangements for employment are made by the Government Shipping Office which provides all the facilities found necessary here. No need exists for any form of bureau other than this, and His Honour is disposed to doubt whether employment offices could be organized and maintained by joint committees

of shipowners and seamen in this Province. It is understood that the ship brokers system, to which a reference is made in paragraph 17 of the Government of India's letter, has not led to abuses which require immediate action, and His Honour would be disposed to defer ratification of the Convention regarding the establishment of unemployment agencies until it had been proved that such are necessary or until the existing system has been found to be insufficient to meet the requirements of seamen seeking employment.

10. In conclusion, I am to state that no clear necessity has been established for the introduction into Burma of any of the restrictions or forms of control recommended by the Conference, and His Honour would again repeat his opinion that the ratification by the Government of India of these Conventions and their acceptance of the Recommendations, without substantial modification, may, in the long run tend prejudicially to affect the existing economic system, and to bring in their train consequences which may be far more disastrous than any which may be supposed to ensue from their non-adoption.

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No. 26

THE
**THIRD INTERNATIONAL LABOUR
CONFERENCE**

[GENEVA, 1921]

BY

A. G. CLOW,

F.S.S., I.C.S., Controller, Labour
Bureau, Government of India.



Published by order of the Government of India

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1922

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INTRODUCTION

BULLETINS 4, 10 and 17 of this series trace the progress of the International Labour Organization up to the conclusion of the second Conference, held at Genoa in 1920. The present bulletin brings the history of the organization up to the close of 1921 and includes the decisions reached at the third Conference, held at Geneva. The account of the Conference given in this bulletin is taken chiefly from an article by the author in Volume II, Part I of the *Journal of Indian Industries and Labour* published in February, 1922.

BULLETINS
OF
INDIAN INDUSTRIES AND LABOUR

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1922

[June

**THE THIRD INTERNATIONAL LABOUR CONFERENCE [GENEVA,
1921]** BY A. G. CLOW, F.S.S., I.C.S., *Controller, Labour
Bureau, Government of India.*

THE AGENDA OF THE CONFERENCE

The following items were on the Agenda of the Conference as originally circulated :—

1. Reform of constitution of the Governing Body of the International Labour Office.
2. Adaptation to agricultural labour of the Washington decisions concerning the regulation of the hours of work.
3. Adaptation to agricultural labour of the Washington decisions concerning —
 - (a) measures for the prevention of or providing against unemployment;
 - (b) protection of women and children.
4. Special measures for the protection of agricultural workers :—
 - (a) technical agricultural education ;
 - (b) living-in conditions of agricultural workers ;
 - (c) guarantee of the rights of association and combination ;
 - (d) protection against accident, sickness, invalidity and old age.
5. Disinfection of wool infected with anthrax spores.
6. Prohibition of the use of white lead in painting.

7. The weekly rest day in industrial and commercial employment.
8. (a) The prohibition of the employment of any person under the age of 18 years as trimmer or stoker.
(b) Compulsory medical examination of all children employed on board ship.

During the summer of 1921, questionnaires were issued by the International Labour Office relating to each of the subjects on the Agenda. Provisional replies were sent by the Governments of the different States to these questionnaires, and on the basis of these replies the Labour Office prepared draft proposals for the Conference. The second item was deleted from the Agenda by a decision of the Conference (see page 8). All the remaining items were discussed.

THE INDIAN DELEGATION

Each nation is entitled to send four delegates to the Conference. Two of these delegates represent the Government, one the employers and one the workers of the country. It is usual to discuss a variety of subjects at each session : the subjects on the agenda for Geneva included items dealing with various aspects of agricultural labour, certain maritime questions, measures for the prevention of anthrax and poisoning due to lead in paints, weekly rest days, and the constitution of the Governing Body, which is the executive of the organization. It would be difficult for any country to find delegates capable of discussing every one of these subjects in detail. Consequently, the Treaty has provided that each delegate may be accompanied by two technical advisers for each item to be discussed. These advisers sit with the delegates in Conference, and an adviser, with the authority of the delegate, can act as a substitute for him, and address the Conference and vote if necessary. Large deputations, consequently, are possible, and at Geneva, Great Britain and Germany had each over thirty accredited representatives.

The Indian delegation was composed as follows :—

GOVERNMENT OF INDIA

Delegates—

Mr. A. C. Chatterjee, C.I.E., I.C.S., M.L.A., Secretary to the Government of India in the Industries Department.

Mr. J. N. Gupta, M.B.E., I.C.S., Officiating Commissioner, Burdwan, Bengal.

Advisers—

Mr. G. F. Paddison, I.C.S., Commissioner of Labour, Madras.

Lieutenant-Colonel F. H. G. Hutchinson, I.M.S., Public Health Commissioner with the Government of India.

Miss G. M. Broughton, O.B.E., I.E.S., Adviser, Labour Bureau, Government of India.

Mr. A. G. Clow, I.C.S., Controller, Labour Bureau, Government of India.

INDIAN EMPLOYERS.

Delegate—

Mr. N. B. Saklatwala, J.P., of Messrs. Tata Sons, Ltd., Bombay.

Advisers—

Mr. A. W. Dods, C.I.E., of Messrs. Burn & Co., Ltd.

Mr. J. K. Mehta, Secretary, Indian Merchants' Chamber and Bureau, Bombay.

Mr. H. Waddington, Secretary, United Planters' Association, Southern India.

Mr. A. U. Crowe, Indian Tea Association.

INDIAN WORKERS

Delegate—

Mr. N. M. Joshi, M.L.A., Servants of India Society, Bombay,
Member of Standing Committee of All-India Trade Union Congress.

Adviser—

Mr. B. P. Wadia, late President, Madras Labour Union.

Mr. D. Chaman Lal, Secretary, All-India Trade Union Congress, was also nominated as adviser to the workers' delegate, but was unable to go to Geneva.

The representatives of the employers were nominated by the Government of India on the recommendation of the Provisional Committee of the Federation of Indian Industries. The workers' representatives were nominated on the recommendation of the All-India Trade Union Congress Committee.

AN ACCOUNT OF THE CONFERENCE

Preliminary

The International Labour Organization was set up by the Peace Treaty. It represents an endeavour, by means of concerted effort between the nations, to improve the conditions of labour throughout the world. Just as it is impossible for any important country to reduce its scale of armaments without some guarantee that the other leading countries will do the same, so it is difficult for industry in any one country to adopt higher standards of safety and comfort for labour unless there is a reasonable expectation that other countries will fall into line. There are many reforms which can be introduced by general consent, but which are impossible for individual countries. To take an illustration on a very small scale, it would be possible for the shopkeepers in any city to adopt a weekly half holiday without incurring an appreciable loss of trade; but if one or two shopkeepers granted the half holiday, and the others did not do so, the generous shopkeepers would lose customers and their rivals would gain.

The work of the International Labour Organization centres in the annual conferences which are attended by representatives of those countries that are members of the League of Nations. The first session was held at Washington in November 1919, and the second at Genoa in June 1920. The third session, which was held at Geneva, lasted from the 25th October to the 19th November 1921. A brief account of the procedure will suffice here.

Procedure

Each of the subjects to be discussed is considered in detail by the International Labour Office during the year preceding the session of the Conference. Questionnaires are drawn up and the various Governments are invited to state their views. The answers received are then examined, and the Office then prepares draft proposals on the lines that appear to them to be most likely to secure approval when the Conference meets. These proposals are in the hands of the delegates of most countries some months before the Conference. The more distant countries are at a slight disadvantage in this

respect, for they have not the same time in which to examine the suggestions. It is partly to obviate this that the Japanese Government have set up an important office close to Geneva, which deals with communications from the International Labour Office.

Forty countries were represented at Geneva, sending 119 delegates and 236 technical advisers. It is clearly impossible for a Conference so composed to discuss any subject in much detail. The great majority of the representatives can have expert knowledge of only one or two subjects at most, and the size of the Conference itself and the short time at its disposal combine to make detailed discussion impossible. It is, consequently, the practice for the Conference, after disposal of the preliminary business, to set up small commissions, consisting usually of about twenty-four members, to discuss each subject. These commissions are elected by groups; the Government delegates, the employers' delegates and the workers' delegates each decide by ballot which countries are to be represented on each commission in each group. Thus, at Geneva, India obtained places in the Government group on 5 commissions out of the 8 appointed, 4 places in the employers' group and 4 in the workers'. The delegates of the countries concerned then decide who shall fill the places which have been secured, and as the commissions sit simultaneously, it is obviously important that the delegation should be large enough to fill the places. It may happen that a country which is keenly interested in a particular item fails to secure a place on the commission dealing with it. In that case it usually sends a representative to put its case before the commission: such a representative has, of course, no vote and can only speak by permission.

The basis of discussion for each subject in the commission dealing with it is usually the draft proposals prepared by the International Labour Office, but there is nothing to prevent a commission from adopting an entirely fresh line. The work of a commission may occupy anything from two or three days to a fortnight. At the conclusion of its work, it decides on the form of the Draft Conventions or Recommendations to be submitted to the Conference and presents these along with a report on its work. The Conference, after a brief discussion, adopts, modifies or rejects the proposals of the commission. In this discussion, as in the commissions, decisions are made by simple majorities. The approved proposals are then sent to a drafting committee to be cast in legal

language : on their return a final vote is taken, and in this a two-thirds majority is required for adoption.

It will at once be evident that, although legally all authority is vested in the Conference and none in the commissions, the commissions have, in practice, much more power than the Conference. The discussion in full Conference must necessarily be brief, and it is not possible to do more than review the chief features there. As a rule, proposals which have been defeated by very small majorities in the commission are brought up again in the Conference, and the decision of the commission is occasionally reversed. But the fact that each proposal will finally require a two-thirds majority makes it difficult for substantial amendments to be made in the commission's proposals. For example, in one instance the commission proposed a Recommendation and a proposal was made that the decision should take the form of a Draft Convention. This was carried by a majority of three votes in the Conference. The smallness of the majority made it evident that the Draft Convention would fail to obtain two-thirds of the final votes. The Conference was, therefore, compelled to go back on its own decision in order to avoid a failure to produce any decision at all. If substantial amendment of a commission's proposals in the Conference is difficult, the adoption of a new line is practically impossible. The result is that the real struggle takes place, as a rule, in the commissions, and those who succeed in carrying their point there have won much more than half the battle.

The opening discussions

The session opened with the election of Lord Burnham as President, and the delivery of several general speeches, including one from the President of the Swiss Confederation. The Conference then went on to a discussion of the agenda. Under Art. 402 of the Versailles Treaty it is open to any Government to object to any item on the agenda. When such an objection is filed the item disappears, unless a two-thirds majority can be obtained in the Conference for its retention. This was the first Conference at which agricultural items had been on the agenda, and the French Government filed an objection to the inclusion of these. This objection was based on doubts as to the competence of the Conference to deal with agriculture, and on the belief that the discussion of agricultural questions was inopportune. Two days were

occupied by a preliminary debate before the ground was cleared by a proposal to discuss first the question of the competence of the Conference; this resulted in a decision, by 74 votes to 20, that the Conference was competent to discuss agriculture. There followed a debate on the expediency of retaining the item relating to the hours of work in agriculture. The vote on this was taken at the close of the fourth session, and resulted in 63 votes for retention of the item and 39 against. The item, having failed to secure a two-thirds majority, accordingly disappeared. On the following day the other agricultural items, which were of a less controversial nature, were retained by comfortable majorities. It was also decided that the question of agricultural hours should be placed on the agenda of a future conference (see page 44).

There was then a lull in the work of the full Conference, for the commissions were set up and some days had to elapse before any of them was in a position to report. After the reports of the commissions began to come in, the Conference had to work over-time continuously in order to dispose of them, and a proposal was even made that the Conference should for itself give up the weekly day of rest which it was endeavouring to provide for the world's workers. The following paragraphs discuss the work undertaken by each commission and the consequent decisions finally adopted by the Conference. The decisions are embodied in Draft Conventions, Recommendations, or resolutions. Draft Conventions and Recommendations, if adopted, must be submitted to the authority competent to give effect to them in each country (usually the legislatures). The difference between the two is that each country has to decide whether it will ratify each Convention or not, and must carry out Conventions which it ratifies; there is no ratification of a Recommendation, and consequently no legal obligation to give effect to it. Consequently, Draft Conventions are usually definite proposals for legislation; Recommendations are more general in nature. Resolutions have no place in the treaty, and, in consequence, involve no legal necessity for further action.

I. First Agricultural Commission

This commission was appointed to consider questions of unemployment and insurance for agricultural workers. It produced—

- (a) a Recommendation on the prevention of unemployment (printed on page 35),

(b) two Draft Conventions concerning workmen's compensation (printed on page 22) and social insurance.

(a) The first proposal is in very general terms and merely asks Governments to consider certain measures suggested for the prevention of unemployment in agriculture. Some of these have long ago been introduced in India. In full conference the recommendation was adopted, although there was, strangely enough, strong opposition to the suggestion that co-operative associations of agricultural workers should be encouraged.

(b) The Draft Convention regarding social insurance was converted by the Conference into a Recommendation (printed on page 36). This and the proposal concerning workmen's compensation embody the same principle, viz., that on these questions laws which protect industrial workers should also cover agricultural workers. The principle is not one that is in itself objectionable, but in the form in which the proposals are cast they are rather short-sighted. For example, if India ratified the workmen's compensation Convention, it would be illegal for her to adopt any proposal for workmen's compensation for the Bombay mill-workers until she was prepared to do the same for agricultural workers in Orissa. The result would be to put the clock back instead of forward. Mr. Paddison, who represented the Government of India on this commission, pointed this out, but the proposals were adopted by large majorities.

II. Second Agricultural Commission

The subjects referred to this Commission related to the protection of women and children employed in agriculture and to living-in conditions of agricultural workers. The Conference, therefore, decided that the women delegates and technical advisers attending the session should be co-opted to this Commission. Their proposals included—

- (a) A Draft Convention concerning the admission of children to agricultural employment (printed on page 24).
- (b) A Recommendation concerning maternity (printed on page 37).
- (c) Two Recommendations concerning the night work of women, young persons and children in agriculture (printed on page 38).

(d) A Recommendation concerning the living-in conditions of agricultural workers (printed on page 39).

(a) The main principle of the Draft Convention, as adopted by the Commission, was that children under the age of 14 should not be kept at work (outside school) during the hours of compulsory school attendance, and in this form it was approved by the Conference. It was then sent to the Drafting Committee. When the draft came back from that Committee it was found that they had omitted all reference to compulsory school hours, except in the preamble, and the English text now implied that children were to be prevented from working during the hours of school attendance. No member of the Drafting Committee made any mention of the change, and it might easily have passed unnoticed in the press of business, had it not been that the French and English texts did not agree. The English text was hurriedly modified to read "hours fixed for school attendance" and the Draft Convention was adopted. The result is to leave the meaning doubtful, but the intention of the Conference was clear and the preamble definitely refers to "compulsory school hours."

(b) The Recommendation concerning maternity is to the effect that the protection afforded by the Draft Convention on the same subject adopted at Washington should be extended to agricultural workers. The only countries which have ratified the Washington maternity Convention are Greece and Roumania; and, in the opinion of the writer, the Commission would have been wiser had they examined the reasons for the failure of that Convention. They might have discovered the difficulties in the way of applying it and avoided these in their Recommendation, instead of advocating an extension of the previous scheme. The Indian representatives, Mr. Crowe, (who was vice-president of this Commission) and Miss Broughton, both urged a more practical view.

(c) These Recommendations enjoin, as regards agricultural workers—

- (1) 9 hours' rest for women, to be consecutive where possible.
- (2) 10 consecutive hours' rest for children under 14.
- (3) 9 consecutive hours' rest for young persons between 14 and 18.

It may be difficult to translate these principles into legislation. It is probable that in most countries all the persons referred to

normally enjoy the periods of rest prescribed, and the legislatures may consequently think it wisest to leave it at that.

(d) The Recommendation regarding living-in conditions is designed to secure official regulation of living-in conditions for agricultural workers. Here, again, the administrative problems involved in the enforcement of the Recommendation are considerable.

III. Third Agricultural Commission

This Commission had to consider trade union rights and technical education as applied to agriculture. They presented a Draft Convention on the first subject and a Recommendation on the second.

The Convention (printed on page 25) merely states that the rights of association and combination 'enjoyed by industrial workers should be extended to agriculturalists. Some discussion took place regarding the principle of 'the open shop,' and the Japanese Government delegate wanted to confine the operation of the Convention to agricultural workers, but the Convention was passed in the form originally suggested by the International Labour Office.

The Recommendation (printed on page 41) is a rather vague one designed to encourage the development of vocational education for agricultural workers.

IV. The weekly rest-day

The Commission produced—

- (a) A Draft Convention relating to the weekly rest-day in industry.
- (b) A Recommendation relating to the weekly rest-day in commerce.

(a) The Draft Convention (printed on page 26) is, in a sense, a corollary to the Draft Convention adopted at Washington relating to the hours of work in industry, which has already been ratified by India. But it avoids the rigidity of that Convention, for, after enunciating the principle that industrial workers should have a weekly day of rest, it goes on to permit governments, after consulting employers and workers, to exempt any class of workers whatever. The only check on this power is the moral

one imposed by the obligation to send a list of the exemptions to the International Labour Office, and by the publication of this list. Three additions were made, however, relating to matters of detail, and it was round these additions that all the controversy centred. These amendments provided—

- (1) that compensation should, if possible, be granted where the weekly rest-day is suspended or diminished. This does not apply to cases where the Government has granted complete exemption.
- (2) That Governments should state their reasons for granting exemptions.
- (3) That employers should be obliged to follow a certain procedure in making the rest-day known.

In full Conference the second amendment was omitted by a majority of two votes. The third clause remained and should not give much difficulty. But the first provision led to a keen controversy. It was declared by some (including Sir Montague Barlow, K.B.E., M.P., Government delegate of Great Britain) that if this clause were retained, it would render the whole Convention impossible to enforce. However, the workers group pressed for its retention, and two separate divisions gave small majorities in its favour. The Draft Convention was then passed, although the Government delegates from Great Britain (the country which has the most complete observance of the weekly rest-day) voted against it. If this clause is likely to prevent any country from ratifying, those who insisted on it were short-sighted, for it has little practical importance.

The Convention contains a special provision limiting its application to certain countries on the lines of the Washington hours-of-work Convention. Thus, in India the Draft Convention applies only to factories as defined in the Factories Act, to mines, and to such branches of railway work as may be specified by the competent authority.

(h) The Recommendation (printed on page 42) relating to the weekly rest-day in commercial establishments is in very general terms. A number of members of the Commission pressed for a Convention, and if the three representatives from India had not been unanimous against it, a Convention might have been presented to the Conference. But it would probably have failed to secure a majority there.

A resolution (printed on page 47) was also adopted designed to encourage the adoption of the weekly half-holiday so general in England. But it actually invites governments to encourage a weekly rest-period of 36 hours. Most workers who get a weekly day of rest are off work continuously for 36 hours (*e.g.*, from 6 on Saturday evening till 6 on Monday morning).

Those who are in earnest about Saturday half-holidays will have to improve their arithmetic before they try again.

V. White Lead

It has long been known that the use of paints containing white lead involved danger to the health of painters from lead-poisoning. The most obvious way of preventing this danger was to prohibit the use of white lead in the manufacture of paints, and this was the method suggested by the International Labour Office, who made an inquiry preliminary to the Conference. In a statement issued by them they took up the position that the effects on the health of painters of the use of white lead paints were extremely serious, that they could not be prevented except by prohibition of the use of white lead in the manufacture of all paints, and that satisfactory substitutes for white lead were available.

These proposals were drastic, and those who made them had, perhaps, an inadequate conception of the effects they would have and the opposition they would arouse. As the later discussion showed, the summary issued by the Office contained many assertions which were open to question, and it was regarded by a number of the experts as a distinctly one-sided statement of the case. But the intensity which marked the opening of the discussion was due chiefly to the openly-expressed suspicion that the Office had been made "the instrument of certain commercial interests," to quote M. Thomas. In other words, it was asserted that those interested in zinc white (recommended as the only satisfactory substitute for white lead) had inspired the attitude taken up. It was alleged that the summary issued by the Office embodied extracts from a pamphlet which had at one time been distributed in the interests of the zinc manufacturers, and damaging inferences were drawn. The result was that M. Thomas himself came to the Commission to defend his subordinates, and made the most eloquent speech that he delivered during the whole month. He convinced most reasonable

men that the graver charges were unfounded, but it is impossible to acquit those responsible for the summary of careless work. Logically, the question of "inspiration" had nothing to do with the merits of the case, but none the less it injured the cause of prohibition not a little.

After these preliminaries were over, the Commission got down to serious work. No subject had aroused keener interest, and the Commission had the assistance of medical and other expert evidence of the very highest quality. The subject was naturally discussed first from the medical standpoint; the opponents of prohibition maintained that many of the effects attributed to lead-poisoning were due to other causes. Later, the question of preventive regulations was discussed, and many of the Commission were of the view that the dangers could be prevented without prohibiting the use of white lead. Again, on the question of the possibility of finding efficient substitutes for white lead, there was an acute difference of opinion. When the actual votes were taken in Commission, they revealed a bare majority against prohibition of any kind, and in favour of preventive regulations.

In the meantime the whole Conference was bombarded by a continuous stream of pamphlets and publications; most of these were from the prohibition side, and towards the climax of the campaign they included personal attacks of the most scurrilous kind on members of the Commission. The result was that, when the Commission came before the Conference acutely divided and with radically differing sets of proposals, there was little prospect of anything being accomplished. The first critical vote gave a majority of one vote on the side of complete prohibition, and on the morning of the second last day of the Conference it seemed almost impossible that any proposal would be devised which would secure a two-thirds majority. But in less than two hours a Draft Convention had been prepared, submitted and adopted by 76 votes to 3. For this result credit must be given chiefly to the British representatives and especially to Dr. Legge of the Home Office.

The Convention (printed on page 29), which finally received 90 votes in its favour without a single vote against, is, naturally, in the form of a compromise. Its essential provisions are:—

- (1) Regulations are to be made governing the use of white-lead paints, where these can be used.

- (2) After a period of six years, young persons under 18 and women are not to be employed in painting involving the use of white-lead paints.
- (3) After a period of six years, the use of paints containing more than 2 per cent. of white lead in internal painting of buildings is to be prohibited.

VI. Anthrax

Ever since the mysterious 'wool-sorters' disease' was identified with anthrax, and traced to wool from infected animals, consistent endeavours have been made to devise satisfactory methods of protection for the workers. In the investigations the lead has been taken by England, where the wool-workers live in considerable dread of the disease. This dread is not so much due to the extent to which the disease is prevalent (in England the average annual deaths are 11) as to the sudden onset and the high mortality-rate characteristic of it. Preventive regulations have done much to minimize the dangers, but the only method of protection that will secure complete immunity for the wool-workers is the disinfection of infected and suspected wools. After long investigations, a process of disinfection has been devised by Mr. G. E. Duckering, a British Factory Inspector; this process is efficient, but somewhat expensive. It is now in use in an experimental station erected by the British Government at Liverpool.

When the cost of disinfection is recovered from the trade, the effect is, obviously, an increase in the cost of the wool and a handicap to the trade of the country adopting disinfection. It is, therefore, in the interests of such countries to secure, if possible, that they shall not be penalized by adopting measures for the protection of their workers, and, from the international point of view, it is desirable to encourage countries to protect their workers from industrial diseases. At the Washington Labour Conference a Recommendation was adopted to the effect that infected wool should be disinfected, and that, where possible, this disinfection should take place in the exporting countries. The International Labour Office now put forward a Draft Convention of a much more rigid type. The essential proposals were—

- (1) the setting up of an international commission to investigate methods of disinfection, prepare lists of suspected

wools, and supervise subsequent action in connection with the Convention.

- (2) disinfection of suspected wool; the disinfection was to be done at the ports of export, wherever possible.
- (3) the prohibition of import of suspected wool that had not been disinfected.

Now the subject is one which concerns India very vitally, for much of the suspected wool is exported from India, though it may not be grown in India. On the other hand, anthrax among Indian wool-workers is infrequent. If the proposed Convention had been adopted, India would have been compelled to disinfect nearly all the wool that leaves her shores, as she would otherwise have been unable to secure its entry into importing countries. The process of disinfection is expensive; Mr. Gupta, who represented the Indian Government on the Commission, stated that the capital cost would be about a crore and the recurring cost about thirty lakhs. This would fall on the Indian tax-payer, who would reap no direct benefit in exchange. Apart from this, the practical difficulties in the way of disinfection in India are almost insuperable. And the absence from the Organization of the United States of America, and of the Central Asian countries (which produce much of the dangerous wool) were serious obstacles to concerted action.

These views received considerable support. It was generally conceded that to force the issue, as the Labour Office had suggested, might result in complete failure, and an end to all hopes of a solution of the question. On the other hand, it is not impossible that a simpler and less expensive method of disinfection may be devised. Again, there is much to be said for the view that the real way to tackle the disease is to stamp it out among animals. And it is important that an attempt should be made to secure the co-operation of the United States.

All these considerations pointed to the conclusion that the question was not ripe for immediate decision, a view consistently pressed by the Indian representatives. This was generally accepted, and the Commission contented itself with proposing a resolution, which was accepted by the Conference, and abandoning the attempt to draft a Convention or a Recommendation. The resolution (printed on page 44) suggests further inquiry into the subject, with the co-operation of the United States of America, if that can be secured. A report is to be presented in time for the

1923 Conference, and will deal with possible methods of disinfection and the question of eradicating the disease among animals. The question of infection from hides and skins will also receive attention. Steps have already been taken to set up the Commission.

VII. Maritime questions

The Maritime Commission submitted—

- (a) A Draft Convention concerning the minimum age of trimmers and stokers (printed on page 31).
- (b) A Draft Convention concerning the medical examination of children and young persons employed at sea (printed on page 33)

Neither of these gave rise to much discussion. The first fixes the minimum age for employment as trimmers and stokers at 18, but it allows, subject to certain safeguards, an exception in favour of the coastal trade of India and Japan, where youths of 16 may be employed. This concession was based, to a considerable extent, on the belief that maturity is reached at an earlier age in the East than in the West. Mr. Joshi made a speech casting doubt on this belief, but the provision received strong support from Mr. Chatterjee and from Mr. Chambers, the British seamen's representative, and, with the rest of the Convention, it was adopted unanimously. The second Convention provides for periodic medical examination of all persons under 18 employed at sea, unless they are on vessels upon which only members of the same family are employed.

VIII. The Governing Body

The composition of the Governing Body, or executive of the Labour Organization, has been the subject of continuous dispute. The Peace Treaty provides that it shall consist of 24 members, selected as follows:—

- 8 nominated by the governments of the eight countries of chief industrial importance.
- 4 elected by the delegates of the remaining governments,
- 6 elected by the employers' delegates,
- 6 elected by the workers' delegates.

The first elections took place at Washington in 1919, and the Governing Body now in office sits as a result of these elections, although a resolution of that Conference condemned its composition,

on the ground that the non-European countries are inadequately represented, with 4 places out of the 24. Again, India has consistently pressed a claim to be included among the eight nations of chief industrial importance. Further, a number of the smaller countries consider that they have not sufficient opportunity of making their voice heard.

The difficulty in the way of reform is that the essential principles are fixed by the Treaty : amendment of it is difficult, and any understandings reached and arrangements made by the delegates have no binding force. The claim of India for a place among the 'big eight' could not be considered by the Conference at all, for the Treaty vests the right of decision with the Council of the League of Nations. The discussion, accordingly, was confined to the consideration of mutual understandings that would give a fairer representation, and proposals for allowing nations places as substitutes for other nations. It was finally decided to take up the question of the possible revision of the Treaty at the next Conference, and, in the meantime, an understanding was reached that of the 12 Government members, four members and of the other groups at least one in each group should be non-European. [See resolution on pages 45, 46.] Proposals for substitutes were also prepared, and these are to be considered by the groups concerned during the course of the current year. Finally, the Council of the League was requested to give its decision on the 'big eight' before the next election, which takes place in 1922. There is every hope that India's claim will then be admitted.

Miscellaneous

The above is a brief summary of the results as regards the formal items on the agenda. In addition a large number of other questions were raised in various forms ; it is not possible to do more than refer to one or two of these here.

Mr. Joshi took the opportunity of the discussion on the Director's report to raise the question of the almost exclusively European character of the staff and the desirability of establishing agencies of the Office in Oriental countries. M. Thomas gave a most sympathetic reply. He pointed out that, as the official languages are English and French, it was essential that the staff should be composed of persons intimately acquainted with these languages, and

this restricted their choice. But he stated that they were trying to make an advance in the direction Mr. Joshi indicated. An Indian officer has since joined the staff at Geneva. On the question of a "branch" in India, M. Thomas spoke, of the lack of funds, and good-humouredly reminded Mr. Joshi of the protests made by India and other countries against the increasing cost of the establishment.

Unemployment naturally bulked largely; the discussion was, as a rule, so purely in terms of Europe as to have little meaning or interest for India. Mr. Paddison, in a short speech, referred to the Indian system of famine prevention, and pointed out that in this respect at least the West had a lot to learn from India. The great causes of unemployment lie rather outside the scope of the Conference. A determined effort was made by the Italian workers' delegate to raise the question of the distribution of raw materials, which has already been discussed by the League of Nations. The Italian position deserves the fullest sympathy, but the regulation of the distribution of raw materials has no very direct connection with labour problems; the Indian monsoon has a much closer connection, but there were no proposals to discuss that!

A keen dispute arose over the credentials of the Dutch workers' delegates, but the Credentials Committee took so long to report that interest in it had died down by the time the report came up; the question was referred for decision to the Court of International Justice. A large number of nominations were the subject of objections, including Mr. Joshi's, but in most cases the objections seem to have had little substance.

Conclusions

It is a not uncommon belief, which is sedulously fostered by that small section of the press which is hostile to all international movements, that conferences like those at Geneva are attended by a collection of noisy theorists, whose deliberations, fortunately for the world, do not get further than talk. Nothing could be further from the truth. Judged merely by the cold record of the legislation which it has inspired in the last two years, the International Labour Organization has already proved itself a powerful force for the amelioration of the conditions of labour. And those who attended the Geneva Conference were genuinely representative of the administration and leadership of labour to-day.

The Geneva Conference may be regarded as the first regular International Labour Conference. The Washington Conference met before the Organization had been established; it received little preparation, and much of its time had to be occupied with deciding preliminary details of procedure. The Genoa Conference dealt with a specialized branch of labour only, and the representatives there were chiefly maritime experts who were not concerned in the wider aspects of the labour question. This Conference dealt with a broad selection of subjects, each of which had received a certain amount of preliminary study. And it was attended by a body of men genuinely representative of those interested in labour throughout the different Continents. The United States of America is still outside the organization, but there is a very general hope, and some expectation, that she will not remain outside for long.

With the experience of the Conference behind us it is now possible to form an estimate of the value and the future of the whole organization. It is scarcely necessary to say that its development has not followed exactly the paths that its founders had in view. No big experiment works out exactly according to plan. But it does seem to be on the way towards realization of the objects which it was created to achieve. It is certainly building up an international spirit. Before the war, various efforts had been made by labour leaders of different schools to give labour an international cohesion. The movement has assisted this. But it has also given employers a similar solidarity, with the result that, in the Geneva Conference, the employers and the workers acted as compact groups or parties, with their own organizations, their own regular meetings, and their concerted plans of action. It was the exception to find the delegations from one set of countries united against those from others; it was the rule to find the workers of all countries united against the employers.

This development is not without its abuses and its dangers. Whenever parties are formed, there is inevitably a loss of independence of judgment and a tendency to approach all questions with a certain bias. Most men are reasonable; most parties are unreasonable. And the cohesion of the workers and the employers resulted in a great increase in the power of the Government representatives. They had, from the start, a comfortable majority over the other two groups combined, and when the workers and the

employers commenced to oppose each other as *blocs* on every vital question, the result was that the decision lay absolutely in the hands of the Government delegates ; the votes of the others ceased to count. It is only fair to say that the British Empire delegates, especially among the workers, attempted to stand against the desire to carry the party system to extremes.

There was a tendency at the earlier conferences to forget that the Conference has no legislative authority. Under the Treaty, each State is free to ratify conventions or not as it chooses. It is consequently bad policy to frame conventions which, however excellent they are in theory, are not likely to secure general acceptance in the different countries, and there is inevitably in all deliberative bodies a tendency to minimize administrative difficulties. Neither of these weaknesses has been eliminated as yet, but when the record of the Conference is compared with those of Washington and Genoa, the growth of a practical spirit is evident. It is true that the agriculturists at Geneva showed a tendency to attempt too much, but agriculture was a new subject. In the discussion of all the other subjects, there was a readiness to make concessions, not because those making them believed them to be right in every case, but because they were practical people and preferred a small real advance to a paper paradise. In consequence the Geneva Conference will probably result in more solid achievement than either of the previous sessions, although their record is by no means small.

DRAFT CONVENTIONS

Adopted by the third session of the International Labour Conference

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Draft Convention concerning workmen's compensation in agriculture

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Geneva by the Governing Body of the International Labour Office, and having met in Third Session on 25th October, 1921, and

Having decided upon the adoption of certain proposals with regard to the "Protection of Agricultural Workers against Accident," which is included in the fourth item of the Agenda of the Session, and

Having determined that these proposals shall take the form of a draft international convention,

adopts the following draft Convention for ratification by the Members of the International Labour Organisation, in accordance with the provisions of Part XIII of the Treaty of Versailles and of the corresponding Parts of the other Treaties of Peace:

Article 1

Each Member of the International Labour Organisation which ratifies this Convention undertakes to extend to all agricultural

wage-earners its laws and regulations which provide for the compensation of workers for personal injury by accident arising out of or in the course of their employment.

Article 2

The formal ratifications of this Convention under the conditions set forth in Part XIII of the Treaty of Versailles and of the corresponding Parts of the other Treaties of Peace, shall be communicated to the Secretary-General of the League of Nations for registration.

Article 3

This Convention shall come into force at the date on which the ratifications of two Members of the International Labour Organisation have been registered by the Secretary-General.

It shall be binding only upon those Members whose ratifications have been registered with the Secretariat.

Thereafter, the Convention shall come into force for any Member at the date on which its ratification has been registered with the Secretariat.

Article 4

As soon as the ratifications of two Members of the International Labour Organisation have been registered with the Secretariat, the Secretary-General of the League of Nations shall so notify all the Members of the International Labour Organisation. He shall likewise notify them of the registration of ratifications which may be communicated subsequently by other Members of the Organisation.

Article 5

Subject to the provisions of Article 3, each Member which ratifies this Convention agrees to bring the provisions of Article 1 into operation not later than 1st January, 1924, and to take such action as may be necessary to make these provisions effective.

Article 6

Each Member of the International Labour Organisation which ratifies the Convention engages to apply it to its colonies, possessions and protectorates, in accordance with the provisions of Article

421 of the Treaty of Versailles and of the corresponding Articles of the other Treaties of Peace.

Article 7

A Member who has ratified this Convention may denounce it after the expiration of ten years from the date on which the Convention first comes into force, by an act communicated to the Secretary-General of the League of Nations for registration. Such denunciation shall not take effect until one year after the date on which it is registered with the Secretariat.

Article 8

At least once in ten years, the Governing Body of the International Labour Office shall present to the General Conference a report on the working of this Convention and shall consider the desirability of placing on the Agenda of the Conference the question of its revision or modification.

Article 9

The French and English texts of this Convention shall both be authentic.

Draft Convention concerning admission of children to employment in agriculture

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Geneva by the Governing Body of the International Labour Office, and having met in Third Session on 25th October, 1921, and

Having decided upon the adoption of certain proposals with regard to "the employment of children in agriculture during compulsory schools hours," which is included in the third item of the Agenda of the Session, and

Having determined that these proposals shall take the form of a draft international convention,

adopts the following draft convention for ratification by the Members of the International Labour Organisation, in accordance with the provisions of Part XIII of the Treaty of Versailles and of the corresponding Parts of the other Treaties of Peace :

Article 1

Children under the age of fourteen years may not be employed or work in any public or private agricultural undertaking, or in any branch thereof, save outside the hours fixed for school attendance. If they are employed outside the hours fixed for school attendance, the employment shall not be such as to prejudice their attendance at school.

Article 2

For purpose of practising vocational instruction the periods and the hours of school attendance may be so arranged as to permit the employment of children on light agricultural work and in particular on light work connected with the harvest provided that such employment shall not reduce the total annual period of school attendance to less than eight months.

Article 3

The provisions of Article 1 shall not apply to work done by children in technical schools, provided that such work is approved and supervised by public authority.

NOTE.—Articles 4 to 11 are identical with Articles 2 to 9 of the Draft Convention concerning workmen's compensation (pages 23-24) save that the words "Articles 1 to 3" should be substituted for the words "Article 1" in Article 5 of that Convention.

Draft Convention concerning the rights of association and combination of agricultural workers

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Geneva by the Governing Body of the International Labour Office and having met in its Third Session on 25th October, 1921, and

Having decided upon the adoption of certain proposals with regard to the rights of association and combination of agricultural workers which is included in the fourth item of the Agenda of the Session, and

Having determined that these proposals shall take the form of a draft international convention,

adopts the following Draft Convention for ratification by the Members of the International Labour Organisation, in accordance with the provisions of Part XIII of the Treaty of Versailles and of the corresponding Parts of the other Treaties of Peace :

Article 1

Each Member of the International Labour Organisation which ratifies this Convention undertakes to secure to all those engaged in agriculture the same rights of association and combination as to industrial workers, and to repeal any statutory or other provision restricting such rights in the case of those engaged in agriculture.

NOTE.—Articles 2 to 9 are identical with Articles 2 to 9 of the Draft Convention concerning workmen's compensation (pages 23-24).

Draft Convention concerning the application of the weekly rest in industrial undertakings

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Geneva by the Governing Body of the International Labour Office, and having met in Third Session on 25th October, 1921; and

Having decided upon the adoption of certain proposals with regard to "the weekly rest day in industrial employment" which is included in the seventh item of the Agenda of the Session, and

Having determined that these proposals shall take the form of a draft international convention,

adopts the following Draft Convention for ratification by the Members of the International Labour Organisation, in accordance with the provisions of Part XIII of the Treaty of Versailles and of the corresponding Parts of the other Treaties of Peace :

Article 1

For the purpose of this Convention, the term "industrial undertakings" includes :

- (a) Mines, quarries, and other works for the extraction of minerals from the earth.

- (b) Industries in which articles are manufactured, altered, cleaned, repaired, ornamented, finished, adapted for sale, broken up or demolished, or in which materials are transformed; including shipbuilding and the generation, transformation and transmission of electricity or active power of any kind.
- (c) Construction, reconstruction, maintenance, repair, alteration or demolition of any building, railway, tramway, harbour, dock, pier, canal, inland waterway, road, tunnel, bridge, viaduct, sewer, drain, well, telegraphic or telephonic installation, electrical undertaking, gas work, water-work, or other work of construction, as well as the preparation for or laying the foundations of any such work or structure.
- (d) Transport of passengers or goods by road, rail, or inland waterway, including the handling of goods at docks, quays, wharves or warehouses, but excluding transport by hand.

This definition shall be subject to the special national exceptions contained in the Washington Convention limiting the hours of work in industrial undertakings to eight in the day and forty-eight in the week, so far as such exceptions are applicable to the present Convention.

Where necessary, in addition to the above enumeration, each Member may define the line of division which separates industry from commerce and agriculture.

Article 2

The whole of the staff employed in any industrial undertaking, public or private, or in any branch thereof shall, except as otherwise provided for by the following articles, enjoy in every period of seven days a period of rest comprising at least 24 consecutive hours.

This period of rest shall, wherever possible, be granted simultaneously to the whole of the staff of each undertaking.

It shall, wherever possible, be fixed so as to coincide with the days already established by the traditions or customs of the country or district.

Article 3

Each Member may except from the application of the provisions of Article 2, persons employed in industrial undertakings in which only the members of one single family are employed.

Article 4

Each Member may authorise total or partial exceptions (including suspensions or diminutions) from the provisions of Article 2 special regard being had to all proper humanitarian and economic considerations and after consultation with responsible associations of employers and workers, wherever such exist.

Such consultation shall not be necessary in the case of exceptions which have already been made under existing legislation.

Article 5

Each Member shall make as far as possible provision for compensatory periods of rest for the suspensions or diminutions made in virtue of Article 4, except in cases where agreement or customs already provide for such periods.

Article 6

Each Member will draw up a list of the exceptions made under Articles 3 and 4 of this Convention and will communicate it to the International Labour Office, and thereafter in every second year any modifications of this list which shall have been made.

The International Labour Office will present a Report on this subject to the General Conference of the International Labour Organisation.

Article 7

In order to facilitate the application of the provisions of this Convention, each employer, director, or manager, shall be obliged :

- (a) Where the weekly rest is given to the whole of the staff collectively, to make known such days and hours of collective rest by means of notices posted conspicuously in the establishment or any other convenient place, or in any other manner approved by the Government.
- (b) Where the rest period is not granted to the whole of the staff collectively, to make known, by means of a roster drawn

up in accordance with the method approved by the legislation of the country, or by a regulation of the competent authority, the workers or employees subject to a special system of rest, and to indicate that system.

NOTE.—Articles 8 to 15 are identical with Articles 2 to 9 of the Draft Convention concerning workmen's compensation (pages 23-24) save that the words "Articles 1 to 7" should be substituted for the words "Article 1" in Article 5 of that Convention.

Draft Convention concerning the use of white lead in painting

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Geneva by the Governing Body of the International Labour Office, and having met in Third Session on 25th October, 1921, and

Having decided upon the adoption of certain proposals with regard to the prohibition of the use of white lead in painting, which is the sixth item of the Agenda of the Session, and

Having determined that these proposals shall take the form of a draft international convention,

adopts the following Draft Convention for ratification by the Members of the International Labour Organisation, in accordance with the provisions of Part XIII of the Treaty of Versailles and of the corresponding Parts of the other Treaties of Peace :

Article 1

Each Member of the International Labour Organisation ratifying the present Convention undertakes to prohibit, with the exceptions provided for in Article 2, the use of white lead and sulphate of lead and of all products containing these pigments, in the internal painting of buildings, except where the use of white lead or sulphate of lead or products containing these pigments is considered necessary for railway stations or industrial establishments by the competent authority after consultation with the employers' and workers' organisations concerned.

It shall nevertheless be permissible to use white pigments containing a maximum of 2 per cent. of lead expressed in terms of metallic lead.

Article 2

The provisions of Article 1 shall not apply to artistic painting or fine lining.

The Governments shall define the limits of such forms of painting and shall regulate the use of white lead, sulphate of lead, and all products containing these pigments, for these purpose in conformity with the provisions of Articles 5, 6 and 7 of the present Convention.

Article 3

The employment of males under 18 years of age and of all females shall be prohibited in any painting work of an industrial character involving the use of white lead or sulphate of lead or other products containing the pigments.

The competent authorities shall have power, after consulting the employers' and workers' organisations concerned, to permit the employment of painters' apprentices in the work prohibited by the preceding paragraph, with a view to their education in their trade.

Article 4

The prohibitions prescribed in Articles 1 and 3 shall come into force six years from the date of the closure of the Third Session of the International Labour Conference.

Article 5

Each Member of the International Labour Organisation ratifying the present Convention undertakes to regulate the use of white lead, sulphate of lead, and of all products containing these pigments, in operations for which its use is not prohibited on the following principles :—

- I. (a) White lead, sulphate of lead, or products containing these pigments shall not be used in painting operations except in the form of paste or paint ready for use.
- (b) Measures shall be taken in order to prevent danger arising from the application of paint in the form of spray.
- (c) Measures shall be taken, wherever practicable, to prevent danger arising from dust caused by dry rubbing down and scraping.

- II. (a) Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.
- (b) Overalls shall be worn by working painters during the whole of the working period.
- (c) Suitable arrangements shall be made to prevent clothing put off during working hours being soiled by painting material.
- III. (a) Cases of lead-poisoning and of suspected lead-poisoning shall be notified and shall be subsequently verified by a medical man appointed by the competent authority.
- (b) The competent authority may require, when necessary, a medical examination of workers.
- IV. Instructions with regard to the special hygienic precautions to be taken in the painting trade shall be distributed to working painters.

Article 6

The competent authority shall take such steps as it considers necessary to ensure the observance of the regulation prescribed by virtue of the foregoing Articles, after consultation with the employers' and workers' organisations concerned.

Article 7

Statistics with regard to lead-poisoning among working painters shall be obtained:

- (a) As to morbidity—by notification and certification of all cases of lead-poisoning.
- (b) As to mortality—by a method approved by the official statistical authority in each country.

NOTE.—Articles 8 to 15 are identical with Articles 2 to 9 of the Draft Convention concerning workmen's compensation (pages 23-24) save that the words "Articles 1 to 7" should be substituted for the words "Article 1" in Article 5 of that Convention.

Draft Convention fixing the minimum age for the admission of young persons to employment as trimmers or stokers

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Geneva by the Governing Body of the International Labour Office, and having met in Third Session on 25th October, 1921 and

Having decided upon the adoption of certain proposals with regard to "the prohibition of the employment of any person under the age of 18 years as trimmer or stoker," which is included in the eighth item of the Agenda of the Session, and

Having determined that these proposals shall take the form of a draft international convention,

adopts the following Draft Convention for ratification by the Members of the International Labour Organisation, in accordance with the provisions of Part XIII of the Treaty of Versailles and of the corresponding parts of the other Treaties of Peace :

Article 1

For the purpose of this Convention, the term "vessel" includes all ships and boats, of any nature whatsoever, engaged in maritime navigation, whether publicly or privately owned; it excludes ships of war.

Article 2

Young persons under the age of eighteen years shall not be employed on work on vessels as trimmers or stokers.

Article 3

The provisions of Article 2 shall not apply :

- (a) to work done by young persons on school-ships or training-ships, provided that such work is approved and supervised by public authority ;
- (b) to the employment of young persons on vessels mainly propelled by other means than steam ;
- (c) to young persons of not less than sixteen years of age, who, if found physically fit after medical examination, may be employed as trimmers or stokers on vessels exclusively engaged in the coastal trade of India and of Japan, subject to regulations made after consultation with the most representative organisations of employers and workers in those countries.

Article 4

When a trimmer or stoker is required in a port where young persons of less than eighteen years of age only are available, such

young persons may be employed and in that case it shall be necessary to engage two young persons in place of the trimmer or stoker required. Such young persons shall be at least 16 years of age.

Article 5

In order to facilitate the enforcement of the provisions of this Convention, every shipmaster shall be required to keep a register of all persons under the age of eighteen years employed on board his vessel, or a list of them in the articles of agreement, and of the dates of their births.

Article 6

Articles of agreement shall contain a brief summary of the provisions of this Convention.

NOTE.—Articles 7 to 9 and 11 to 14 are identical with Articles 2 to 4 and 6 to 9 of the Draft Convention concerning workmen's compensation (pages 23-24).

Article 10

Subject to the provisions of Article 8 each Member which ratifies this Convention agrees to bring the provisions of Articles 1, 2, 3, 4, 5 and 6 into operation not later than 1st January 1924 and to take such action as may be necessary to make these provisions effective.

Draft Convention concerning the compulsory medical examination of children and young persons employed at sea

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Geneva by the Governing Body of the International Labour Office, and having met in Third Session on 25th October, 1921, and

Having decided upon the adoption of certain proposals with regard to the "Compulsory Medical Examination of children and young persons employed at sea," which is included in the eighth item of the Agenda of the Session, and

Having determined that these proposals shall take the form of a draft international convention,

adopts the following Draft Convention for ratification by the Members of the International Labour Organisation, in accordance with the

provisions of Part XIII of the Treaty of Versailles and of the corresponding parts of the other Treaties of Peace :

Article 1

For the purpose of this Convention, the term "vessel" includes all ships and boats of any nature whatsoever, engaged in maritime navigation, whether publicly or privately owned; it excludes ship of war.

Article 2

The employment of any child or young person under 18 years of age on any vessel, other than vessels upon which only members of the same family are employed, shall be conditional on the production of a medical certificate attesting fitness for such work, signed by a doctor who shall be approved by the competent authority.

Article 3

The continued employment at sea of any such child or young person shall be subject to the repetition of such medical examination at intervals of not more than one year, and the production, after each such examination, of a further medical certificate attesting fitness for such work. Should a medical certificate expire in the course of a voyage, it shall remain in force until the end of the said voyage.

Article 4

In urgent cases, the competent authority may allow a young person below the age of 18 years to embark without having undergone the examination provided for in Articles 2 and 3 of this Convention, always provided that such an examination shall be undergone at the first port at which the vessel calls.

NOTE.—Articles 5 to 12 are identical with Articles 2 to 9 of the Draft Convention concerning workmen's compensation (pages 23-24).

RECOMMENDATIONS

Adopted by the third session of the International Labour Conference

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Recommendation concerning the prevention of unemployment in agriculture

I

The General Conference of the International Labour Organisation, Considering that the Draft Convention and Recommendations concerning unemployment adopted at Washington are in principle applicable to agricultural workers, and recognising the special character of unemployment in agriculture, recommends that each Member of the International Labour Organisation should consider measures for the prevention of or providing against unemployment amongst agricultural workers suitable to the economic and agricultural conditions of its country, and that it should examine particularly from this point of view the advisability:—

- (1) of adopting modern technical methods to bring into cultivation land which is at present not worked or only partially developed, but which could by such means be made to yield an adequate return;
- (2) of encouraging the adoption of improved systems of cultivation and the more intensive use of the land;
- (3) of providing facilities for settlement on the land;

- (4) of taking steps, rendering work of a temporary nature accessible to unemployed agricultural workers by means of transport facilities ;
- (5) of developing industries and supplementary forms of employment which would provide occupation for agricultural workers who suffer from seasonal unemployment, provided steps be taken to ensure that such work is carried on under equitable conditions ;
- (6) of taking steps to encourage the creation of agricultural workers' co-operative societies for the working and purchase or renting of land ; and of taking steps to this end to increase agricultural associations of land workers established for the purpose of agricultural production.

II

The General Conference recommends that each Member of the International Labour Organisation furnish the International Labour Office a periodical report dealing with the steps taken to give effect to the above Recommendation.

Recommendation concerning social insurance in agriculture

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Geneva by the Governing Body of the International Labour Office, and having met in Third Session on 25th October, 1921, and

Having decided upon the adoption of a proposal with regard to the "protection of agricultural workers against sickness invalidity and old age" which is included in the fourth item of the Agenda of the Session, and

Having decided that this proposal shall take the form of a recommendation,

adopts the following Recommendation, to be submitted to the Members of the International Labour Organisation for consideration with a view to effect being given to it by national legislation or otherwise, in accordance with the provisions of Part XIII of the Treaty of Versailles and of the corresponding parts of the other Treaties of Peace.

The General Conference of the International Labour Organisation recommends :

That each Member of the International Labour Organisation extend its laws and regulations establishing systems of insurance against sickness, invalidity, old age and other similar social risks to agricultural wage-earners on conditions equivalent to those prevailing in the case of workers in industrial and commercial occupations.

Recommendation concerning the protection before and after childbirth of women wage-earners in agriculture

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Geneva by the Governing Body of the International Labour Office and having met in its Third Session on 25th October, 1921, and

Having decided upon the adoption of certain proposals with regard to the "protection before and after childbirth of women wage-earners in Agriculture" which is included in the third item of the Agenda of the Session, and

Having decided that these proposals shall take the form of a recommendation,

adopts the following Recommendation, to be submitted to the Members of the International Labour Organisation for consideration with a view to effect being given to it by national legislation or otherwise, in accordance with the provisions of Part XIII of the Treaty of Versailles and of the corresponding Parts of the other Treaties of Peace.

The General Conference of the International Labour Organisation recommends :

That each Member of the International Labour Organisation take measures to ensure to women wage-earners employed in agricultural undertakings protection before and after childbirth similar to that provided by the Draft Convention adopted by the International Labour Conference at Washington for women employed in industry and commerce, and that such measures should include the right to a period of absence from work before and after childbirth and to a grant of benefit during the said period, provided either out of public funds or by means of a system of insurance.

Recommendation concerning night work of women in agriculture

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Geneva by the Governing Body of the International Labour Office and having met in its Third Session on 25th October, 1921, and

Having decided upon the adoption of certain proposals with regard to the "night work of women in Agriculture" which is included in the third item of the Agenda of the Session, and

Having decided that these proposals shall take the form of a recommendation,

adopts the following Recommendation, to be submitted to the Members of the International Labour Organisation for consideration with a view to effect being given to it by national legislation or otherwise, in accordance with the provisions of Part XIII of the Treaty of Versailles and of the corresponding Parts of the other Treaties of Peace.

The General Conference of the International Labour Organisation recommends :

That each Member of the International Labour Organisation take steps to regulate the employment of women wage-earners in agricultural undertakings during the night in such a way as to ensure to them a period of rest compatible with their physical necessities, and consisting of not less than 9 hours, which shall, when possible, be consecutive.

Recommendation concerning night work of children and young persons in agriculture

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Geneva by the Governing Body of the International Labour Office and having met in its Third Session on 25th October, 1921, and

Having decided upon the adoption of certain proposals with regard to the "employment of children and young persons in Agriculture during the night" which is included in the third item of the Agenda of the Session, and

Having decided that these proposals shall take the form of a recommendation,

adopts the following Recommendation, to be submitted to the Members of the International Labour Organisation for consideration with a view to effect being given to it by national legislation or otherwise, in accordance with the provisions of Part XIII of the Treaty of Versailles and of the corresponding Parts of the other Treaties of Peace.

The General Conference of the International Labour Organisation recommends :

I

That the Members of the International Labour Organisation take steps to regulate the employment of children under the age of 14 years in agricultural undertakings during the night in such a way as to ensure to them a period of rest compatible with their physical necessities and consisting of not less than 10 consecutive hours.

II

That each Member of the International Labour Organisation take steps to regulate the employment of young persons between the ages of 14 and 18 years in agricultural undertakings during the night, in such a way as to ensure to them a period of rest compatible with their physical necessities and consisting of not less than 9 hours which shall be consecutive.

Recommendation concerning living-in conditions of agricultural workers

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Geneva by the Governing Body of the International Labour Office and having met in its Third Session on 25th October, 1921, and

Having decided upon the adoption of certain proposals with regard to the "living-in conditions of agricultural workers" which is included in the fourth item of the Agenda of the Session, and

Having decided that these proposals shall take the form of a recommendation.

adopts the following Recommendation, to be submitted to the Members of the International Labour Organisation for consideration with a view to effect being given to it by national legislation or otherwise, in accordance with the provisions of Part XIII of the Treaty of Versailles and of the corresponding Parts of the other Treaties of Peace.

The General Conference of the International Labour Organisation recommends :

I

That each Member of the International Labour Organisation, which has not already done so, take statutory or other measures to regulate the living-in conditions of agricultural workers with due regard to the special climatic or other conditions affecting agricultural work in its country, and after consultation with the employers' and workers' organisations concerned, if such organisations exist.

II

That such measures shall apply to all accommodation provided by employers for housing their workers either individually, or in groups, or with their families, whether the accommodation is provided in the houses of such employers or in buildings placed by them at the workers' disposal.

III

That such measures shall contain the following provisions :

- (a) Unless climatic conditions render heating superfluous, the accommodation intended for workers' families, groups of workers or individual workers, should contain rooms which can be heated.
- (b) Accommodation intended for groups of workers shall provide a separate bed for each worker, shall afford facilities for ensuring personal cleanliness; and shall provide for the separation of the sexes. In the case of families, adequate provision shall be made for the children.
- (c) Stables, cowhouses and open sheds should not be used for sleeping quarters.

IV

That each Member of the International Labour Organisation take steps to ensure the observance of such measures.

Recommendation concerning the development of technical agricultural education

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Geneva by the Governing Body of the International Labour Office and having met in its Third Session on 25th October, 1921, and

Having decided upon the adoption of certain proposals with regard to the "development of technical agricultural education" which is included in the fourth item of the Agenda of the Session, and

Having decided that these proposals shall take the form of a recommendation,

adopts the following Recommendation, to be submitted to the Members of the International Labour Organisation for consideration with a view to effect being given to it by national legislation or otherwise, in accordance with the provisions of Part XIII of the Treaty of Versailles and of the corresponding Parts of the other Treaties of Peace.

The General Conference of the International Labour Organisation recommends :

I

That each Member of the International Labour Organisation endeavours to develop vocational agricultural education and in particular to make such education available to agricultural wage-earners on the same conditions as to other persons engaged in agriculture.

II

That each member of the International Labour Organisation send a report to the International Labour Office at regular intervals containing as full information as possible as to the administration of the laws, the sums expended, and the measures taken in order to develop vocational agricultural education.

Recommendation concerning the application of the weekly rest in commercial establishments

The General Conference of the International Labour Organisation of the League of Nations,

Having been convened at Geneva by the Governing Body of the International Labour Office and having met in its Third Session on 25th October, 1921, and

Having decided upon the adoption of certain proposals with regard to the "weekly rest day in commercial employment" which is included in the seventh item of the Agenda of the Session, and

Having decided that these proposals shall take the form of a recommendation,

adopts the following Recommendation, to be submitted to the Members of the International Labour Organisation for consideration with a view to effect being given to it by national legislation or otherwise, in accordance with the provisions of Part XIII of the Treaty of Versailles and of the corresponding Parts of the other Treaties of Peace.

The General Conference recommends :

I

That each Member of the International Labour Organisation take measures to provide that the whole of the staff employed in any commercial establishment, public or private, or in any branch thereof, except as otherwise provided for by the following paragraphs, should enjoy in every period of seven days a period of rest comprising at least twenty-four consecutive hours.

It is further recommended that this period of rest should, wherever possible, be granted simultaneously to the whole of the staff of each establishment, and that it should, wherever possible, be fixed so as to coincide with the days already established by the traditions or customs of the country or district.

II

That each Member take the steps necessary to secure the application of this Recommendation and to define any exceptions which the Member may consider to be necessary.

If exceptions are found necessary it is recommended that the Member should draw up a list of such exceptions.

III

That each Member should communicate to the International Labour Office, the list of the exceptions made in pursuance of paragraph 2, and thereafter every two years any modifications of this list which it shall have made in order that the International Labour Office may present a report thereon to the International Labour Conference.

CERTAIN RESOLUTIONS

Adopted by the third session of the International Labour Conference

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Resolution on hours of work in agriculture

The Third Session of the International Labour Conference decides that the regulation of hours of work in agriculture be inserted in the Agenda of a future Session of the Conference.

Resolution on Anthrax

I. This Conference, while recognising the important advance made by the British Government towards a solution of the problem of satisfactory disinfection of wool and hair infected with anthrax, considers that the question of universal compulsory disinfection in its economic and humanitarian aspects has not yet been sufficiently studied to justify the conclusion of an International Convention.

II. This Conference therefore requests the Governing Body of the International Labour Office to appoint members representing the chief producing and manufacturing countries to serve on an Advisory Committee, which should be instructed to examine the questions in all its bearings, and present a report to the Governing Body in time for consideration by the Conference in 1923, and is of opinion that meanwhile the proposal for an International Convention should be postponed. The Conference is further of opinion that the co-operation of the United States of America should be invited. The enquiry should be conducted at first mainly by correspondence. All secretariat services required in connection with the Committee should be provided by the International Labour Office.

III. This Conference, while accepting disinfection as the only effective means at present available for protecting industrial workers against infection from certain classes of material, regards the eradication of the disease among animals as the ultimate solution of the problem, and is accordingly of opinion that the Committee referred to in the second paragraph should be further instructed to make full and careful enquiries as to the most practical and effective methods of preventing infection, and to make a separate report for consideration by the 1923 Session of the Conference.

IV. This Conference wishes to place on record that the danger to workers of infection by anthrax from hides, skins and other materials is also serious and deserves careful study and investigation.

Resolution on the Governing Body

I. The International Labour Conference respectfully requests the Council of the League of Nations to give its decision upon the protests which have been submitted to it concerning the list of the eight States of chief industrial importance in due course before the next election of the Governing Body of the International Labour Office, in order to ensure that the elections to the Governing Body during the 1922 session of the Conference take place in a fully regular manner.

II. The Conference, recognising that modifications of the Treaty of Peace constitute the sole method of amending certain existing modifications, and of assuring a fully equitable representation on the Governing Body to the Members of the International Labour Organisation.

At the same time considering that such modifications made in virtue of Article 422 of the Treaty could not be of an improvised character;

Requests the Governing Body to examine the question and to place on the Agenda of the next Session of the Conference proposals to the above effect.

Pending the full decision of the question by an amendment of Article 393 of the Treaty of Peace, the Conference resolves that equitable provision should be made for the representation of the chief non-European areas and as a provisional step in that direction makes the following recommendations and proposals with a view to the election to be held in 1922, which shall remain in force until

the receipt of the necessary number of ratifications required by Article 422 to the modifications adopted by the 1922 Session of the Conference.

The Conference makes the following recommendations to the three groups :—

Of the 12 Governments represented on the Governing Body, 4 should be from overseas countries ;

Of the 6 Delegates of the Employers' Group, at least one should be from an oversea country ;

Of the 6 Delegates of the Workers' Group, at least one should be from an oversea country,

and makes the following proposals :

Substitutes (deputy members) may accompany the ordinary Members of the Governing Body. They have the right to speak on special subjects with the permission of the Chairman asked for in writing.

They have not the right to vote.

In the absence of the titular member the substitute has all the rights of the titular member.

Each substitute shall deliver written credentials to the Chairman of the Governing Body.

The 12 Governments represented on the Governing Body may appoint their own substitutes (deputy members). Such a substitute may be of another nationality than the titular member of the Government itself, and shall be appointed in person by the Government of the titular member ; or by the titular member if duly authorised to do so by his Government.

The Employers' and Workers' Groups may each appoint at the Conference 6 substitutes (deputy members), the expense of three of whom in each group shall be paid out of the funds of the International Labour Organisation. These may be of a different nationality from the titular members.

These recommendation and proposals shall be submitted to the Governments, Employers and Workers during the next twelve months, so that the Delegates of each group may receive instructions thereon for the next Session of the Conference.

Resolution on the weekly rest-period

The Conference desires to affirm its conviction that it is the duty of all Members of the International Labour Organisation to encourage the adoption of a weekly day of rest for the workers in their countries. For this reason it invites the competent authority of each country to encourage collective agreements between the employers' and workers' organisations, in order to fix, wherever the working conditions of the industry, trade or profession concerned permit, a re-arrangement of the hours of labour which will allow of an extension of the weekly rest to at least thirty-six hours.

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BULLETINS OF INDIAN INDUSTRIES & LABOUR

No. 36.

INDIAN COAL PROBLEMS

By

J. COGGIN BROWN, O.B.E., D.Sc.,
Superintendent, Geological Survey of India.



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Note.

The Government of India desire it to be understood that the statement made and the views expressed in these bulletins are those of the authors themselves.

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BULLETINS
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No. 36.]

1926

[**December.**

INDIAN COAL PROBLEMS.

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Introduction.

This report is divided into four parts, dealing with, (I), recent researches on coal in general, (II), the Indian coking problem, (III), the question of blending Indian coals and (IV), low temperature distillation. It was written during a period of study leave spent in the United Kingdom during 1925. It is partly a condensation of many earlier writings on Indian coal, and partly a digest of the large literature which has grown up around the treatment of coal, outside India, in the last decade or so. Parts of it are thus largely a matter of compilation from text books, technical papers and inventor's descriptions. To all those authors whose work has been quoted, the writer expresses his indebtedness, more especially to Dr. C. H. Lander, Director of Fuel Research in the United Kingdom, who permitted him to visit His Majesty's Fuel Research Station at Greenwich, and gave him all the assistance in his power. His book, written in conjunction with Mr. R. F. McKay, is of fundamental importance in the study of "Low Temperature Carbonisation" and has been used freely in the following pages. To Dr. Edgar Evans, the pioneer of scientific coal treatment in India, and the present Chief of the Department of Fuel Research, in the National Federation of Iron and Steel Manufacturers of the United Kingdom, the writer also owe his best thanks.

REPORT.

PART I.

Recent Researches on Coal.

Classification of Coal.

Coal has been defined as a compact stratified mass of mummified plants (which have in part suffered arrested decay to varying degrees of completeness) free from all save a very low percentage of other matters.*

As Dr. Lander has shown the specific gravity of coal is of the order of 1·2, the volume occupied by the coal is only about one-tenth to one-twelfth of the volume of the original vegetable tissues, so that a seam of coal 10 feet thick is the solid degradation product from vegetation approximately 100 to 120 feet thick. Regarded in this light, the amount of vegetable matter required to form some of the thicker Indian coals seams, like those of Assam and Bihar, is well nigh incredible. Though this is not the place to discuss the origin or mode of formation of Indian coals, it is necessary to point out that they—like all the rest of the coals in the world—are now universally recognised to have their origin in plant life.

Coals are conveniently divided into five principal genera from the geological point of view. These are as follows:—

- Brown Coals and Lignites.
- Sub-Bituminous.
- Bituminous.
- Semi-Bituminous.
- Anthracitic.

Examples of all these can probably be found in India.

Other grading schemes of this kind add Peat before the Brown Coals and Lignites, and insert the Cannel Coals and Torbanites before the Bituminous Coals.

Coals are also classified from many other points of view, such as chemical composition, coking properties, industrial application, etc. The special groupings adopted from time to time for Indian coals are well known. Gruner's modification of Regnault's original chemical classification of coals is still widely used on the Continent. The official classification of American coals, advocated by the United States Geological Survey, is based on the ratio of

* M. C. Stopes and E. V. Wheeler: "*Monograph on the Constitution of Coal*", Department of Scientific and Industrial Research.

the carbon-hydrogen content, which decreases more or less steadily from Anthracite to Peat. Another American classification uses the heating value of the coal substance per given weight as a means of differentiation. For the purposes of low temperature carbonisation experiments, the British Fuel Research Board divides coals into two classes, one in which the resultant coke occupies a greater volume than the original coal and the other in which it occupies a smaller volume. A classification which is being widely adopted in the United Kingdom and has been used by the Geological Survey of England and Wales is that of C. A. Seyler. In this the coals are divided according to their hydrogen content into five principal groups, each of which is further sub-divided into other classes according to the carbon content. This is perhaps the most complete classification yet brought forward and it would be an exceedingly interesting study to work out the position occupied by the various Indian coals in the scheme, especially those of the flaming, high volatile, non-coking coals of Raniganj, compared with the slower burning, lower volatile, coking coals of Jharia. Unfortunately, the essential analytical data are not available.

Most of the classifications which have been proposed have their own limited uses, but practical tests will always be necessary before the degree of utility of any particular coal for a given industrial purpose can be determined.

Whatever differences of opinion may exist regarding the mode of accumulation of the vegetable matter which ultimately gave rise to coal, and the precise methods by which this transformation took place, many writers have remarked on the gradation of the carbonaceous deposits of the world from peat at one end of the series to anthracite at the other, and the theory is often advanced that these represent time stages in the metamorphosis. For example, Professor Bone has recently advanced the following provisional classification :—

The Wood to Coal Series.*

0. Woody Tissue— (Lignocelluloses)		
1. Peat (Quaternary)	(Water—90) (Combustible—10)	
2. Earthy Brown Coals (Tertiary)	(Water—40 to 50) (Coal—50 to 60)	Woody Brown Coals (Tertiary)
3. Laminated Lignites (Chiefly Tertiary)	(Water—20 to 40) (Coal—60 to 80)	

* W. A. Bone : "Lignites and Brown Coals and their Importance to the Empire"—*Journal of the Royal Society of Arts*, Vol. LXX, p. 343, (1922).

- | | |
|--------------------------|------------------|
| 4. Sub-Bituminous Coals | (Water—10 to 20) |
| (Chiefly Cretaceous) | (Coal—80 to 90) |
| 5. Bituminous Coals | (Water 10) |
| (Mesozoic Carboniferous) | (Coal 90) |
| 6. Semi-Bituminous Coals | |
| (Carboniferous) | |
| 7. Anthracitic Coals | |
| (Carboniferous) | |

According to W. Randall, the majority of the non-coking Gondwana coals of India which of course make up the largest reserve, are of a sub-bituminous character. "Their high moisture contents", it is stated, "are an indication of the fact that they are constituted of vegetable products much less altered than is the case in the coking coals. The constituents of these sub-bituminous coals are all non-coking, and for this reason the coals are incapable of being cleaned to yield coking products."*

It appears doubtful if the non-coking property of many of the Indian coal is due entirely to their age or to the degree of alteration of their original vegetable constituents. Some of the seams of the Raniganj field, the Sanctoria, the Laikdih and Ramnagar seams of the Barakar area of the same field, for example, yield good coke, others are classified as non-coking coals, yet both belong to the same geological period. Many of the seams of the Jharia and Giridih fields, and some of those of Bokaro can be coked. Even the Tertiary coals of Assam are coking, yet confining our attention to the Gondwana basins of the Peninsula, we are told that the coals of South Karanpura are sub-bituminous and non-coking, that the Takhir coals, while of excellent quality, are the same. In the case of the Daltonganj field, we have the interesting example of the sub-bituminous and entirely non-coking coals of Bbudyar Khad, while another coal from the same district, that of Debi Rai Khad, is of a more highly bituminous nature and contains constituents that are strongly coking. Further west still, the coals of Sasti, Ghugus and Bisrampur, like the coals of the Satpura area, the Wardha and Pench valley, are all of a sub-bituminous, non-coking type. These examples are given to illustrate the belief that the question of geological age alone is not the only criterion of whether a coal belongs to a sub-bituminous, non-coking type or to a bituminous and coking quality.

Chemical Constitution of Coal.

According to Prof. Bone, the original vegetable debris from which all coals have been formed, must have consisted for the most part of ligno-celluloses *plus* a certain proportion (probably not exceeding 10 to 20 per cent.) of

*W. Randall: "Froth Flotation of Indian Coals"—*Rep. Geol. Surv. Ind.*, Vol. LVI, p. 229, (1925).

vegetable proteids. The debris would also probably contain, besides the foregoing main components, a certain small amount of resins, and it would be mingled with more or less mineral matter. Apart from the latter, coals should therefore contain the following bodies :—

- (a) Cellulosic or humic derivatives.
- (b) Nitrogenous bodies derived from the proteids.
- (c) Resinous compounds.

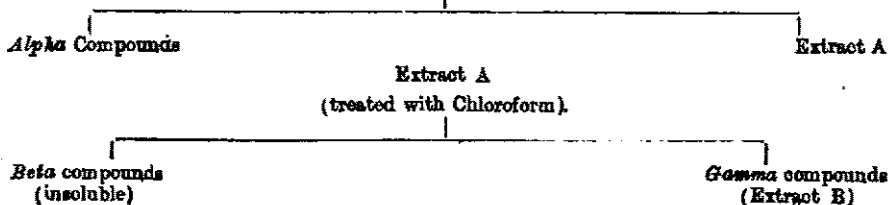
Modern writers apparently agree that the resinous compounds have the greatest effect in determining whether a coke is strongly or weakly coking, or whether it will not form a coherent residue at all when submitted to appropriate temperature conditions. A vast amount of research work has been done in the last twenty years with a view to determining the chemical composition of the ultimate organic compounds which build up the complex mixture of substances known as coal. These investigations resolve themselves into :—

- (a) attempts to extract soluble bodies by means of solvent liquids ;
- (b) the action of reagents, such as alkalies or acids on coal ;
- (c) distillation.

The pioneer work in both sections (a and b) was performed by Professor P. P. Bedson in Newcastle-on-Tyne, and the writer had the privilege of working in his private laboratory while a number of the earlier experiments were in progress. His work has been continued by a host of followers both in Europe and America but, unfortunately, the results which have been achieved do not appear to be at all commensurate with the time and labour spent upon them. Still, in the case of solvents, it has been proved that portions of the coal substance can be dissolved and separated after long extraction with solutions of pyridine and chloroform. The bodies which are obtained are designated as :—

Alpha compounds, which are insoluble in pyridine.
Beta " " " soluble in pyridine, but insoluble in chloroform.
Gamma " " " " " and soluble "

Bituminous Coals
 (treated with pyridine).



The *alpha* and *beta* compounds are believed to be derivatives of the ligno-celluloses, etc., while the *gamma* compounds appear to be derived from, or to have concentrated in them, the resinic bodies. According to S. Roy Illingworth :—

1. Anthracitic Coals are characterised by the general absence of *beta* and *gamma* compounds.

2. The properties of carbonaceous coals are due to the relatively high contents of *alpha* compounds compared with the *gamma* compounds and to the absence of *beta* compounds.

3. Bituminous coals in general owe their most striking properties to the presence of *gamma* compounds ; while the *beta* compounds occur in the greatest quantity in coals in which the $\frac{C}{H}$ ratio lies between 14 and 16.

It cannot be emphasized too strongly that the separation of coal into three groups, the *alpha*, *beta* and *gamma* compounds is purely an empirical division. The compounds are not bodies of definite chemical composition but complex mixtures which vary amongst different coals, and consequently differ in properties and behaviour. At the same time, if it is true that the resinous constituents of a coal play the leading part in the process of coke formation, and if it is also true, as work on British coals appears to indicate that the original resinous portions become concentrated, changed or unchanged as the case may be, into the *gamma* group, one is driven to the conclusion that investigation into the presence or absence of the *gamma* group in any particular series or class of coals, might throw light on their coking properties or furnish some explanation as to why one coal from a particular seam will coke—in the usual meaning of the term—while that from an adjoining seam will not. This should be an interesting field for research in India which might well be taken up in one or other of the chemical laboratories attached to the universities. In this connection attention may be directed to a similar investigation on certain South African* coals.

Many attempts have been made to oxidise coal by means of strong chemical reagents, fuming acids, mixtures of acids, caustic alkalies, bromine, etc. The literature on this subject had been summarised by Stopes and Wheeler who conclude as follows :—

“ Considered by themselves, the facts elicited from the study of the action of reagents on coal are not very informing (we except, of course, the facts relative to the formation of ulmic compounds), nor are the prospects for

* P. N. Latengan : “ Low Temperature Carbonisation of South African Coals ”—*Journal S. A. Inds.*, Vol. VI, p. 609 (1923). “ Results of Distillation and Solvent Extraction of Mine Samples of South African Coals ”.—*Ibid* ; Vol. VII, pp. 41, 103, 152.

future work in this direction very promising".* Very little systematic work has been done on the Indian Gondwana coals from this standpoint though pyridine extraction tests have been recently carried out with another object in view. According to Dr. D. Penman, the percentage of coal substance which can be extracted by pyridine in the case of a number of Indian coals varies from 22 per cent. down to less than 1 per cent. Dr. Penman has suggested that if the percentage extractable by pyridine is a measure of the relative ignition temperature of the coal dust, as is indicated by the 2nd Report of the British Coal Dust Committee (1913), then it would appear to be possible to discriminate roughly between the Indian seams as regards the explosibilities of the dusts produced by them, and in that way to grade the precautions that will require to be taken in mixing them.†

The Ulmins.

The compounds removed from coal by means of potassium hydroxide form the basis of the so-called "Ulmic Substances". According to Lander and McKay they are highly complex colloidal jellies which appear after the decay of the softer portion of plants. They occur in wood decayed by "wet rot", to a lesser degree in peat and lignite, but very rarely in bituminous coal; they have never been detected in Anthracite. The content of soluble ulmic compounds diminishes as the content of carbon increases. The formation or non-formation of ulmic compounds is indeed generally given as a method of distinguishing between a lignite and a bituminous coal. It is found, however, that a bituminous coal which has become oxidised by weathering for example, contains appreciable quantities of ulmic compounds, and that the quantity increases with the degree of oxidation. The presence of ulmic compounds detracts from the coking quality of a coal. A very interesting field for research is therefore opened up by a study of the ulmic compounds in carbonaceous material, and further information on the constitution of these compounds in coal would be of great value in determining the constitution of coal.‡

Messrs. Lander and McKay doubtless had British coals before their minds when they made this suggestion, but it is an equally important one from the Indian point of view, where no work of this nature has yet been

* M. Stopes and Wheeler : *Loc cit.*, p. 36.

† *Trans. Inst. Min. Eng.*, Vol. LXVII, p. 360-367 (1923-24).

‡ C. H. Lander and R. F. McKay : "*Low Temperature Carbonisation*," pp. 44 and 45 (1924).

carried out. Here again, as in the case of the action of solvents on coal, lies a promising field of research, which really needs exploration and might lead to results of economic importance as well as of scientific interest.

The Visible Ingredients of Banded Bituminous Coal.

An important advance was made in the study of bituminous coals when Dr. Marie Stopes recognised the fact that such coal is built up not merely of dull and bright bands, but of four distinctive portions which can be separated from each other, and which so react to certain simple chemical treatments as to indicate that their chemical molecules should be substantially different from each other.

To these four ingredients, all of which, in varying quantity, may be found in most ordinary bituminous coals, Dr. Stopes gave the following names:—

- I. Fusain.
- II. Durain.
- III. Clarain.
- IV. Vitrain.

Examination of typical Indian bituminous coals from the Jharia field shows that they contain all these constituents. Tests conducted by Randal on a large number of samples, have shown that it is necessary to crush the coals to about $\frac{1}{8}$ inch in order to set free the different constituents of Indian coals, generally. We shall now consider each ingredient in greater detail, relying on Dr. Stopes' original descriptions. In the first place none of them are homogeneous neither are they independent molecular units.

Fusain—is the so-called "Mother of coal", mineral charcoal, etc., of various writers. It occurs as patches or wedges of powdery, detachable fibrous strands. It can be easily separated from the rest of the coal, which is all firmer than it is in texture, and its presence makes lines of weakness along which the coal is most easily fractured. Indian specimens often appear to possess the appearance of patches of vegetable tissue, to the naked eye. Owing to its powdery nature, fusain is believed to be largely responsible for the dangerous accumulations of coal dust of many mines, though on the other hand F. S. Sinnatt does not consider that it is dangerous. It does not coke but leaves a non-coherent residue on heating. Fortunately, the proportion of fusain in Indian coals is usually small, and its composition, like that of samples from English coals, varies a great deal.*

* "On the Four Visible Ingredients in Banded Bituminous Coal"—*Proc. Roy. Soc. London, Ser. B.*, Vol. XC, p. 470 (1919).

Durain—is the “spore” coal or “dull” coal of the earlier literature. It occurs generally as bands of very variable thickness which are, however, usually ultimately lenticular in shape. It is hard, with a close, firm texture, which appears rather granular even to the eye. However straight the break across it, the broken face is never truly smooth, but, if looked at closely, always has a finely lumpy or matted surface. Generally, even in the dullest of durain bands a few (or many) flecks or hair-like streaks of bright coal are to be seen. Sinnatt* has stated that in certain special coals durain is practically representative of the whole seam, while Lessing found that durain in general is almost devoid of coking value and when heated undergoes practically no change in form. To these observations on English coal may be added Randall's remark, that some of the non-coking Gondwana coals of India are almost entirely made up of durain, sometimes profusely inter-banded with fusain.

Clarain—occurs as bands of very variable thickness with a definite and smooth surface when broken across the bedding plane. Such faces possess a well-marked glassy or shining appearance. Microscopically it is more composite than durain and it is often rich in fragmentary plant remains. On coking it is said to present good cohering properties. Clarain bands are particularly strongly developed in some of the better coking coals from the Jharia field.

Vitrain—occurs in definite, rather narrow bands sharply defined from the contiguous clarain or durain. “A single brilliant band does not exhibit the fine banding detectable even in the brightest of clarain, but it is a coherent and uniform whole, brilliantly glossy, indeed vitreous in its texture. The compact, vitreous band may split up readily in the fingers to small cube-like segments, but more generally, they break irregularly when forced, as with a pen-knife point, when the curved irregular faces have well-marked conchoidal fracture”. (Stopes). Microscopically it is translucent, of a brownish colour similar to hardened glue. It is comparatively highly coking.

The proportions, and differences in physical properties, of these constituents determine, as Randall has pointed out, the extent to which a coal can be cleaned free from high ash-bearing, inherent substances and, it may be added, to which it can be coked. A coal which contains a greater proportion of vitrain and clarain is likely to yield a more satisfactory coke than one in which

* F. S. Sinnatt: “A contribution to the study of Fusain”—*Trans. Inst. Min. Eng.*, Vol. LXII, p. 169 (1921).

R. Lessing: “The Behaviour of the Constituents of Banded Bituminous Coal on Coking”—*Trans. Chem. Soc.*, 117, 1920.

these bodies are greatly subordinate to the durain and fusain. The approximate ash contents, at various specific gravities of vitrain, clarain and durain samples from an Indian coal have been determined by Randall as follows :—

Specific Gravity.	Ash per cent.	Constituent.
1.26	1	Vitrain
1.30	5	Clarain
1.35	10	Clarain
1.40	15	Clarain
1.45	20	Durain
1.50	25	Durain
1.60	40	Durain

The Hydrogenation (or Liquefaction) of Coal.

In 1914, Dr. Bergius and his co-worker Bidwiller took out patents in Germany for a process of hydrogenating coal and obtaining liquid products from it. From various statements which have been published from time to time in the technical press, it appears that the process is applicable to many varieties of coal and coal-like substances. The material is ground down to a fine powder, mixed with a mineral or tar oil, and the mixture heated for several hours in bombs with hydrogen, at pressures of about 100 atmospheres and temperatures of 400° to 450°C. Under these conditions it is claimed that a portion of the carbon of the coal combines with the hydrogen, resulting in the formation of liquid products, which closely resemble mineral oils. Dr. Bergius, speaking recently before a meeting of the West German Coal Engineers at Essen, maintained that the long series of experiments carried out at the works of the Deutsche Bergin Aktien Gesellschaft fur Kohlen and Erdolchemie at Mannheim-Rheinau, have solved the difficult problem of bringing the process to a practical stage. The hydrogen necessary for the operation can be obtained by a special method from the gases rich in methane, formed in the liquefaction process itself. The liquid products yield by ordinary methods of distillation and refining, benzine, Diesel oil, fuel oil and lubricants. These have the same properties as the present trade substances sold under these names. It is announced, further, that by far the greater number of German coals are suitable for liquefaction, including many of the low-valued materials such as coal dust.

Bergius claimed that it is possible to convert something like 70 or 80 per cent. of the original value of certain German coals into oil, and, as far as can be gathered, independent investigations have proved the general truth of these assertions, arresting enough when it is remembered that only about 6 per

cent. of the weight of the original coal is recovered as tar by the ordinary carbonisation or distillation methods. Thus, in an investigation by a Belgian Commission in 1922, a particular coal on hydrogenation gave 90 per cent. of oil, the remaining 10 per cent. being made up of gas and unchanged original mineral impurities. The researches at Birmingham University, where English coals have been tried out for the first time, gave yields of oil of 37 per cent. and 61 per cent. for coals from South Staffordshire, South Wales and Lancashire. The quantity of oil produced from English and Welsh coal does not appear therefore to equal that obtainable from the German specimens, but on the other hand, the apparatus was not the same as that used by Bergius and perhaps, under more drastic conditions, the liquid yields would have been greater.

In the Birmingham experiments it was found that very little change took place when the material was heated alone with hydrogen. If, however, the coal was mixed with a substance like phenol or a mineral oil of high boiling point, and then subjected to hydrogenation, considerable absorption of hydrogen occurred, and a large proportion of the coal became liquid. The exact part played by these additional reagents is not clear.

A method such as this would have very far-reaching effects if it could once be established on a commercial basis. The actual engineering difficulties of working under such intense pressures are of course very great, while the cost of the plant will naturally be high. Still the method has startling possibilities and the writer is inclined to share the view of Messrs. Nash & Shatwell who hope that they will not be accused of undue optimism when they suggest in their paper entitled "Fuel Oil Resources of the Future," read at the end of 1924 before the Institute of Petroleum Technologists, that long before the existing resources of fuel oil become exhausted, synthetic mineral oil might be obtained by the hydrogenation of coal.

The Bergius process has attracted much attention on the Continent and a company entitled "La Société Internationale de Combustibles Liquides" has been formed to exploit it, by the "Arbed" undertaking which has secured the patent rights for Belgium, France and Luxemburg. The Grand Duchy is represented by the Arbed and Terres Rouges concerns, France by the Schneider works at Creusot and Belgium by the E. Coppee firm, the Bank of Brussels, the Société Generale de Belgique and the Financiere de Transports.

The writer has also been informed that a powerful English group is interested in the patent rights for this company. Beyond watching the results of these and of continental developments from the Indian point of view, the writer has no further suggestions to offer now.

PART II.

The Indian Coking Problem.

Mr. Trebarne Rees on Wastage of Coking Coals.

Mr. Trebarne Rees, who reported to the Government of India in 1919, drew attention to the primitive and wasteful methods of coking in vogue on the Indian coalfields, and to the fact that the best quality coking slack was being used for general purposes, such as steam raising, smithy work, etc. He suggested that consumers should be induced to use other grades of fuel for these purposes so as to conserve the best coking coals for metallurgical uses, particularly for the reduction of iron ores in blast furnaces.

Coalfields Committee on reserves of Coking Coal.

The Coalfields Committee, which reported in January 1920 after touring the fields and examining numerous witnesses, came to startling conclusions regarding the paucity of the reserves of high grade coking coals though then, as now, only approximate figures were available. The Raniganj coalfield alone contains over twenty thousand million tons of coal of all kinds, but most of this is inferior and only 518 million tons of first class coal are estimated to exist. The addition of the Jharia reserves of the best coal brings the total up to nearly a thousand million tons. To the west of Jharia, the Bokaro field is said to contain over six hundred million tons of coking coal, and it is possible that further reserves will be found in the untouched Karanpura fields still further to the west. Apart from these, the only other coking coal known to occur in any quantity in India is that of Assam, the high sulphur content of which, however, makes it unfit for metallurgical purposes. The Committee concluded that as far as is known at present, India will be dependent for metallurgical coke on the fields of the Damuda valley, and that although the total amount of coal they contain is undoubtedly very large, the quantity available for coke manufacture is strictly limited. Unless the resources are conserved and the use of the coal of lower grade substituted, wherever possible, for that of the better coking qualities, India may be faced at no very distant date with the loss of her metallurgical industries for want of coke. If the present rate of increase is maintained and an opportunist policy persisted in, the known reserves of two thousand million tons of high grade coking coals would be extracted in forty years.

Having come to this conclusion the Committee made a number of recommendations to the Government of India. These included the formation of a

new Government Department and a Board, as controlling authorities with legal powers designed to ensure conservation and economic extraction of coal.

It is necessary to point out that the Mining Engineer of the Railway Board submitted a minority report, in which he stated his own personal belief that in the recently proved portions of the Jharia and Raniganj fields, and in the Bokaro and Karanpura fields, there are at least 300 years supply of good quality coal available.

Personal Observations in 1921.

Writing in 1921, the author drew attention to these matters and pointed out that the authorities were well aware of the position. He gave his own opinion that there was no need for fear that the growth of India's iron and steel industry is likely to be checked by the lack of metallurgical coke. Apart from the question of conservation, there are possibilities of extensions to known reserves of high class coal in the undeveloped fields and in the results of research in the mixing, washing and flotation of the poorer qualities. The results of recent investigations in the United Kingdom on froth flotation as applied to the washing of industrial coal, are of peculiar interest to India, as they have demonstrated that metallurgical fuels of a high degree of purity can be made from coals possessing a high ash content.*

Tariff Board and Reserves of Coking Coal.

The next development of this question of the coking coal reserves occurred with the publication of the Report of the Tariff Board regarding the Grant of Protection to the Steel Industry in 1924.

This contains a report by Dr. C. S. Fox and a note by Dr. E. H. Pascoe in which the latter, after pointing out that the figures quoted are nearly all rough approximations, concludes that India possesses a reserve of 1,768 million tons of coking coal. On the assumption that 3 tons of coking coal are required to produce 2½ tons of coke, there is therefore enough coking coal in India to supply the iron and steel industry with 4 millions of tons of metallurgical coke per annum for the next 150 years at least.

Revision of the Geological Survey of Raniganj and Jharia.

It is admitted that our information of the reserves of the two most important coalfields, Raniganj and Jharia, which between them account for some 95 per cent. of the output, is of the scantiest description. It is impossible to make reliable estimates without large scale geological maps which must be based on accurate and complete topographical maps. These having

* "The Iron and Steel Industry of India"—*Min. Mag.*, July 1921.

been completed recently, a new geological survey has commenced which, it is believed, will result in trustworthy data, leading to a definite figure for the reserves becoming available.

But it is not only in connection with the quantity of coal available that our knowledge is limited and meagre, as identical conditions obtain as regards qualities, composition and their variations in the seams themselves and from seam to seam. Dr. Fox in his report on the "Mineral Resources of India for a Domestic Steel Industry" stated:—"Complete analyses of Indian coals are conspicuous by their absence". Regarding his tabulation of the usual type of analyses, Dr. Fox remarked:—"Such an arrangement admittedly does not bring out the superior importance of the Raniganj and Jharia Coalfields nor does it truly express the composition of individual seams where several occur in the same field".

Physical and Chemical Survey of the National Coal Resources of Great Britain.

Even in a country with an old established and highly organised coal industry like Great Britain, where the research workers on coal and allied subjects are probably now to be numbered by hundreds, it has been found essential recently to undertake a detailed physical and chemical survey of the more important seams. In 1922 the Fuel Research Board issued a press notice which has an important enough bearing on similar Indian problems to be reproduced here:—

"It has long been felt that an important aspect of the problem of the conservation of the national coal resources involves the study and classification of the coal seams which are at present being worked or developed, and also of seams or portions of seams which are being left unworked or thrown aside above or below ground. This study and classification on its directly practical side must deal primarily with the suitability of each particular coal for those purposes for which its individual qualities render it most adequate, *e.g.*, for gas making, steam raising or for domestic use.

"This question of survey has for some years been receiving the anxious consideration of the Fuel Research Board but the unstable conditions which prevailed in the coal industry during and since the war have necessarily led to the postponement of the work of organization. It is now however considered that the time has arrived when a beginning can wisely be made.

"The Fuel Research Board believe that this work can be most effectively carried out with the help of local committees on which colliery owners, managers and consumers are associated with the representatives of the Fuel Research Board and the Geological Survey. By the combination not only

will local knowledge and experience be made available, but the initiative of those most deeply interested in the practical aspects of this Survey will be secured.

“The survey work will thus from the outset assume a practical character, for the selection of seams for examination will be in the hands of those who are in the best position to establish the relative importance of the problems awaiting solution. The selected seams will be subjected to physical and chemical examination by the local experts ; and, as a result of this experience a further selection of those which appear to justify experiments on a practical scale to test their suitability for particular uses or methods of treatment will be made. This experimental work will be carried out either at His Majesty’s Fuel Research Station, or at other works as may be found most convenient

“The first Committee is already at work in the Lancashire and Cheshire district, where the local Research Association has been recognised by the Fuel Research Board as its responsible body for the purpose. It is felt by the Fuel Research Board that the experience gained in the work and organisation of this Committee will be of great value in the establishment of committees in other districts when the time is ripe for further developments, but they are satisfied that it will be wise to build up this national organisation on the sure foundations of actual experience”.

The reports (four of which have now appeared), of the physical and chemical survey of various seams in the Lancashire and Cheshire coalfield alone are most valuable. They contain full details of each seam, their variations from place to place and the reasons for these changes. Particular attention is paid to the physical and chemical properties of the coal and series of proximate and ultimate analyses are given. The results of tests on washing the coal and of large scale experiments, including steam-raising tests, the carbonisation of the coal at high and low temperatures, the utilisation of the coke in water gas plants, etc., are included.

Suggested Physical and Chemical Survey of Selected Coal Seams in Raniganj and Jharia.

However urgent the reasons for detailed survey research of this nature may be in the United Kingdom, they apply with still greater intensity in the case of India and, although we possess neither Fuel Research Board nor Private Research Associations, an attempt to collect information of this kind (though it cannot be done on such an ambitious scale perhaps), at any rate as regards the more important seams now being mined in Raniganj and Jharia, might be started now and carried on concurrently with the revision of the geological maps. The results of such a chemical

and physical survey of a few important seams might prove sufficiently valuable to the industry generally, to counterbalance the time and trouble involved. The author's experience shows that the geological party working alone will be fully occupied in purely geological operations and cannot be expected to do more than assist and advise in such a matter. The question is one which might very profitably be taken up by the Mining and Geological Institute of India with the assistance of local committees which already exist in Raniganj and Jharia. The leading mining firms, the chief consumers and the railway authorities might be invited to assist. The Mining and Geological Institute of India has, in the past, undertaken the revision of the geological maps of the two great coalfields and brought them to as high a degree of accuracy as was possible in the absence of a new topographical survey. In the same way the Institute, through its interested members, might now turn its attention to the physical and chemical survey of the seams themselves.

Essential Qualities of a Blast Furnace Coke.

The essentials of a blast furnace coke according to Sutcliffe and Evans, whose views are practically identical with those of most other authorities on the subject, are as follows:—

1. Freedom from ash and sulphur.
2. High carbon content.
3. Resistance to the action of carbon-dioxide in the upper region of the furnace.
4. Rapidity of combustion.
5. Uniformity of size. A maximum size of 4 to 6 inches, and, on the other hand, freedom from smalls.
6. Strength without "density", as "density" is inimical to rapid combustion and fast driving.
7. Porosity—a highly developed cellular structure which, however, must not be so open as to reduce strength, with the subsequent production of smalls.
8. Hardness—to resist abrasion in the furnace.

The only one of these essentials which can be considered here is "freedom from ash and sulphur". This may be regarded as a chemical property of the coke depending (a) on the composition of the original coal, and (b) on its selection and preparation before it enters the oven. The other seven properties enumerated above are mainly, though not entirely, physical characteristics, variable with the efficiency or otherwise of the coking operation,

the discussion of which lies outside the scope of this bulletin. As far as the author's information goes the modern by-product recovery coke ovens in existence in India are as suitable for the purposes for which they were erected as similar plants in other parts of the world, and given equally good coal to start with, are capable under efficient management of yielding coke equal to the best that is manufactured anywhere.

Quality of Indian Metallurgical Coke.

According to Mr. C. P. Perin, out of 17 coal seams found in Jharia, only three can be said to give a fair coking coal. His use of the term "fair" is a relative one, because, as he explains, in countries accustomed to low ash fuels they would not be regarded with approval. The coals have one great advantage, however, in that they rarely exceed a half of one per cent. in sulphur, but they have on the other hand, the disadvantage of a very high percentage of phosphorus carried uniformly in the ash. The latter element is stated to average about 1 per cent. of the total ash. "What is called first class coal in the Bengal field rarely contains less than 12 per cent. of ash". The coke produced at Tata's works in non-recovery retort ovens of the Coppee type is stated by Mr. Perin to carry from 17 to 20 per cent. of ash. In England and America it would be looked upon as a most undesirable blast furnace fuel, but with high grade iron ore containing very little silica or alumina, the operation of the blast furnaces has been reasonably successful from the start.*

Composition of Indian Coking Coals and Cokes.

Further figures† of the composition of the coking coal used by Messrs. Tata's Limited, and of the coke manufactured from it have been made available recently.

Composition of coking coal used by Messrs. Tata's.

(Average of all collieries).	
Volatile Matter	25.20
Fixed Carbon	57.69
Ash	17.11
Sulphur	not given
	100.00

* C. P. Perin: "The Recent Development in the Iron and Steel Industry of India," 18th General Meeting of American Iron and Steel Inst., New York, October 22nd, 1920. In this connection see also:—H. M. Surtees Tuckwell: "The Iron and Steel Industry in India"—*Proc. Emp. Min. & Met. Congress*, Vol. IV, p. 252, (1925).

† "The Iron Age"—March 13th, 1925. See also "The Iron and Coal Trades Review" April 10th and July 24th, 1925,

Composition of By-Product Oven Coke made from the above Coals.

Volatile Matter	2.19
Fixed Carbon	74.08
Ash	23.73
Sulphur	not stated
	<hr/>
	100.00
	<hr/>

Comparison of Indian Coking Coals and Cokes with those used in Britain, the Continent and America.

Tables are given below in which the composition of Indian coking coals are compared with those generally used in the United Kingdom, the European Continent and the United States of America.

Coking Coals as charged into Ovens.

	Moisture.	Fixed Carbon.	Volatile Matter.	Ash.	Sulphur.
British	2 to 8.	...	81 to 37.	6 to 18.	1 to 2.5.
" (average)	3.78	...	38.62	10.75	1.69
Continental	10 to 12	...	20 to 25	8 to 10	...
American . . . . .	...	...	28 to 34	4 to 9	...
Indian . . . . .	...	...	26.4	15.75	.64

Composition of Metallurgical Cokes.

	Fixed Carbon.	Volatile Matter.	Ash.
British	84 to 92	0.45 to 0.81	7 to 15
Continental	ash content said to be high.		
American	84 to 89	.8 to 2.0	10 to 14
Indian	74 to 77	1 to 2	20 to 24

The most striking feature of these tables, incomplete though they are, is the unusually high ash percentage of the Indian coal and consequently of the ooke obtained from it. The figures for foreign countries are based on a recent paper by G. A. Hebden.*

Performances of Blast Furnaces using Indian Coke.

Although it is a digression from the main subject under discussion, it is advisable to give here the data which have recently been published relating to the performance of the blast furnaces at Tata's plant, using the coke which

* G. A. Hebden : " Comparative Survey of Coke-oven Practise in Various Countries "—*Proc. Empire Min. & Met. Congress*, Pt. IV, pp. 65-80 (1925).

has already been described. So far as the author is aware, they are the only figures which have ever been made available and they have appeared only in an American publication which is not obtainable easily.

Production of C & D Blast Furnaces, Tata Works in January 1925.

	C	D	Total.
Total pig iron, tons	17,414	17,676	35,090
Average per day, tons	561.74	570.19	565.1
Average coke per ton, lbs.	2,102	2,200	2,151
Highest daily tonnage	636	672	...

Charge per ton of Pig-Iron.

	C	D
Ore, tons	1.52*	1.6†
Manganese ore, lbs.	56.5	22.5
Dolomite, lbs.	1,226	1,216
Scrap, lbs.	34‡	43‡
Scale, lbs. . . . .	...	28

Composition of the Iron Ores used.

	Fe	Si O ²	P	Mn	Al ² O ³
Sulaipat	65.86	2.48	0.054	0.21	1.29
Badampahar	56.06	4.89	0.090	0.54	4.31
Gurumahsani	59.36	5.11	0.063	0.47	4.52

The Removal of Ash from Indian Coals.

Mr. Treharne Rees suggested in 1919 that attention might well be directed to the improvement of Indian coking coals by crushing and washing, though he was careful to point out that earlier attempts had up till then failed to ameliorate them by these processes. "The ash", we are informed "does not exist generally speaking, in distinct bands in the coal, a large portion being found in laminated streaks which cannot be separated by hand, whilst the slight differences in specific gravity have hitherto made washing ineffectual."

In giving evidence before the Coal Committee, Mr. W. Weir, the Colliery Superintendent of the Bengal Iron and Steel Company, advocated experiments on the preparation of coking coals before they are put into the oven. Then,

* 25 per cent. Sulaipat and 75 per cent. Badampahar and Gurumahsani ore.

† 50 per cent. Badampahar and 50 per cent. Gurumahsani ores.

‡ Ingot moulds.

as now to a large extent the coal was coked in the by-product ovens unscreened, unwashed and sometimes unstamped. A very prevalent opinion in India, said Mr. Weir, is that it would not pay to wash Indian coals because of their "physical characteristics". They are described by Indian geologists as "laminated, bituminous coals in which the bright and dull layers alternate". It is said that these bright and dull layers grow together, the bright bituminous layer sticking fast to the dull layer above and below it. The dull layers contain the poorer coal and practically all the ash, the whole forming a complete mass. The writer has seen stone bands varying from $\frac{1}{2}$ -inch to 2 inches in thickness running through the middle of the seams. Such bands could be dealt with at picking tables before the coals reach the breaker and washery. When the coal and refuse approach one another in specific gravity, some difficulty may be experienced in washing..... Testing coals in laboratories to decide whether they will wash or coke is in the writer's opinion hopeless, and no one can say in India that the coals won't wash, until a real practical test has been made with a washer on a small scale..... For up to-date foundry light casting practise, the percentage of ash in an Indian coke is much too high, and experiments should be carried out to try and improve the calorific value of the coke for blast furnace and foundry practise.

Further extended Washing Experiments recommended by Coalfields Committee.

The Coalfields Committee summed up as follows :—Draper washers have not yet been tried in India. Tests of Indian coal carried out in England in various types of washers indicated that the percentage of loss was too high to justify the capital expenditure that would be involved, but further experiments are required and should be undertaken.

Mr. Treharne Rees had already mentioned that types of machines like the Draper washer might very possibly be found to reduce the quantity of ash in the coal, as they are capable of effectually separating materials in which the margin between the specific gravities is very slight.

The further experiments desired by the Coalfields Committee were actually carried out, and through the courtesy of the companies concerned a selection from them can be given here.

The extraneous Ash of Indian Coking Coals.

In the first place it is necessary to point out that high ash-bearing shale bands do actually occur in Indian coal seams and that under prevailing conditions they are not adequately removed. All the following seams of the Jharia field possess such bands of varying extent and thickness in certain loca-

lities:—Nos. 10, 13, 14, 15 and 16. These bands cannot be properly removed during extracting operations underground, as even in cases where they are well defined and easily recognisable it would not be economical for the actual coal getter to waste his time picking them out. They are therefore filled into the tubs by the miner and brought to the surface with the coal. The removal of extraneous and accessory mineral matter of this kind can be accomplished by (a), hand picking on travelling belts or tables, or, by (b), some system of washing, if the difference between the specific gravity of the shale and coal is wide enough.

A table is given below showing the specific gravity and ash content of various shales from Jharia seams.

Seam.	Sp. Gr.	Ash (per cent.)
Malkera	2.0	53.25
"	3.18	71.65
"	2.89	77.65
"	2.42	84.15
"	2.41	85.47
Alkusa	2.30	56.50
" (10 seam) . . . . .	...	48.95
" (16 ")	1.65	45.0

This table indicates that the shale in these seams ranges from a specific gravity of 1.85 upwards, while the ash content of the material increases from 45 per cent. upwards. The quantity of the shale in these seams was not more than 10 per cent., and it has been estimated that were it all eliminated an ash reduction of about 5 per cent. on the general bulk would be brought about. Actual tests which were made by Dr. Evans with seams 10 and 16, showed an ash reduction on shale elimination of from 2.5 per cent. to 5.1 per cent.

Inherent Ash of Indian Coals.

If the matter ended here the problem of the preparation of a relatively pure coking coal would be easily solved. Unfortunately it does not, for in addition to the accessory impurities of these carbonaceous shale bands—most coal seams in general and Indian seams, apparently more so than others, contain a quantity of inherent, natural, inorganic impurities. (The shaley bands which we have just considered consist mainly, of course, of inorganic material which has been introduced into the seam during its formation). This has been well expressed in the opinion of Messrs. Sinnatt and Mitton regarding the origin of the inherent ash:—

“Natural, inorganic matter, derived from the original plant substances from which the coal has been formed and from the matter which has been

deposited (as part of the coal-forming mass) from solutions with which the plant substances have been in contact. These impurities form the inherent ash of the coal, which, as a general rule (in British coals), varies in amount between less than 1 per cent. up to about 5 per cent. It is not possible to separate these impurities from the coal as a whole; at the same time, it may be pointed out that the recent work by Wheeler and Lessing has shown that the bright part of coal, vitrain, contains, as a rule, a lower percentage of ash than the other ingredients, clarain, durain and fusain. If it were possible to separate the bright coal from the remainder of the seam, it would be found to contain a lower percentage of inorganic matter than the seam as a whole.**

The following table shows the percentage of inherent ash in the four constituents of coal from various typical English seams:—

Name of Seam.	Percentage of Inherent Ash.			
	Vitrain.	Clarain.	Durain.	Fusain.
Furnace Mine	1.30	2.58	8.66	6.35
Arley Mine, Lancashire	0.87	1.15	2.50	4.72
Trencherbone, Lancashire	1.54	2.17	1.47	5.50
Wigan Five Feet „	1.92	2.79	4.65	not done
Wigan Yard, „	0.82	3.26	12.90	5.90
Thick Seam, Staffordshire	1.20	1.45	3.60	10.00

Mr. Randall's work on the Indian coals yields much the same conclusions.

Inherent Ash of Indian Seams.

The high ash percentage which still remains in typical Indian Gondwana coals even after the removal of the extraneous shaley bands is shown by the following table:—

Seam.	Ash, per cent.
10 Alkusa	19.6
16, average	18.77
11, New Tetturya	18.77
12, „ „	15.31
14, „ „	15.48
N. Damuda (average)	19.00
Bokaro Jharla	15.81

The ash in all these examples is still much too high for them to be regarded as desirable coking coals. The quality of the Indian seams depends then on the relative properties and proportions of bright and dull coal in

*F. S. Sinnatt & H. E. Mitton: "The Preparation of Coal for the market"—*Trans. Inst. Min. Eng.*, Vol. LXVII, p. 485 (1924).

them. In the better quality coking seams Dr. Evans decided that the proportion of bright coal is probably from 60 to 70 per cent., and that this gradually declines until in extreme cases, like some of the Pench coals, the proportion of bright material is nearer 5 to 10 per cent.

Variation of Ash with Specific Gravity.

The following table shows the variation of the ash content in Indian coals with the specific gravity. The results were obtained by Mr. Draper and Dr. Evans on clean bright cubes with no shaly interstratifications :—

Sample.	Sp. Gr.	Ash.
1	1.33	10.15
2	1.34	11.55
3	1.39	12.60
4	1.38	13.20
5	1.37	14.22
6	1.41	14.60
7	1.44	17.50
8	1.46	18.65
9	1.48	18.80
10	1.49	21.32
11	1.60	26.20

As a typical instance of the variation in ash content of different portions of the same seam, the case of seam 16 at Bhilatand and of the same seam at Sijua, both in the Jharia field, may be cited. In this case careful sampling has been performed foot by foot throughout the whole workable portion and determinations of the ash content made for each section.

Seam 16 Bhilatand.

Top Coal not worked.

8 feet 4 inches

average 22.4 per cent. ash.	to 9	" 4 "	29.5	per cent. ash
	10	" 4 "	28.7	" " "
	11	" 4 "	18.37	" " "
	12	" 4 "	17.38	" " "
	13	" 4 "	21.40	" " "
	14	" 4 "	11.90	" " "
	15	" 4 "	18.12	" " "
	16	" 4 "	33.84	" " "
	17	" 4 "	45.96	" " "
	18	" 4 "	33.31	" " "

Seam 16 Sijua.

Top Coal not worked.

6 feet

average 20.4 per cent. ash.	to 7	" 60.7	per cent. ash.
	8	" 24.5	" " "
	9	" 24.1	" " "
	10	" 13.7	" " "
	11	" 9.9	" " "
	12	" 33.2	" " "
	13	" 35.5	" " "
	14	" 22.1	" " "
	15	" 12.5	" " "
	16	" 25.4	" " "
	17	" 17.1	" " "
	18	" 10.8	" " "
19	" 14.1	" " "	
20	" 22.0	" " "	

(It is a remarkable coincidence that Mr. Randall, working years later, gives the ash percentage of unpicked, run-of-mine coal from No. 16 seam in the Jharia area at exactly the same figure *viz.* 22.4 per cent.)

The shale bands of this seam are said to vary from 8 per cent. to 12 per cent. The specific gravity of the shale is 1.85 and its ash content 45 per cent. The bright coal occurs in laminated bands but generally, in this particular seam, the brighter bands are intimate mixtures of bright and dull coal.

Small samples gave the following results:—

Bright coal:—Specific gravity 1.3 to 1.4 with an ash percentage of 8 to 10 per cent.

Dull Coal:—Specific gravity 1.45 to 1.5 with an ash percentage of 18 to 20 per cent.

To render this, or similar coals, suitable for the manufacture of comparatively good metallurgical coke an ash content of 16 per cent. is a maximum figure. Now although it has been calculated that the coal contains an average of 10 per cent. added shale, practical tests have shown on a large scale that not more than a 5 per cent. reduction can be allowed and such a reduction is not large enough.

Detailed and costly experiments have been carried out in washing tests on such Indian coals by both the Draper and the Rheolaveur systems. It is unnecessary for the writer to describe these methods here, for useful though they are for certain classes of foreign coals, they have proved their inability to bring about a clean enough concentration when operating on Indian coals. There are no moving parts in either of these plants and so they are regarded as the most perfect gravity machines of their kind on the market. In the Draper system the crushed coal is treated with a stream of water in a vertical direction and in the Rheolaveur by both vertical and horizontal currents combined.

Apart from the removal of extraneous ash it may now be definitely asserted that no systems of simple gravity washing is likely to ameliorate the ordinary coking coals of India on a commercial scale.

This is due to the fact that the specific gravities of the good coking constituents, vitrain and clarain closely approach those of the higher ash, non-coking ones, durain and fusain.

Amelioration by Froth Flotation.

The application of the principles of froth flotation which had previously been utilised solely, and very successfully, for the dressing of metalliferous

ores, to the treatment of coal has given us a method of cleaning Indian coking coals by which the proportion of ash in many of them can be reduced to reasonable limits, and in some cases at least, probably on an economic basis in normal times. The principles of froth flotation do not depend on specific gravity but on certain obscure differences of surface properties of the individual particles of the constituents of the crushed coal.

When the first results of the early experiments on English coals by this new method of treatment appeared, its possibilities in India, where at that time ideas regarding the production of the better quality metallurgical coke had arrived at an impasse, were recognized. Partly as a result of investigations made by the author in England, arrangements were made for the series of tests to be carried out in the laboratory of the Geological Survey of India by the agent of the Mineral Separation Company, the owners of the patents. Mr. Randall's report has just been published and it is available for the interested public.* It can be summarised in a few words:—

“ A comparison of the advantages to be gained by cleaning (by the Froth Flotation process), and the costs of treatment, is now possible. It will be seen that if a coal is cheap and/or capable of yielding a large percentage of clean product, treatment may be profitable. *Certain of the Indian coals fulfil these conditions.* ”

Present Position of Froth Flotation of Coal.

Further development of the froth flotation method as applied to the treatment of coals in the United Kingdom has, unfortunately, been checked by the unprecedented depression in the British coal mining industry; over 500 of the mines have been closed and all the others have been working on short time. The unprofitable condition of the trade generally has compelled owners to curtail expenses drastically and this has resulted in the cessation of many interesting lines of large scale development and research.

A company was formed some 2 or 3 years ago entitled La Compagnie Francaise des Mines Powell Duffryn, which installed a froth flotation and briquetting plant at Nantes in Northern France in which it was proposed to treat imported Welsh coal and manufacture briquettes for sale on the Continent. The serious state of the coal trade generally has prevented this from being done up to date.

The Powell Duffryn Steam Coal Co., Ltd., which is one of the largest of the South Wales coals concerns, erected a froth flotation plant in 1924, to

*W. Randall: "Froth Flotation of Indian Coals"—*Rec. Geol. Surv. India*, Vol. LVI, pp. 220-249, (1925).

treat 25 tons of coal per hour at Bargoed in the Rhymney Valley. The treated coal was used for coking. The results are stated to have proved extremely satisfactory, so much so that the capacity of the original installation has been doubled and 40 to 50 tons per hour are now being regularly frothed.

A new briquetting works is to be erected shortly at the same company's Aberaman mines, in which it is proposed to manufacture ovoids for domestic use from low volatile coals.

In France again, at Noeux-les-Mines, a coal cleaning and briquetting plant has been erected which, it is stated, should be working continuously in the autumn of 1925. In Belgium the results obtained in the first installation, erected at Charleroi, are said to have fully justified the expectation of the licensees and arrangements are now proceeding for the erection of further plants. Another plant in the Liege district is said to be showing excellent results.

In Central Europe the interest in froth flotation continues to increase, as shown by the proposed installation of several new plants. A number of new plants are being erected in Spain where the output of cleaned coal treated by froth flotation rose from 171,461 tons in 1923 to 227,112 tons in 1924.

The Drying of Coal Froths.

One of the difficulties of the Mineral Separation Company's process of froth flotation, is the fact that the fine powdered coal froth comes from the machine, entangled with anything from 50 to 70 per cent. of water and the drying of the froth is troublesome. When it is remembered that it is the aim of the coke maker to see the coal going into the oven with, say, not more than 5 per cent. of moisture, this difficulty will be appreciated. Various methods have been tried in the search for a solution of the problem. Both filtration and centrifuging have met with only partial success on a large scale. However, the difficulty appears to have been overcome by treatment with tar. If the coal concentrates are intended for subsequent coking they are treated with emulsified tar in the cold. Each tiny coal particle becomes coated with a tarry layer and is thus no longer wettable. Flocculation takes place and the coal is then dried by pressing in moulds or between porous belts running on rollers.

For briquetting, the concentrates are agitated with soft molten pitch. The temperature of the pulp is then raised to about 60° to 100°C. when intense flocculation takes place. The flocculated pulp is then pressed in moulds provided with means of drainage, when a hard, durable briquette containing less than 10 per cent. of water is said to be produced. If the briquette is

allowed to stand for a few hours, the water content is said to drop to 4 or 5 per cent.

The Diehl System.

In connection with this problem the author's attention was called by Dr. Edgar Evans of the Research Department of the National Federation of Iron and Steel Manufacturers, to the Diehl System of vacuum flotation. This certainly appears to offer attractive possibilities and should be studied by any one interested in the introduction of froth flotation into India. It differs from the Minerals Separation process in that the coal is floated not by introduced or entangled air, but by means of the air contained in the coal particles and in the wash-water itself. This is brought about by carrying out the operations *in vacuo*. The process is said to be carried out very simply and very effectively by means of a siphon. The cleaned froth as it leaves the machine is under a considerably lower pressure than the atmospheric pressure, the bubbles therefore collapse instantaneously, and by draining alone the proportion of water is reduced down to about 10 per cent., which is a very different figure from the 50 per cent. of the other process.

PART III.

The Problem of the Blending of Indian Coals.

Analysis of Evidence on Blending.

Another of Mr. Treharne Rees' numerous recommendations concerned the blending or mixing of Indian coals. "Serious attempts do not appear to have been generally made", he wrote, "either from the scientific or the practical side to mix the various qualities of coal found in these two fields, with a view to increasing the efficiency and economic use of the outputs, whether for coal making purposes or otherwise. This has been done in other countries with very beneficial results and deserves attention."

The evidence laid before the Coalfields Committee indicated that a few experiments had been made in blending coal for steam raising and coking purposes, with, on the whole, satisfactory results. The Committee referred to the fact that bunker coals and exported coals were often mixtures of various seams. This mixing however, was not designed on scientific lines to secure increased efficiency, neither was it constant, as it depended entirely on the exigencies of an inadequate transport system. The Committee also discovered that experiments had been conducted to ascertain whether certain kinds of coal, ordinary classed as non-coking, could be made to produce satisfactory coke when blended with good coking coals, but the results of these tests were

rather disappointing though not altogether a failure. Finally, the Committee came to the conclusion that there could be no doubt that mixtures of various kinds and qualities of coal may often be advantageous, and they recommended such mixing to the attention of colliery owners and consumers as a means of increasing the efficiency and economic use of the outputs.

An analysis of the evidence given to the Coalfields Committee on the blending of coals shows that of eight witnesses who answered in the affirmative, one confined his remarks to the question of steam raising and two to coking, while the remainder dealt with both sides of the question. The great majority of the witnesses examined replied that they had no experience of the subject at all. Much of the little material evidence which was submitted was of a nebulous character. It does appear, however, that even at that time the advantage of mixing the slow-burning coals of the Jharia field with the fast-burning coals of Raniganj, was appreciated from the steam raising point of view.

This subject is of greater importance to-day when the Indian coal industry is depressed through overproduction than it was a decade or so ago, and it received some consideration from the Committee appointed in 1925 to enquire into the methods of stimulating the export trade.

Mixing for Steam-raising.

As is shown by analysis there is a very marked difference in the volatile constituents of the coals produced in the two fields. "The percentage of volatile matter in the Raniganj coal is very high, in some cases as high as 35 per cent., whilst that of Jharia coal rarely goes above 25 per cent. Jharia coal is practically all coking coal, whilst the Raniganj coal is either non-coking or only partially coking. It follows that the Jharia coal is better than the Raniganj for certain purposes and *vice versa*. The Jharia coal is a low volatile and short-flamed coal and therefore gives better results than Raniganj when used in an ordinary locomotive boiler or in any boiler with a forced draught. But for some purposes a mixture of Dishergarh-Poniat and Jharia coals will give results superior to those from either of them in isolation and comparable to those from Welsh. This fact is particularly important from the point of view of competition with Natal coals which, as will be shown, are very similar in quality to Jharia coals."

"We wish, however, to draw particular attention, in this connection, to the difference already noticed between Raniganj and Jharia coals, which makes the two kinds suited for different purposes. Several witnesses,

realising this difference and realising that Dishergarh coal, as a fast burning or "fireman's coal", is of a type in no way comparable with the Natal coals which have successfully invaded overseas markets, seek to draw the conclusion that only Jharia coals, as strictly comparable with those from Natal, should be sent out to compete against them. This conclusion we are unable to accept: it is not a question of matching against Natal coals either Dishergarh coals or Jharia coals separately: a judicious mixture will produce a coal that for some purposes will prove more satisfactory and more economical than either Dishergarh or Jharia coal burnt alone and can compete, on at least level terms, with any coals or mixture of coals from any collieries in South Africa. We give below the analysis of a mixture of one-third Dishergarh-Poniati and two-thirds selected Jharia which has proved very successful both for the bunkering of steamers and for use in locomotives: it is not claimed that this or any other mixture of Indian coals is better than the very best of the Natal coals for these purposes but we are definitely advised that it is at least fully as good."

—	Ash.	Moisture.	Volatiles.	Fixed carbon.	Calories.	B. T. Us.
Mixture of one-third Dishergarh-Poniati and two-thirds selected Jharia.	9.30	2.20	2.37	68.00	7,400	13,320

"As regards calorific value, the best of the Natal coals are slightly superior to this mixture, but there are other factors besides calories to be considered when assessing the merits of a coal. The addition of a proportion of free-burning coal in the mixture brightens up the slower burning coal and thus more than compensates for the reduction which it causes in the number of calories: in particular it facilitates the starting and restarting of locomotives and considerably lightens the heavy work in the stokeholes of steamers. We must not omit to mention that the ash resulting from this mixture is soft and non-clinking. To specify a mixture suitable for fixed boilers in the Bombay mills is dangerous since so much depends on the particular type of boiler, on the system of draught and on the kind of work for which it is used. But, generally speaking, a mixture very suitable for use in mills would be three-fifths Selected Jharia and two-fifths Dishergarh-Poniati."

"It may be mentioned that much of the distrust of Indian coals in overseas ports appears to be due to the description of a coal that is not the very best

Jharia coal as "first class Jharia." Coal so designated is not so good as Selected Jharia, mainly owing to its higher ash content. None the less it deserves particular mention among coals suitable for export because it has been used with very satisfactory results in admixture with selected Jharia coal for ordinary bunkering purposes by the British Indian Steam Navigation Company. The analyses of coal of this class from two representative collieries are as follows :—

First class Jharia:	Ash.	Moisture.	Volatiles.	Fixed carbon.	Calories.	B. T. Us.
15 Seam Jogta	11.9	.95	18.70	69.4	7,561	13,610
South Bullibari	13.5	1.00	21.48	65.07	7,258	13,064

"These analyses are from samples taken in the same manner as those quoted above for other Indian coals. The importance of enabling purchasers to obtain precise information as to any first class Jharia coals exported can hardly be exaggerated owing to the large variation in the quality of these coals in different parts of the field. The best of them compare not unfavourably with the average Natal coal and most of them are better than Transvaal."

"Our conclusions as regards quality is that the best Indian coals can compete in any market in the East: but if such competition is to be effective, only the best coals should be exported and particular care must be taken not to allow the purchaser overseas to be misled as to the precise quality of coal which will be delivered. It is chiefly lack of attention to these two vital points which has earned for Indian coal a bad name overseas".

Blending of Coal for Coking.

Mr. R. Purdey, President of the Association of Colliery Managers in India, stated to the Coalfields Committee that he had experimented with the coking of almost every seam in the Jharia and Raniganj coalfields. Some he found high in impurities but first class cokers, others low in impurities but poor cokers; some cokes that would carry almost any load and others the reverse. "We have some seams that will not coke at all, but not many, some can be mixed with good results and would thereby considerably increase the country's available coke."

A summary of the rest of the small amount of evidence available may be tabulated as follows :—

Witness.	Seams experimented with.	Results.
Mr. W. C. Banerjee	Dust of Seams Nos. 10, 12 and 13 at New Kusunda.	Good.
Mr. G. George	One part Dishergarb. Three parts Jharla.	Satisfactory.
Mr. R. Heron	Nos. 13 and 14 (Jharla)	Suitable.
Mr. J. Kirk	All from 12 to 15 (Jharla)	Satisfactory.

On the other hand, Mr. J. Mackie testified that experiments made in England in 1919, with all the seams in the properties of Messrs. Mackinnon, Mackenzie & Co., showed that no marked improvement was gained by mixing and that each individual seam made an equally good coke.

The Position in the United Kingdom.

The supplies of high class coking coals are not so abundant in the United Kingdom that the continual inroads on the reserves can be regarded with equanimity, and a study of the situation has shown that the question of the scientific blending of the coals has received much attention from many workers in recent years. From the practical point of view, however, it does not appear to me that coking practice in Great Britain has followed very closely behind the advance of theoretical knowledge. Most of the British coking plants are attached to the collieries and owned by the same companies. The coke oven manager has to rest content with and make the best of the available coal which comes from the seams worked in the adjacent mine. Where mixing does take place it is usually quite haphazard, although the number of papers which have appeared in the technical literature of the subject recently, show that the desirability of producing a consistent quality of coke to suit the requirements of British blast furnace practice is beginning to be appreciated very generally.

Continental and American Position.

The average Continental practice is apparently somewhat better than the British one. This is due to the fact that really good coking coals only exist in limited quantities and most of the Continental requirements have to be imported. This leads to methods in which definite weights of coals, whose behaviour has

been ascertained from experience, are mixed before crushing and washing, and in this manner a more or less regular quality is delivered to the ovens.

In America, apparently, the blending of high and low volatile coals, has been developed to a considerable degree of efficiency. The object is to obtain a definite and regular grade of coal to produce coke of a quality which varies very little, either way, from certain accepted standards that have been laid down. American blast furnace coke is small in size and, containing more volatile matter than is usual in the United Kingdom, is consequently softer. But these disadvantages, if they may be regarded as such, are counterbalanced by the regularity of the properties of the coke, enabling the blast furnace manager to manipulate his daily oven practice with precision. Most iron metallurgists prefer a slightly inferior coke of unvarying grade to a better one of which the composition is not constant. Innumerable preliminary experiments are necessary to obtain the essential data, but once a definite mixture of coals has been decided upon it can be rigidly adhered to. "After the high and low volatile coals have been crushed they are put into separate bins. These bins are fitted with a mechanical discharge, and the coal passes therefrom on to a mixing table; a quantity of each kind is delivered on to the table at a rate of 80 per cent. high volatile and 20 per cent. low volatile, or some other predetermined value. The coal is mechanically mixed on the tables, and is then transferred by means of a scraper on to a belt conveyor and conveyed to the ovens. This method of mixing is very efficient and gives a regular quality of coal into the ovens. All these operations are watched very carefully, and records are made."* Such methods represent the highest degree of scientific attainment, and are to be regarded as an ideal towards which Indian practice should strive.

The work of the Fuel Research Board in the United Kingdom has shown that the question of blending coals is of immense importance in the production of a robust coke. If the coal be deficient in either the more fusible or the less fusible portions, the correct proportion must be ensured by blending in suitable quantities with another coal, possessing in a high degree those properties which are deficient in the first. The question is dealt with at length in the Report of the Fuel Research Board for the years 1920 and 1921.

Theories of the Coking Process and their Bearing on Blending.

A study of most of the recent literature on the theories of the coking process, leads to the conclusion that they have probably been as concisely stated by Mr. John Roberts as by any other contemporaneous writer.

* Habden : *Loc. cit.* pp. 72-74.

He summarises the various stages as follows:—*

1. Fusion of the binding agent in the coal, followed immediately by the decomposition of the excess binder and the formation of a plastic layer. The swelling of the charge takes place at this stage. (Roberts' "Binder" is of course the same substance or group of substances as the "Resinic Matter" of Wheeler and other writers, which are supposed to correspond to the "Gamma Compounds" obtained by the action of certain solvents on coal).
2. Development of the cellular structure in the semi-coke as the volatile matter is being evolved.
3. Secondary contraction of the coke and its final cementing with graphitic carbon as the hydrocarbons become decomposed and the rest of the volatiles are evolved.

(Though accepted by the majority of writers, Mr. Roberts' views on the hardening of coke do not hold the field to the exclusion of all others. In particular they are not accepted by Illingworth.†)

Practical Bearing of the Theory.

The most important fact which emerges from the work of Mr. John Roberts is expressed by him as follows:—

"The maximum rate of heat transfer through the mass, consistent with the formation of suitable coke, is obtained only when the condition of the charge is such that no excess binder is present.‡

This fundamental principle—fundamental alike in the case of Indian coking coals and those of other countries, has been confirmed by Messrs. Weyman, Edgar Evans, Smith and Townsend. The latter sum up their views as follows:—

"The improved heat transmission results from the restriction of the development of the plastic layer, which acts practically as a non-conducting zone. We concur in Mr. Roberts' view that slow coking in wide ovens results in the destruction of the excess binder of strongly-coking coals, heat energy being needlessly used up in the destruction of this binder. In order to employ the binder usefully, and at the same time to effect great improvement in the rate of heat penetration, Roberts proposed that all strongly coking coals should be blended with inert substances such as coke dust and non-coking and feebly-coking coals.

* John Roberts: *Coll. Eng.*, Oct. 1924, p. 357.

† *Fuel*, June 23rd, 1923, p. 90.

‡ *Trans. Inst. Min. Eng.*, Vol. LXII, pp. 9-32 (1921-22).

We are satisfied from the results from our experiments that judicious blending undoubtedly does produce the effects described, prevents expansion of the charge, and reduces the coking time, the resulting coke being of uniform and strong nature.”*

The Coking of “Non-Coking” Coals.

Coals which were formerly regarded as non-coking may now, according to Mr. J. Roberts, be safely coked in practice, and the size of the material used is an important factor in determining whether a coal will coke under the best conditions of modern practice. He defines a coking coal as follows:—

“A coking coal is one which if crushed to pass through an $\frac{1}{4}$ -inch sieve, becomes fused or semi-fused when heated at a temperature of 900°C and yields a coherent coke when all volatile matter has been driven off.”

Many coals which were formerly classified as non-coking coals both in Europe and America, have been satisfactorily coked when stamped, as it has been shown that the binder then has less chance of becoming oxidised or decomposed. “Most coal-producing countries”, writes Mr. Roberts, “yield large quantities of coals that cannot be coked in 20 inch ovens in the regular process”, and to this one may add, that India is probably endowed with more than the average amount of such material. The importance of his further remark needs no emphasis:—“Most of these (coking) coals when properly used are capable of acting as binders for inert material such as non-coking coal and, as far as possible, the practice of blending should be adopted”.

Mr. Percy, as long ago as 1875, in his classical work on “Fuel” appreciated the difficulties likely to arise by the drawing of too strict a demarcation between “coking” and “non-coking” coals. “In some instances,” he wrote,† the coking of a coal depends on the manner in which it is heated and the degree of heat to which it is subjected. Thus certain Staffordshire coals are practically non-coking coals; that is the powder of these coals when heated to redness in the usual way does not yield a coherent coke, but only a very slightly fritted and tender mass. Yet, if it be rapidly exposed to a high temperature, such as a bright red heat, a pretty solid hard coke may be obtained.” According to Mr. J. Roberts it is also possible to reduce the

* E. W. Smith & F. S. Townsend: “The Manufacture of Oven Coke”.—*Trans. Inst. Min., Eng.*, Vol. LXIX, p. 60 (1925).

† A quotation from J. Roberts.

binder in a good coking coal to such an extent that it will not coke in a temperature of 750°C, but will yield dense coke when heated to about 1,300°C.

Mr. Arthur Roberts' Views.

An American named Arthur Roberts has arrived independently at much the same conclusions as his namesake J. Roberts. The following notes are based on his Patent Specification No. 175319, as quoted by his namesake.*

In order to produce coke of metallurgical structure the particles of carbon and other solid residuum must be bound together by a cementing material which must be formed at the right temperature and under the proper conditions. The two essential elements, therefore, are the solid, residual matter, and a binder to join together the particles thereof. The binding material itself is not one of the constituent components of the coal, but it is evolved or formed as a product of distillation during the heat treatment and later performs its cementing functions provided the heat treatment and the process are suitable ones. As the process of distillation of a charge of coal proceeds secondary decomposition of resinoids or resinous matter, as he terms the binding material, takes place with a resultant enriching or hardening effect, binding the previously disconnected particles of the residuum together. The secondary decomposition and the cementing function take place at a temperature of from 600° to 750°C. If metallurgical coke is required, "there must be present when a temperature of 600° to 750°C is reached, a sufficient amount or proportion of resinous materials distributed throughout the mass and remaining in such condition that the cementing action can be performed by decomposition of these bodies". The principle is laid down that if a coke structure is to be produced from so-called "non-coking" coals, the temperature of each portion of the coal must be raised to 600° to 700°C, sufficiently fast after incipient decomposition to decompose the resinous material prior to and before it can be eliminated from the coal in a gaseous state.

The fact that the decomposition of the resinous matter and the conversion into cementing material takes place at a temperature of 600°C to 700°C, is stressed repeatedly in Mr. A. Roberts' specification, and it forms the basis of his process by which heat is introduced into a charge of coal with sufficient rapidity through the relatively large mass of the retort and a correspondingly large area for the heat transmission, to prevent the oxidation of the com-

* "Fuel" p. 309 (1875).

pounds that yield the coke cementing material. It would appear to have been impossible to obtain a coke from a "non-coking" coal at a temperature below 600°C.

It is evident, according to Mr. J. Roberts, that Mr. A. Roberts found that "non-coking" coals, or at any rate, feebly coking coals of high oxygen content, on carbonisation, yield hydrocarbons which decompose at temperatures of 600° to 750°C,—a fact which Mr. J. Roberts claims to have discovered independently a year before the publication of the American's specification. Whereas the latter was working on the production of metallurgical coke from non-coking coal, the former (Mr. J. Roberts) was using blends of coking and non-coking coals in the production of semi-coke, adopting the temperature range of 600° to 750°C and taking advantage of the cementing effect of the hydrocarbons that become decomposed by passing through the outer layers of the semi-coke. It appears certain, he writes, that the effect is due to the non-coking coal, because it can be obtained only when non-coking coal is used. The resinic matter is not the principal factor in cementing coke as it decomposes below 500°C and can only play a small part in the formation of hard coke; the more important agency is the secondary effect resulting from the decomposition of compounds above 600°C.*

Recapitulation of Previous Views.

1. Coking coals yield on carbonisation at about 900°C, compounds decomposable at that temperature, yielding graphitic carbon which serves to harden and cement the coke.

2. "Non-coking" coals yield on carbonisation at from 600° to 750°C, compounds decomposable at that range of temperature and yielding graphitic carbon which cements the residuum and causes the formation of coke.

3. By blending coking and non-coking coals in suitable proportions, a superior semi-coke can be produced in which the outer zone is hardened by the deposition of graphitic carbon in it; this bright zone having the lustre of metallurgical coke.

4. The main cause of hardness in coke is graphitic carbon deposited at temperatures above 700°C when coking coal is used alone; and between 600 and 750°C when non-coking coal is used, either alone or mixed with coking coals.

* Dillingworth believes that the resins are par-excellence the coke-producing ingredients in coal. See *Proc. S. Wales. Inst. Eng.*, XXXV, No. 2, p. 268.

PART IV.

Low Temperature Carbonisation.

Differences of High and Low Temperature Carbonisation.

The two great branches of the high temperature carbonisation of coal as typified by the metallurgical coke and the gas industries have a long history behind them. The main desideratum of high temperature distillation in retorts is a maximum yield of gaseous products capable of attaining the legal calorific standard on consumption. The recovery of coke, tar and nitrogen (in the form of ammonium sulphate), etc., is of secondary importance, although the sums derived from the sale of such products play an important part in making the process profitable. In by-product coke ovens on the other hand, a maximum yield of hard metallurgical coke is of first importance while the gas, tar, etc., are the by-products.

The main desiderata of low temperature carbonisation are as follows:—

1. The production of smokeless fuel suitable for domestic and industrial purposes.
2. The maximum production of oil of low specific gravity.
3. The maximum production of gas of high calorific value.

The quantity of residual gas obtained in most low temperature carbonisation systems is comparatively small, but it possesses special properties and has a high calorific value, and, accordingly, its sale has an important bearing on the economics of the process.

History of Low Temperature Carbonisation.

The history of low temperature carbonisation is a brief one and dates from about 1890, when Mr. T. Parker took out patents to produce "Coalite" in cast-iron retorts. Although this process was heralded as an epoch-making success, it failed miserably from the commercial point of view. In 1912-13 however, a Royal Commission on Fuel and Engines for the Navy, under the Chairmanship of the late Lord Fisher, most carefully investigated the question of the sufficiency of fuel oil supplies for naval purposes from existing industries in the United Kingdom. This Commission reported that the only means of obtaining and maintaining these supplies lay in "the development of a new carbonising industry founded on the distillation of bituminous coal at a temperature much below that used in gas retorts or coke ovens."

One of the most important features of this Report was its insistence on the fact, that as the possible oil production from the low temperature distillation of bituminous coal amounted only to some 5 to 8 per cent. by

weight of the coal treated, a market would have to be created for the other products in order to put the processes on an economic basis.

The outbreak of the war diverted the attention of the public, which had been aroused by the Report of the Royal Commission, and delayed the experiments of the investigators, until the shortage of fuel oils and the broader question of fuel conservation in Great Britain generally, brought the problem into prominence again. In 1916 it was recognised by the Government of the day that some measure of the State aid was essential and in 1917, the Committee of the Privy Council for Scientific and Industrial Research, on the recommendation of their Advisory Council, established a Board of Fuel Research under the Directorship of the late Sir George Beilby. The terms of reference of the Board were "to investigate the nature, preparation and utilisation of fuel of all kinds, both in the laboratory and, when necessary, on an industrial scale." The Board later adopted as their programme two lines of research as follows :—

- (1) A survey and classification of the coal seams in the various mining districts.
- (2) An investigation of the practical problems which must be solved if any large proportion of the raw coal at present burned in its raw state is to be replaced by various forms of fuel obtainable from coal by carbonisation and blending processes.

Reference has already been made to the work of the Board on item (1), in an earlier section of this bulletin and the desirability of work on similar lines in India has been indicated. As regards item (2), the Annual Reports of the Fuel Research Board contain full data of the progress that has been made. "The Board affirm that much knowledge has been obtained in the direction of a technical solution, that this solution is almost within reach, and that the elements of uncertainty still remaining are mainly economic and social."

Present Position.

At the moment it cannot be said in the case of bituminous coals, in spite of all the research work that has been done on the subject, that any of the fifty odd processes which have been suggested and in many cases tried out, not only in the laboratory but in large scale tests as well, has been commercially successful. The official view of the situation was stated by the Prime Minister in the House of Commons on June 29th, 1925. His remarks were as follows :—

"Now to come to the question of the low temperature carbonisation of coal, and the production from it of oil and of smokeless fuel. There are

many people to-day who speak as though it would be possible, if the Government desired, to start these processes working on a commercial basis at half the pit heads in the country. But that is not the case. Put quite shortly, the position is this. Research has been going on at the Government station and by various processes in private hands, several of which have reached remarkable results so far as the laboratory is concerned. The time has not come yet when a commercial process has been successfully devised. It will come, it may come soon, it may be in a few years, but it is as certain as we are standing and sitting in this House this afternoon that what has been proved successful in the laboratory will be proved successful commercially, and when that day comes, although what is discovered in the laboratories must be the common property of the science of the whole world, yet it will give this country probably the greatest push forward in development that it has had since the discovery of steam."

It has been claimed by several writers, who usually possess a pecuniary interest in the process that they advocate, that the production of smokeless fuel from raw coal, with an adequate recovery of the various by-products, has been successfully attained on a large scale. But the investigation of many of the processes suggested and operated on a semi-commercial scale in the United Kingdom and a study of the position in America and on the Continent, tends to lead to the conclusion that a commercially successful method has still to be worked out. It is doubtful if there is any other contemporaneous subject on which such a flood of unreliable literature has been published and in which the real conclusions that have to be reached have been so buried under semi-political and company-promoting platitudes.

Requirements of a Good Smokeless Fuel.

The requirements of a good smokeless fuel have been summarised by Messrs. Lander and McKay as follows:—*

1. It must have been previously treated for the recovery of valuable by-products from the raw fuel and so rendered smokeless.
2. It must contain sufficient volatile matter—say 7 to 10 per cent.—or be of such a structure as to be easily kindled and kept alight in open fire-places.
3. It must have a relatively low ash content: partly to prevent an undue reduction in calorific value, and partly to reduce the dust resultant upon combustion when burnt in household fires,

* *Loc. cit.*, p. 26.

and to reduce clinkering troubles when burnt in boiler furnaces.

4. It must not be so friable as to break easily during handling or transport.
5. It must be compact, but not of such a structure that the ash formed during combustion covers the surface of the fuel in such a manner as to hinder combustion or to mask radiation.
6. Its price must be sufficiently low so that when the other advantages are taken into account it will attract purchasers away from bituminous coals. If the fuel is to be sold in the form of briquettes, the advantages of uniformity and coherence should be taken into account when considering the economic value of the briquettes.

Requirements for Successful Operation.

Again, the same writers have shown how the establishment of low temperature carbonisation as a commercial possibility is dependent upon four important factors, *viz.* :—

1. There must be ample supplies of raw material.
2. The plant must be such as will have a reasonable life, and it must be under the control of an experienced and scientific staff.
3. The products of distillation must be in a marketable form, either for the direct use of consumers, or as raw material in other industries.
4. The commercial value of the products after retorting must admit of a reasonable margin of profit after meeting the working costs and manufacturing expenses, including the depreciation and renewal of the plant.

The Indian Position.

As regards the special position of India, three of these factors (Nos. 1, 2 and 4) need no comment. In the case of 3, India differs from the British Isles, where there is no great demand amongst householders for smokeless fuel in preference to raw coal. In India, there is a certain, steady and, it is believed, gradually increasing demand for soft coke. Unfortunately, complete statistics are not available, though it is well known that soft coke is employed over large areas in Bengal and Bihar and Orissa and is peculiarly adapted for operations in open hearths where a free-burning, smokeless fuel is required. Large quantities are known to be railed daily from the coalfields to Calcutta and in the opposite direction as far as the United Provinces, where no suitable substitute is available. In these regions, according to the Coalfields

Committee's Report of 1920, "soft coke¹ has become an essential commodity in the daily life of a considerable proportion of the community," while the latest report of the Statistical Department states that its use is extending owing to the growing scarcity of wood fuel, the price of which has considerably risen. The Annual Reports of the Chief Inspector of Mines in India show that upwards of 250,000 tons of soft coke are made at collieries alone in India and it is unquestionable that large amounts are made elsewhere from coal despatched from the collieries. The primitive and wasteful process of manufacturing soft coke in India, is too familiar to need comment. It is regretted that adequate statistics are not available on this important matter.

One of the reasons for the failure of low temperature carbonisation processes to establish themselves seems to have been due to the prevalent idea that they could be utilised in connection with any and every kind of coal, but it is now recognised that a very careful selection of raw coals—coupled with blending on the most deeply considered lines, is essential.

It is unnecessary to discuss here the multitude of causes which have been the reasons for so many failures in the past, and which have led, owing to their cumulative effect, to the non-committal or unfavourable attitude with which the whole question is regarded in many interested circles. These are available in numerous text books, accessible to anyone interested in the subject. Stress should, however, be laid on those general conditions, which, in the author's view, apply particularly to India and Indian conditions. These are as follows :—

1. *Non-suitability of high grade Indian Fuels.*—It would not be economically sound to submit high grade fuels, such as the coking coals of Jharia now in use for the preparation of blast furnace coke, or the well-known, lumpy, steam coals of Raniganj, or indeed any fuel which for special reasons already finds a satisfactory market, to low temperature distillation.

2. *Suitability of Poorer Coals.*—It might eventually prove profitable to treat the low grade fuels and the slack of the better coals by this process. In the term "low grade fuels" are included, of course, the brown coals and lignites such as those of Kashmir and Burma. The ends in view would be the production of a smokeless fuel from these materials with the recovery of valuable liquid by-products, the utilization of the gaseous products involved and the simultaneous improvement of the low grade material into a high grade fuel by the increase of its original calorific value.

3. *Semi-coking Coals.*—Low temperature carbonisation processes, especially those which give the final product a more suitable shape, like the Maclaurin process in Britain or the Fellner-Ziegler process in Germany, would appear to be applicable to the Indian semi-coking coals—those coals of which the country has vast quantities which possess a certain amount of coking power but not sufficient for the production of coke in the usually accepted meaning of the word.

4. *Non-coking Coals.*—Low temperature carbonisation processes are peculiarly adapted for the non-coking coals which have a sufficient volatile content and especially for the slack of such coals which, in India, as elsewhere, is at present mainly wasted. The first cost of such raw material is low, while the recovery of the low temperature tar, benzene, etc., and the proper utilization of the gas appear to offer avenues of potential profit. The semi-coke produced may be burned in gas producers in special cases, briquetted for domestic fuel, or pulverised and burnt under boilers for steam raising. It is not generally realised in India to what an extent the use of pulverised fuel has grown in other countries during the last few years, especially under the "Unit" as opposed to the "Storage" systems.

5. *Special case of the Lignites.*—The low temperature carbonisation of Indian lignites is a subject that deserves serious consideration.* Owing to the absence of such materials in Great Britain, we do not find much of interest in British literature. On the Continent however, and in Germany especially, the problem of dealing with such fuels has been studied for decades. Owing to the fact that such coals generally have no coking capacity, the semi-coke is obtained in a powdery form which can be used as pulverised fuel without any further treatment. In many cases, however, especially in countries with poor supplies of coal, the coking residue is briquetted. This is done by a small addition of pitch as a binder, the pitch itself being obtained by distillation of the low temperature tar produced in the process. Such fuels are stated to be of high quality and to obtain a ready market. The chief importance of the process, however, as

* In this connection see an important paper which has appeared since this report was written :—

C. H. Lander : " Report on the examination of Burmese Lignites from Namma, Lashio and Pauk ". *Rec. Geol. Surv. Ind.*, Vol. LVI, pp. 362-383 (1925).

Dr. Bone in England and many German authors have shown, lies in the fact that it simultaneously produces a remarkable increase in the calorific value of the coked residue. This is mainly due, of course, to the expulsion of the original high water content of such fuels, and also in part, to the separation of much of the oxygen in the form of steam and the mon- and di-oxides of carbon. As an example of the improvement in lignite by this process the following table and note are quoted from a recent paper by Schutz and Buschmann.

Description.	Calorific	Percentage of
	value per kg.	yield in weight of crude lignite.
	Cal.	Per cent.
Crude lignite, 60 per cent. moisture	1,800	...
Lignite briquettes, 15 per cent. moisture	5,000	47
Semi-coke from lignite, anhydrous	6,900	20
Low-temperature tar, anhydrous	8,500	1.75
Benzene	10,000	0.25
Gas, containing CO ₂	4,000	6.75
Decomposed water and losses . . . . .	...	11.25

"The problem of the low temperature carbonisation of lignite, very rich in volatile matter, such as that from Saxony-Thuringia, has been solved for over half a century, although even in this case, owing to the defects of the old processes, insufficient importance was attributed to the recovery of light oils and gases. A somewhat low-grade lignite has, therefore, purposely been employed as a basis in the foregoing comparison, as it is thereby shown that a semi-coke, the yield of which is only 20 per cent., nevertheless contains 76.7 per cent. of the calorific value of the crude lignite, and thus is turned into a high-grade fuel. Owing to its nearly four-fold calorific power, its value must be estimated as about equivalent to that of bituminous coal, and it therefore compares fairly with the cost of the coal. As by-products there are produced 8.75 per cent. of the weight, or 12.8 per cent. of the calorific value, of the crude lignite in the form of tar, benzene and gas, which, provided there are good market possibilities for the gas, repay not merely the cost of the process, but also, in view of the low value of the crude lignite, render possible a fair profit. It is at once obvious that the value of the products of low-temperature carbonisation is equal to several times that of the crude lignite. In the case of crude lignite that cannot be briquetted, and which can only be used as fuel on the spot where it is produced, the low-temperature carbonisation process is therefore of great importance, because it opens up possibilities of new markets."

Classification of Low Temperature Carbonisation Systems.

The student of low temperature carbonisation finds himself almost overwhelmed by the literature on the process. It is no exaggeration to say that scores of retorting systems have been invented and the number of patents granted must run into many hundreds. As one recent writer remarks "most

of these are likely to remain as records of misplaced ingenuity or as tombstones of unscientific skill."

Considered broadly there are three main groups of systems :—

In the first, the crushed coal is exposed in thin layers in a gas-tight retort to the action of heat supplied externally. The coal itself is in repose during the heating.

In the second group, the retort is again externally heated but the coal itself is stirred or agitated, either by movement of the retort which may be vertical, horizontal or inclined, or by the movements of suitable mechanical devices inside the retort.

The third group forms the internally heated class, in which the coal is exposed to the sensible heat of huge volumes of producer gas or superheated steam which are passed into the retort and over and through the coal. In the case of producer gas this is either made in the retort itself or supplied from an external source.

Particulars are appended of a number of retorting systems which appear to possess features of interest from the Indian standpoint.

The Tozer Retort.

This is a vertical cast-iron retort which has its cross-sectional area divided by concentric rings which are themselves divided again by ribs extending through the whole length of the retort and so forming annular spaces about 4 inches wide. The central core is left open and forms an equalising tube which prevents any accumulation of pressure during the operation.

By dividing the retort in this manner, it is claimed that carbonisation can be accomplished in 4½ hours. The noteworthy point of the process is the distribution of the fuel in the two divided annuli. If it were distributed in a single annulus of double the thickness the time required for carbonising would be so prolonged that commercial utility would be out of the question. The gases evolved pass partly upwards and partly downwards, making their way eventually to the eduction tube, at the top of the retort. The top and bottom covers are rendered gas-tight by simple mechanical devices. The retort is arranged in a brick-work setting designed to prevent local heating. The charge taken is 1½ tons and the average temperature when treating lignite is 515°C. Though it was claimed originally to be equally adapted for coking or non-coking coals, it is understood that the makers now recommend it for lignites and non-coking materials only.

The smokeless residues from the treatment of lignite are either used in the form of pulverised fuel or briquetted.

The Company claims that the following developments prove the success of this process on a commercial scale *for the treatment of lignites* :—

- (1) The adoption of the process in Japan and the purchase of the patent rights for that country.
- (2) The use of the retorts in a plant in South Africa.
- (3) The adoption of the process in France on the lignite fields at Laluque, south of Bordeaux, where a plant is being installed and will be in operation shortly.

The cost of installation of a plant, to treat 100 tons of lignite per diem complete with by-product recovery plant amounts, according to figures supplied by the Company, to £27,706. A briquetting plant alone, complete with engine and designed to produce 240 tons of ovoid briquettes per day of 2½ hours, is priced at £2,600 f.o.b. Hull or Liverpool.

RESULTS OBTAINED IN THE TOZER RETORT.

Bikaner Lignite—

	Raw Lignite.	Residual Fuel.
Moisture	32.0 per cent.	10.9 per cent.
Volatile matter	46.5 "	25.1 "
Fixed Carbon	46.2 "	65.4 "
Ash	7.5 "	11.5 "
Sulphur	1.3 "	1.5 "
Calorific Value *	11,460	12,400

Crushing tests on the briquettes showed from 620 to 730 lbs. per square inch.

Spanish Lignite—

	Analysis of Lignite.
Moisture	5.24 per cent.
Volatile Matter	35.74 "
Fixed Carbon	49.03 "
Ash	9.90 "

Products obtained per ton of lignite treated :—

(Spanish Lignite.)	
Ammonia Sulphate	8.9 kgs.
Benzole at 0.800	8.9 litres.
Tar free of water	101.0 "
Motor Spirit at 0.859, up to 160°	9.5 "
Light oils at 0.935, 160°—230°	14.9 "
Heavy oils at 0.960, 230°—330°	25.3 "
Phenols and Cresols	15.2 "
Hard paraffin of good quality	5.3 "
Pitch	30.6 "
Residue Fuel containing 12.5 per cent. volatile matters	800.0 kgs.

* B. T. U. per lb. gross.

Fuel briquettes 830 kgs. Calorific value 6,888 calories = 12,240 B. T. U.

French lignite—

Analysis of Lignite.	
Moisture	58.21 per cent.
Volatile Matter	24.72 "
Fixed carbon	12.64 "
Ash	4.43 "

Products obtained per ton of lignite treated:—

Ammonia Sulphate	11.50 kgs.
Benzoles	0.36 litres.
Tar free of water	27.50 "
Motor Spirit at 0.853, up to 170°	0.96 "
Light Oils at 0.863, 170°—230°	1.03 "
Heavy Oils at 0.885, 230°—360°	6.08 "
Phenols and Cresols	1.20 "
Pitch	17.90 "
Residue Fuel	930.00 kgs.

Calorific value of briquettes 6,630 calories.

The Sensible Heat or Nielsen Process.

Mr. Nielsen has laid down ten axioms which he considers must be fulfilled before any low temperature distillation process can be successful. They are as follows:—

- (1) From an economic point of view, the raw material must be treated in bulk.
- (2) Any desired reaction temperature must easily be attained and be kept with a minimum of variation.
- (3) Strict temperature control.
- (4) Rapid and uniform treatment so as to obtain a maximum throughout.
- (5) Lowest possible distillation temperature in order to secure the products in the primary state and avoid secondary reaction.
- (6) Absolute control of time-duration in the various temperature zones.
- (7) Countercurrent principles strictly adhered to, so that once an oil vapour has been evolved at a specific temperature, it should not be brought into higher temperature zones.
- (8) Rapid removal of distillation products once they have been formed.
- (9) The retort should only be called upon to act as an economical and efficient separator of solid, liquid and gaseous products from any raw carbonaceous material, this being its primary function.

The treatment should aim at being continuous; continuous feeding, heating and discharging.

It is claimed of course that the Nielsen retort is the only one on the market which fulfils all these conditions.

The retort itself is an inclined cylindrical steel shell, lined with fire-brick and caused to rotate slowly by means of a spur ring which surrounds the shell at its mid-length. The raw coal is continuously fed into the top end of the retort by means of a screw conveyor working in a trough into which the coal falls. It travels slowly downwards towards the automatically controlled exit, which is arranged to form an air lock, allowing the residue to be discharged after cooling to the outside atmosphere, but preventing the outside air from getting inside. Complete carbonisation is of course effected during the time of the traverse of the coal from end to end of the retort. The coal is carbonised by the medium of hot producer gas which enters from a producer of special design near the lower end, and travelling through in counter current is in direct contact with the coal the whole way. The outlet is through a specially designed gland and the producer gas carries with it the gases and condensable materials evolved from the coal. These pass through the usual tar extractors, scrubbers, etc., before being burnt or collected in gas holders as the case may be. A superheater is fitted to the retort to be fired by the make gas and in this way it was hoped to obtain a rich gas more nearly approaching that obtained from externally heated retorts than from internal ones of this type.

An installation on this system has already been erected in India and the suitability of the process for Indian coals and Indian conditions will doubtless be judged by its performances.

The Fuel Research Board's Horizontal Retorts.

The first large-scale experimental retort was designed at Greenwich with the following objects in view :—

- (1) The steady maintenance of any desired internal temperature up to 600°C.
- (2) The exposure to this temperature of layers of crushed coal of any desired thickness.
- (3) The collection and accurate measurement of gases and volatile liquids evolved during carbonisation.
- (4) The removal, quenching and weighing of the coke and the study of the influence of fusibility in different types of coal on the physical properties of the coke.

- (5) The design and construction of the ovens containing the retorts so as to ensure uniformity of heating with a minimum expenditure of fuel and the minimum deterioration of the metal of the apparatus.
- (6) The complete control and accurate measurement of the fuel gas used for heating, and of the air supplied for its combustion. Briefly, the end in view was the determination of the relation between operations on a laboratory and on a works scale.

A full description of these horizontal steel retorts appears in the Report of the Fuel Research Board for 1920-21. The battery consists of nine retorts, 9 feet long and 2½ feet wide. Each retort is built of top and bottom, cambered plates of ¾ inch mild steel, connected by 5 inch standard section channels. They are closed in front by self-sealing doors through which are inserted the two steel trays carrying the coal. These trays are the full width of the retort, three inches deep and divided by steel strips which split the coal into 3 inch cubes. The gas off-take is at the back of the retort and leads to a common collecting main but the off-take is automatically closed when the retort door is opened. The gases evolved on heating pass through the usual condensing and scrubbing apparatus, etc., for the collection of the oil, and, finally, into a gas holder.

The heating chamber for the battery is 30 feet long, 8 feet wide and 4 feet high with a capacity of approximately 860 cubic feet. The gas and air are supplied through three nostril blocks in the roof. The combustion of the gas is completed under the crown of the arch, which is maintained about 600°C. and radiates its heat to the upper surfaces of the retorts. The flues which remove the products of combustion lead away from the bottom of the chamber.

It is stated officially that the retorts have proved extremely useful for the purpose for which they were designed. The yields and qualities of the products of carbonisation of various types of coals have been ascertained with great accuracy, and valuable data regarding the proper methods of maintenance of steel retorts of this kind have been gleaned. The author examined a retort at Greenwich which was stated to have been in service for many months and had been dismantled from its setting and was unable to detect any corrosion of the material or distortion of the structure.

Although it is claimed that at one state of the market, during the period of operation, this retort was practically self-supporting, the heavy labour costs necessitated by charging and discharging the carbonising trays by hand are a fatal disadvantage from an economic standpoint in the United Kingdom. In order to obviate this to some extent, a carbonising machine was devised and

patented by which the trays of crushed coal, superimposed one above the other, could be raised or lowered in an iron retort, removed, and discharged by appropriate machinery. This resulted in an increased time being required for carbonisation, and decreased throughputs, while mechanical difficulties caused by the parts moving out of register at high temperatures, reduced the expected advantages and the experiments were suspended temporarily, as unlikely to prove profitable.

By carbonising mixtures of suitable coking and non-coking coals in the simpler retort already described, the difficulties due to swelling were obviated and some very satisfactory smokeless fuels made.

The Director of Fuel Research has written as follows :—

“ The disadvantage of the station setting lies in the labour cost, which is sufficiently high to put the setting as at present designed out of court for commercial purposes in this country. In countries, however, where labour is cheap and good prices can be obtained for the smokeless fuel and oils produced, the system is worthy of serious consideration. If a satisfactory method for the mechanical charging and discharging of the trays can be developed, the method might have some application in Great Britain.”

The comparatively simple nature of the apparatus, its ease of operation, the high returns of finished products which are produced without any pronounced waste, seem to indicate that it should be studied carefully in any commercial investigation of the possibilities of the introduction of Low Temperature Carbonisation into India.

Carbonisation of Coal in Oil Shale Retorts.

Suggestions appear in the literature on the subject of carbonisation, from time to time, that the treatment of bituminous coals might well be carried out in the vertical retorts used for the refining of oil shale. It must not be forgotten however, that in spite of the vast deposits of oil shale which have been discovered in various parts of the world and of the many attempts which have been made to utilise them, it is doubtful if the recovery of oil from them has yet been placed on a profitable commercial basis anywhere, except possibly in France and Scotland.

*The Scottish Retort.**

The vertical Scottish shale retort is a comparatively simple structure. Its upper part, situated immediately below the loading hopper, is made of cast iron and is 11 feet 3 inches long and 2 feet diameter at the top, tapering

* This description of the Scottish retort is taken from a paper read by Mr. E. Bailey before the first Empire Mining and Metallurgical Congress, London, 1925, and published in the *Transactions of the Congress.*

outwards to 2 feet 4 inches at the bottom. The lower part is constructed of firebrick, and is 22 feet 8 inches long and 2 feet 4 inches diameter at the top tapering outwards to 3 feet at the bottom. The retorts are arranged in sets of four, within firebrick heating chambers in the bench. Each pair of retorts has a hopper common to both, and the whole bench is carried on brickwork piers, which enables the spent shale to be discharged into trucks running on rails below the bench. From the bottom of the firebrick portion the shale passes down through a firebrick cone into a cast-iron chamber in which is situated a circular horizontal table, with an annular space between its rim and the wall of the chamber. The whole column of shale in the retort is supported by the cone and by this table, and, by means of the slow circular motion of an arm attached to a spindle passing up through the centre of the plate and worked by a metal bar extending the whole length of the bench, and driven by motor mechanism, is swept over the edge of the table into the annular space and so dropped into the discharge hopper.

A single retort of this type deals with 4 tons of Scottish shale per 24 hours. In its passage downwards the shale is exposed to a gradually increasing temperature, ranging from about 270°F. at the top to about 1300°F. at the bottom.

The temperatures of the external heating chamber range from about 1000°F. near the top to about 1800°F. near the bottom of the retort. The heating is performed by the incondensable gases produced from the shale itself, supplemented in the case of poorer shales by additional gas supplied from external coal gas producers.

A quantity of steam, corresponding to at least 75 gallons of water per ton of shale, is introduced into the bottom of each retort. A slight suction is maintained on the retort by means of a fan. From the atmospheric condensers the crude oil and ammonia flow through separators to their own receiving vessels, and both these and the gases are treated further in apparatus which need not be described here.

With bituminous coking coals under treatment in a system devised on these lines, it is certain that the usual troubles brought about by the fusion and swelling of the coal would be met with, while even after blending or pre-heat treatment with a view to reduce these tendencies as much as possible, the slowness of the heat penetration through the coal itself would probably be a grave disadvantage. At the same time the Scottish shale retort proves that a non-coking coal can be easily passed through a comparatively simple apparatus without any difficulty, the freedom from agglomeration under rising temperature which the raw material possesses allowing the essential

heat penetration to take place reasonably rapidly. Although numerous inventors have turned their attention to endowing coking coals in some manner with the properties of oil shales for these purposes, these need not be dealt with at the moment, for the question immediately arises—would it be possible to treat the Indian sub-bituminous, non-coking coals or the Burmese lignites in some such apparatus?

Such a proposal has actually been made as described below :—

The Crozier Retort.

A few years ago large deposits of oil shale were discovered in the Eastern part of the Amherst district of Burma near the Siamese border. They have been described in the Records of the Geological Survey of India* and elsewhere, and have been taken up by various companies. According to one authority, one particular shale basin extends for some 22 square miles. The main seam is between 6 feet and 7 feet in thickness and in one-half square mile, which has been bored, 7½ millions of tons of shale with an oil content of 45 gallons per ton have been proved in this seam alone. Tests on a bulk sample made in the Scottish retort described above, at the Pumphreton Works in Scotland, yielded 44 gallons of oil to the ton of shale.

A new type of retort was developed in Burma by Mr. Crozier to treat this shale and a full-sized single unit was erected at the British Empire Exhibition at Wembley where it could be inspected under working conditions.

The retort proper is constructed in the form of a flat-sided cylinder with semi-circular ends and is surrounded by brickwork, constructed so as to form an encircling external flue which is divided into compartments by means of fire tile partitions. The outward passage of the gases from the furnace through the various compartments of these external flues is controlled by means of dampers, which may be operated in such a way as to permit a straight ascent of the gases to the top of the retort, or to pass through each compartment of the external flues before reaching the chimney. The retort is provided with internal flues which traverse the apparatus diagonally. These flues conduct the heat across the retort to the opposing external flues and serve as a means of distributing heat throughout the descending mass of material under treatment. The internal flues are provided with dampers and by this system of dampers and flues the temperature may be controlled effectively in each section of the retort. Steam generated in a "Cochran" boiler is admitted at the bottom of the retort. This steam takes up heat from the spent shale residue, becomes

* G. de P. Cotter : "Oil Shales of Eastern Amherst, Burma."—*Rec. Geol. Surv., India*, Vol. LV, pp. 273—318 (1924).

superheated and redistributes this heat throughout the shale mass higher up in the retort. Steam is also admitted at the vapour exits to assist the removal of the gases and to eliminate the possibility of "cracking". In the process of treatment, the material, broken to a suitable size (approximately four inches) is charged continuously in at the top of the retort. The shale, or coal, flows freely by gravity through the retort and is discharged by means of a screw at the bottom, the rate of feed being regulated by the discharge.

As the shale or coal becomes heated in its descent through the retort, the oil content is yielded progressively with the increase of temperature and a primary rough fractionation of the oil constituents is thus effected. In order to take advantage of this fractionation and to obviate the possibility of internal condensation and cracking of the vapours, the apparatus is provided with a series of vapour traps arranged at different levels, by means of which the vapours are trapped and withdrawn from the retort immediately on formation and at their respective formation temperatures. Each of the series of vapour take-offs leads to a separate condenser in which the oils are collected. After the elimination of the oil vapours, the fixed gas passes through the fan and is forced through scrubbers for the removal of the lightest spirit and ammonia and then to the retort fire-box to be burned to provide the heat for the retort. The fixed gas from a shale or coal yielding 30—40 gallons of oil per ton would be sufficient to supply the heat necessary for the retorting process, which should be entirely self-supporting as regards heat, once the retort is in proper operation.

The Condensers.

The condensers consist essentially of oblong steel boxes, to the cover-plates of which are attached the series of inverted U tubes or pipes, in which condensation of the vapours takes place by means of atmospheric cooling. The condenser boxes are divided into a series of compartments which collect separately the condensed products from each of the ascending and descending pipe columns. They are also provided with a series of baffles in the form of traps, which, while forcing the vapours to travel through the cooling pipes, do not prevent the free flow of the condensate from the cool end toward the hot end of the apparatus. Each of the four condensers contains eight compartments, which are numbered from the cool end of the condensers. No. 1 therefore receives the lightest condensate while the No. 8 (boiling box) receives the hot incoming vapours direct from the retort.

The boiling boxes are constructed so as to act in the manner of stills and the incoming vapours are trapped and boiled through the primary condensate

which is maintained at a definite level in these boxes. In this manner the immediate condensation of only the highest boiling-point constituents of the vapours is affected and the vapours which travel forward and condense in the body of the condenser are more in the character of distillates. In the arrangement of the condenser a difference in level is provided which permits the excess condensate from the boiling box of No. 1 condenser to flow continuously to the boiling box of No. 2 condenser, and so on down the series, giving up its lighter constituents in succession, according to the increasing boiling temperature to which it is submitted. The arrangement also permits the gravitational flow of the light condensate in the No. 1 box back to the boiling boxes of the individual condensers. It will be seen from this countercurrent cascade arrangement, which is entirely automatic in operation, that all the lightest fraction may thus be concentrated in the No. 1 box of No. 1 condenser and that all the highest-boiling point oils are concentrated in the boiling box (No. 8) of No. 4 condenser, while different grades of kerosenes, fuel oil or lubricating base are taken off from the intermediate compartments.

The process of fractionation as described above is entirely automatic under steady operating conditions. The control is limited to maintaining the correct temperatures in the boiling boxes of the respective condensers and diverting the various oil streams to the respective storage tanks, according to the specific gravities of the desired fractions.

Reduction of Refining Costs.

The system of fractionation which is effected practically entirely by means of the latent and excess heat of the vapours coming direct from the retort, is said to result in a considerable reduction in refining costs as compared with the older methods of treatment, which depended upon the production of one first crude oil. The economy which may be effected in this manner is, of course, not limited to that which is due solely to the more efficient utilisation of the heat. A large proportion of the high-boiling-point impurities in the oil, which has ordinarily to be removed by expensive redistillation and acid treatment, is concentrated in the high-boiling-point residuum of the process. The fractions are produced therefore in a state of comparative purity and require little subsequent refining to be made of marketable quality.

Proposal to Utilise Burmese Lignites in the Crozier Retort.

The lignite coal field of the Nam-ma basin in the Northern Shan States was originally described by Mr. R. R. Simpson. At a later date it was opened

up by the Burma Corporation and a short account of their operations has been published by Mr. E. Moldenke. A tonnage of this coal was sent from Burma to England to Messrs. Babcock & Wilcox, who were asked to report if it was suitable for burning direct under stationary boilers. The firm replied that it was possible for them to design a firebox for stationary boilers in which Nam-ma coal could be burnt. The proposition however did not eventuate and the mining operations were suspended.

Mr. Crozier has put forward a very interesting proposal to treat these and similar lignites in his retort for the production of a residual smokeless fuel of good calorific value with the recovery of light spirit, fuel oil, heavy oil, pitch and gas as by-products. It is based on the results of tests in his electrical laboratory retort. As it is a confidential question, the writer cannot discuss it here nor do more than state that in his opinion Mr. Crozier's system deserves serious consideration in any attempt to exploit these or similar Burmese coals.

The Freeman Multiple Retort.

The Freeman Multiple Retort is another example of a type of apparatus which it is claimed can be used equally well for the distillation of coals or oil shales. The retort consists of a series of cast-iron chambers placed vertically one above the other. The material to be treated is fed continuously into the top chamber through a gas-tight charging valve where the moisture is driven off. This process is one in which the temperature of the charge, during its passage through the retort, is under strict control, and in which the reduced oils are collected at the time of reduction before they can be affected by excessive temperature and their constitution changed. The charge at the bottom of the first chamber falls upon a rotating plate, across which it is continually agitated or stirred and conveyed by ploughs or scrapers to a suitable chute whence it drops into the next chamber below. The second chamber is maintained at a higher temperature and from it a light spirit, together with gas, is obtained. The same agitation and ploughing effect is conducted here, and the material after being exhausted of the gases and oils which may be evolved at this particular temperature, passes into the third chamber maintained at a still greater heat. In this manner the charge travels through five or six chambers until, finally, the gas-free residue is discharged for further treatment which may be either briquetting, coking or pulverising.

An experimental unit of this plant can be seen in operation at the works of "British Oil and Fuel Conservation Limited", at Willesden, and the methods used to control the temperature of the various sections of the retort are parti-

cularly instructive. They appear to be entirely automatic and thus to eliminate completely the errors liable to arise through dependence on the human factor. It is stated by the owners of the Freeman patents that many of the difficulties which have been met with in low-temperature carbonisation, such as the lengthy carbonization time, the irregularity of the products made, the excessive heating required, and the large areas necessitated for installations of plants, have been overcome. The system certainly deserves consideration if oil shales or non-fusible coals have to be dealt with. On the other hand, it is rather complicated mechanically and, from the view point of Indian labour, its mechanical complications might give rise to trouble in India. In any case the residual fuel is in the form of a coarse powder only suited for briquetting or use as pulverised fuel.

The Kustore Experiment.

The first attempts to manufacture soft coke on a large scale under scientific conditions in India appear to have been made by Dr. Edgar Evans at Kustore colliery in 1920. At that time Dr. Evans was employed by the Coal Products Syndicate, on various researches into Indian coals—amongst which was low temperature carbonisation.

A study of the indigenous Indian methods of making soft coke, which consist of the primitive and inefficient process of burning it in heaps or in open stalls, convinced Dr. Evans that the small proportion of soft coke which is obtained, comes from that portion of the coal which is carbonised in an atmosphere of inert gas, itself the product of the combustion of the gases evolved by the distillation of the coal.

It followed that coal ought to be carbonised with the same effect by confining it in a retort and passing through it gaseous products of combustion at a temperature of 750° to 800°C.

Working on these lines a small experimental plant was designed and erected at Kustore colliery and is shown in diagrammatic section on page 57.

Description of the Plant.

A, is a gas producer fitted with a step grate which was charged with coke through the opening at the top. This was fitted with a cover and sliding

door S 1. The gas from the producer passed through the flue F 1, regulated by the damper D 1, into the combustion chamber B. A part of this gas passed down the chamber PR, meeting at the bottom of A 1, a carefully controlled supply of air. The remaining portion of the gas passed down a vertical chamber contiguous to this, to which no air was admitted, and mixed with the products of combustion at the bottom of the chamber. [The raw producer gas, unmixed with air, was introduced with the object of keeping the temperature of combustion down to the required point and the supply was controlled by a damper which is not shown in the sketch.]

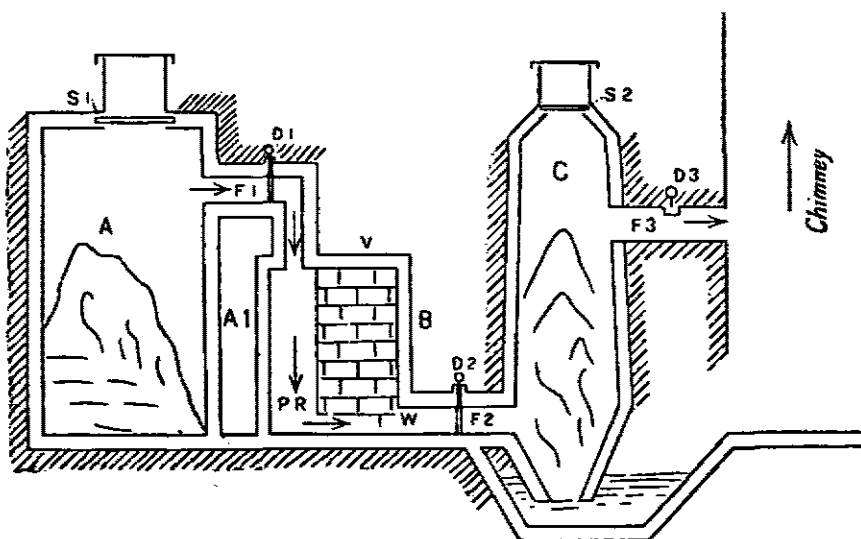
The mixed gases passed up and then down the chamber V W and thence into flue F 2. The chamber was filled with chequer-brick-work and in its passage through it, the inert gas became thoroughly mixed and its temperature equalised. From the flue F 2 controlled by damper D 2, the hot, inert gas passed into the retort C, where it met coal, charged through the opening S 2 at the top of the retort. During its passage through the coal, the inert gas effected a distillation of the volatile matter in the coal, and the mixed gases, inert gas and the products of distillation, passed through the flue F 3 to the chimney.

No attempt was made to recover the by-products as the draught was insufficient to allow the gas being passed through the condensing apparatus whilst air was admitted at the damper D 3, in sufficient quantity to burn the combined gases produced and thus to increase the chimney draught.

The plant was lined with fire-brick and this was supported by a 2 foot thickness of ordinary brick wall.

The retort was a cylindrical vertical chamber, tapered slightly from top to bottom and varying from 2 feet minimum to 3 feet maximum internal diameter. It held about a ton of coal which was charged in lumps of from 2 to 5 inches diameter.

The experiments with this plant proved that the coal could be carbonised in 2 hours, though it was not possible to keep the through-put up to this rate owing to the crude methods of charging and discharging. The latter indeed brought about the end of the trial, for on one occasion during the absence of the man in charge, the coke jammed in the retort, whilst the workmen continued to empty it in the usual way, through the water seal at the bottom. As a consequence the red-hot material which formed the stoppage suddenly collapsed into the water and caused an explosion which so weakened the crudely built chamber that further trials were not carried out.



Performances of the Kustore Apparatus.

It is claimed that several tons of first class soft coke were made in this retort from non-coking coal of the Toposi (Raniganj) type, and that this material found a ready sale.

The accident which ended the experiment was not due to the "sticky" quality of the coal, but to physical conditions which would not recur in a properly designed retort, fitted with efficient charging and discharging mechanism. The trial, it is stated, has shown that coal of the Toposi type can be readily carbonised by passing a current of inert, superheated gas through it. While it is probably true that a plant of this type could be built cheaply and easily and could be handled by unskilled labour under expert supervision and, while Dr. Evans still claims, as he did in an interview which the author had with him lately, that it could produce a soft coke of a quality uniformly superior to anything on the Indian market at present, a number of questions in connection with it have still to be determined. These include the following :—

- (1) An efficient loading and discharging mechanism must be designed and proved.*
- (2) A by-product recovery plant must be designed and proved. This will have to deal with a very much larger quantity of gas,—

* In view of existing practice of continuous vertical carbonising retorts there should be no difficulty in this.

estimated as at least 5 times greater, than that usually put through in ordinary by-product coking practice.

- (3) The tar produced will differ from ordinary coke-oven tar. In Dr. Evans' words:—

"Its specific gravity will approach very closely that of water, and it will contain at least 60 per cent. of emulsified water whose separation presents some difficulty".*

Analysis of Toposi Coals used in the Kustore experiments.

	<i>Lump Coal.</i>	<i>Small Coal.</i>	<i>Soft Coke produced.</i> dried sample.
Moisture	8.10	2.94	
Volatile Matter	37.17	36.39	4.58
Fixed Carbon	46.85	46.41	65.57
Ash	12.87	14.26	U.S.

Results of Laboratory experiments in the Low Temperature Distillation of Indian Coals.

(1) *Pench Valley Coal.*

<i>Proximate Analysis.</i>		<i>Distillation Test at 750° C.</i>	
Volatile Matter	35.83 per cent.	Coke	62 per cent.
Moisture	10.47 "	Gas	6,774 cu. ft. per ton.
Fixed Carbon	38.62 "	Tar and water	16.6 per cent.
Ash	15.58 "	Am. Sulph.	27.42 lbs. per ton.
S	0.60 "	Benzol, etc.,	1.37 galls. per ton.
N	1.29 "		
Cal. Val.	5,995 cal.		

Analysis of Soft Coke.

(1) Vol. Mat. = 4.68 per cent.	Coke was typical soft coke of good quality.
Ash = 22.11 "	.....
S = 0.52 "	.....
N = 1.07 "	.....

All the Pench coals are said to be non-resinous, non-coking, humic coals and they are all considered to be suitable for the manufacture of smokeless fuel.

(2) *Toposi Coal—*

<i>Proximate Analysis.</i>		<i>Distillation Test at 750° C.</i>	
Vol. Mat. = 40.98 per cent.		Coke = 65.3 per cent.	
Moisture = 6.14 "		Gas = 6,300 c. ft. per ton.	
F. Carb. = 41.80 per cent.		Tar and water = 12 per cent.	
Ash = 11.08 "		Water-free tar = 21 galls. per ton of coal.	
S = 0.28 "		Am. Sulph. = 21.2 lbs. per ton.	
N = 1.60 "		.....
Cal. Val. = 6,780 "		.....

* The separation of water from the tar is probably capable of solution along lines recently developed in gas-works and coke-oven practice.

Analysis of Soft Coke.

Vol. Mat.	= 11.06 per cent.	.	.	.	The coke was a typical soft coke.
Ash	= 12.78	"	.	.	.....
F. Carb.	= 76.16	"	.	.	.....
S	= 0.25	"	.	.	.....
N	= 1.91	"	.	.	.....

Analysis of Indian Soft Cokes.

The following analysis of typical Indian soft cokes as they appear on the market, obtained from the same source, are the only ones that the writer is acquainted with :—

Analysis of "Poora Koila", Raniganj Field, 1919.

No.	Des.	Vol. M.	Moisture.	Ash.	F. Carbon.
1	Toposi	7.50	dried	26.8	65.7
2	"	7.12	9.75	29.04	69.84
3	"	5.30	2.89	50.92	43.78
4	"	4.13	6.00	42.56	58.31
5	Kalipahari	7.21	5.37	28.42	64.37
6	"	5.61	5.50	37.60	58.79
7	"	5.18	dried	37.58	57.24
8	"	5.78	5.52	38.00	56.23
9	Jote Janak	6.08	dried	35.12	58.85
10	"	6.80	dried	30.00	63.20
11	"	6.00	6.10	29.00	65.00
12	"	5.84	6.70	23.52	71.14
13	Toposi	6.18	8.00	19.90	73.92
14	"	5.59	8.10	32.20	62.21
15	"	4.73	8.10	37.36	67.89
16	"	8.11	10.40	31.32	60.07

Average Sulphur Content of the above samples.

1—4. Toposi	.	.	.	.	.	S
5—8. Kalipahari	.	.	.	.	.	0.20 per cent.
9—13. J. Janak	.	.	.	.	.	0.25 "
13—16. Toposi	.	.	.	.	.	0.23 "
						0.26 "

All above samples were taken from "Poora Koila" heaps, made by the native process.

The "Fusion" Rotary Retort.

This retort, which is operated under Hutchin's patents by the Fusion Corporation, Ltd. of Middlewich, Cheshire, is a typical example of the horizontal, rotating, externally heated systems, differentiated from various other more or less similar devices by being fitted with an internal scraper or breaker.

The retort tube is constructed in standard sizes from 2 ft. 6 in. to 4 ft. in diameter and from 25 to 100 feet in length, with capacities ranging from 5 to 100 tons of coal per 24 hours.

The crushed coal enters the retort through an automatic feed valve and slowly makes its way along through finding its angle of repose as the tube rotates, but only so long as the depth of the material at the feed end is slightly greater than that at the discharge end. It is claimed that by this means the end-pressure or thrust of the inclined retort, which is not conducive to uniform heating, is obviated.

In the retort itself is placed the breaker, which may be of one or more lengths, usually not less than five, and which may have three or more points or blades. The breaker is not fixed or propelled in any way. It is placed loosely in the retort and its diameter is about two-thirds of that of the tube. As the retort rotates the breaker keeps falling over and over and in so doing gives a hammer or clipping action to the charge. One of the special features claimed for the method is that it prevents the birth or growth of scale on the wall of the retort, which other mechanical devices such as worm gear, paddles driven by shafting, etc., cannot do.

The essential heat is obtained from the combustion of gas from a producer and the gases from it enter the brick-work chamber, in which the retort rotates, through ports arranged for the proper regulation of the temperature. They enter at the discharge end, circulate round the rotating tube, and leave at the feed end into the chimney flue.

At the discharge end there is a stationary chamber of cast iron, which acts as a receiver for the residual products. The connection to the condensers is also joined to this chamber, through which the gas and oily vapours pass. The solid residue passes out through an automatic discharge valve.

The stuffing boxes which join the rotating portion of the apparatus to the stationary chamber are especial features of Hutchin's patents, but being of purely mechanical engineering interest need not be mentioned here.

One criticism of this retort is that as the oily vapours are withdrawn from the hottest end, they must have been subjected to a certain amount of cracking, with the usual detrimental results. The inventors claim that this is not the case.

It ought to have been mentioned that at each end of the retort tube, external to the heating and feeding arrangements, there is mounted a ring which rests on heavy rollers carried on spindles revolving in bearings, and that the retort is driven by means of spur gearing of the usual type. This retort has still to prove its utility for bituminous coals and under prevailing Indian conditions.

The Sutcliffe-Evans or Pure Coal Briquette Process.

The inventors of this process have tried to overcome the more obvious difficulties met with in low temperature distillation processes by pre-treatment of the raw coal. Mr. Sutcliffe is the Managing Director of Sutcliffe, Speakman & Co., Ltd. of Leigh, Lancashire. Dr. E. C. Evans is the Chief of the Fuel Research Department of the National Federation of Iron and Steel Manufacturers. It is claimed that the process is applicable to all types of carbonisation—metallurgical, gas and low temperature.

The coal is first washed, dried and then pulverised or ground to a pre-determined size. It is then mixed with a non-coking coal, or coke breeze or a pre-heated coal in such proportion as to render the blend non-expanding on heating. The mixture is then briquetted without a binder, a process which demands high pressures (approximately 8 to 10 tons per sq in., in specially designed presses). The author has examined these briquettes and they are harder and denser than one would expect. The briquettes are carbonised in a vertical cylindrical retort, lined with fire-brick, which is heated internally by superheated steam. A somewhat complicated regenerative system is fitted to the retort.

By this means the patentees claim that they do away with most of the difficulties encountered in low temperature carbonisation generally, as they only have to consider the conduction of heat from the outside of the briquette to its interior. If this is so, it follows that the size of the retort is only limited by the crushing strength of the briquette.

This is said to be sufficient usually to enable an output up to 250 tons per day, per retort, to be attained. A high yield of oils and other by-products and a particularly good yield of ammonium sulphate, equal to that reached by the Mond system, are also claimed. Dealing with a British coal of average composition in a large installation under erection at present, the following results are anticipated :—

70 per cent. smokeless fuel.	} per ton.
20 galls. oil.	
4 to 5 galls. motor spirit.	
50 to 60 lbs. sulphate of ammonia.	

together with surplus gas to the extent of 4,000 to 5,000 cubic feet, of a calorific value of some 450 B. T. U. One particular aspect of the question of especial interest to India—if it ever comes to pass that the high sulphur-bearing coals are taken into consideration—is that the steaming adopted in this and similar processes, is said to eliminate large proportions of this element from the residual coke.

This company claims to have studied the Indian problem to a certain extent and to have carried out many tests with Indian coals. Below is given a copy of a letter received from them on this subject. "We understand that so far as India is concerned, she is short of suitable coking coal available for blast furnaces. We, therefore, tackled this problem from the point of view of increasing the coking quality of the coal and also giving an improved quality of coke for the blast furnace, and we found that on treating the so-called coal spoken of as Seam 16, of which we understand there are very big quantities available in India, that by having this washed under the Mineral Separation process we were able to divide it into three classes of fuel as follows:—

1. About 50 per cent. of good coking coal with 15 per cent. ash.
2. About 40 per cent. of high ash coking coal with 25 per cent. ash.
3. About 10 per cent. shale with over 50 per cent. ash.

On our process by using the 50 per cent. good coking coal produced as above, for mixing in with clean non-coking coal of low ash, we could then make coke by this mixture and could, in short, make a mixture using 2, 3 or even 4 parts of non-coking coal mixed with one part of this high grade coking coal. In this way, as you will see, the coking facilities are increased enormously.

"The No. 2 class of coal produced in the above washing, it was suggested should be carbonised and converted into a domestic fuel to take the place of the carbonised fuel that is now in use in India.

Results of Tests with High Ash Residue.

(1) *Analysis of raw material—*

Coal dried at 110° C—	
Volatile Matter	21.30 per cent.
Fixed Carbon	42.85 "
Ash	35.85 "
	100.00 per cent.
<hr/>	
Sulphur	0.92 per cent.
Nitrogen	1.17 "
Calorific value	9,400 B. T. U.

(2) *Sample coked at 850°C.*

Volatile Matter	1.95 per cent.
Ash	44.55 "
Fixed Carbon	53.50 "
	<hr/>
	100.00 "
	<hr/>
Sulphur	0.94 per cent.
Nitrogen	1.03 "
Apparent Sp. Gr.	1.172 "

(3) Sample mixed with 20 per cent. previously carbonised material, briquetted and carbonised in retort at 700°C. Excellent, dense carbonised briquettes produced.

Apparent Sp. Gr. 1.386

(4) No. 3 test repeated, but briquettes carbonised at 650°C. Excellent, dense briquettes obtained.

Distillation Test.

Tar or fuel oil	8 gallons.
Sulphate Ammonia	13 lbs. per ton carbonised.
Light Spirit	3 gallons per ton carbonised.
Gas	4,500 cu. ft. of 640 B. T. Us.

Products evolved at 600°C.

"On a large scale and in an internally heated retort, we would anticipate the following yields at 800°C.

Fuel Oil	8 to 10 gallons.
Sulphate	20 lbs per ton.
Light Oil	3 gallons.
Gas	7,800 cu. ft. of 500 B. T. Us.

"It will be noted that the above results are based on a material containing 35 per cent. ash. If the shale be eliminated in the flotation treatment (which can be done quite readily) the ash would be reduced to 30 per cent. and the coke would consequently be of better quality. This is a matter to be determined entirely in accordance with the economic conditions at the site.

"Tests on a semi-commercial scale were made in the experimental retort we have installed and a smokeless domestic fuel was obtained which should have a ready market in India. The ash content is high but this would not be a serious detriment as the average "soft coke" now used contains about 40 per cent. ash.

"This could be reduced if found desirable, either by eliminating the shale or alternatively, by adding a low ash non-coking coal to the residue.

*Treatment of Low Ash material for the manufacture of Furnace Coke.**Analysis of cleaned product.*

Volatile Matter	27.30
Fixed Carbon	60.60
Ash	12.10

Sample dried at 110°C.

Sulphur	0.84 per cent.
Nitrogen	1.68 per cent.
Cal. Value	13,100 B. T. Us.

100.00 per cent.

<i>Carbonisation Tests.</i>	<i>Coke made at 850°C.</i>
Volatile Matter 0.75	Sulphur 1.03 per cent.
Fixed Carbon 83.40	Nitrogen 1.69 per cent.
Ash 15.85	Apparent Sp. Gr. 0.941
	Cal. Value 12,100 B. T. Us.
<hr style="width: 20%; margin: auto;"/> 100.00 per cent.	

Carbonisation Tests in retort —

- (1) Coal mixed with 20 per cent. previously carbonised material.
Temperature 650°C.

Coked briquettes considerably swollen.

Apparent Sp. Gr. 1.026

- (2) Coal mixed with 25 per cent. previously carbonised material.
Temperature 700°C.

Coked briquettes considerably swollen.

Apparent Sp. Gr. 0.985

- (3) Coke mixed with 50 per cent. previously carbonised material.
Carbonised at 750°C.

Briquettes very dense, showing no expansion.

Apparent Sp. Gr. 1.144

“The above tests are of considerable importance as indicating the concentration of the resinic constituents of the coal in the clean product. It offers far reaching possibilities of widening the range of coals suitable in India for the manufacture of coke.

Distillation Test on Cleaned Product—

This material treated at 700° C gave the following results :—

Coke	77.21 per cent.
Tar or fuel oil	12 gallons per ton.
Light oils	2 ” ” ”
Sulphate Ammonia	21 lbs. per ton.
Gas	5,709 c. ft. of 705 B. T. Us

“It is our experience that the results on a large scale are considerably better than those on a small scale, and if a coal of the type of seam 16 is treated we would expect the following results from 1 ton of coal :—

7.7 cwts. good coke for blast furnace purposes.
6.4 cwts. soft coke—domestic fuel.
25 lbs. sulphate of ammonia.
10 to 12 gallons tar, or fuel oil.
2 gallons motor spirit or benzol.

“Regarding India, in a recent enquiry which we have had, a non-coking coal has been reported to us with volatiles 30 per cent. and only 9 per cent. of ash. If a non-coking coal such as this had been used for mixing in with a strong coking material as previously mentioned, it would have resulted in quite a superior coke and one which would not have contained an undue percentage of ash,

" Dealing with the question of operating. For a 1,000 ton per day plant that we worked out for India sometime ago in connection with these tests we estimated the costs as follows :—

	Rs. As.
Washed Coal	4 0
Drying, Grinding and Briquetting	0 4·8
Retorting	0 7
By-product plant	0 4·8
Power plant	0 4·8
Management	0 4·6
Capital Charges	2 2
Total per ton	7 12

Assume 300,000 tons treated per annum. Cost per annum Rs. 23,25,000.

Receipts :—

	Rs.
105,000 tons high class furnace coke	***
96,000 tons soft coke at Rs. 10 at works	9,60,000
3,000,000 gallons fuel oil at Rs. 340 per ton	6,00,000
3,000 tons sulphate at Rs. 150 per ton	4,50,000
	20,10,000

Net cost of coke Rs. 3,15,000.

Cost of blast furnace coke = Rs. 3 per ton.

" Regarding the question of cost of a plant in this country, our cost of an installation works out as follows :—

Carbonisation Plant with By-product Recovery.

Capacity	500 tons coal per day.	150,000 tons per annum.		
			£	s. d.
Three pairs Retorts			45,000	0 0
Briquette Plant			35,000	0 0
Power Plant, Motors and Generators			20,000	0 0
Tar Dehydrating Plant and Tanks			5,000	0 0
Carbonised Fuel Plant and Screen			4,000	0 0
			109,000	0 0
Erection and Foundation, say			11,000	0 0
			120,000	0 0
Siding Accommodation and Sidings			10,000	0 0
			130,000	0 0
Buildings			20,000	0 0
			150,000	0 0
Equals—20 s. per ton treated, per annum.				
Ammonia Plant and Condensers Erected, Gas Exhausters, etc.			45,000	0 0
=6s. per ton per annum.				
Light Oil Plant, Charcoal Absorption			40,000	0 0
=5s. 6d. per ton, per annum				
			285,000	0 0
=81s. 6d. per ton treated, per annum.				
Washing Plant " Henry " system Dryer, and Bunkers			20,000	0 0
=2s. 6d. per ton, per annum.				
			265,000	0 0
=34s. per ton treated, per annum.*				

* The writer accepts no responsibility for these figures.

"Regarding the fuel produced under this process you may take it that the coke would be beneficial in blast furnaces, more resembling charcoal than coke, and we think there is no doubt it will effect a great economy in iron production.

"The coke also having more resemblance to charcoal would be a most excellent substitute for the charred residue of coal which we now understand is used in India to a pretty large extent. Further more, it will interest you to know that by a recent process that we have protected in the preparation of the raw coal, we are so making it that the sulphur is held in the ash, so that by treating the coal running not more, say, than 2 per cent. of sulphur in the raw state, we are able to improve it so that the coke on combustion does not give off sulphur fumes."

The Everard Davies Process.

This system is the invention of Mr. W. Everard Davies of 119, Victoria Street, London, with whom the author has been in correspondence. The installation consists of twin, firebrick, vertical, continuous retorts 9-36 in. in width, 24-36 feet in height and 4 feet 6 inches to 8 feet in length with a charge of 10-30 tons, the time of carbonisation being 8 to 12 hours. The accessory apparatus such as the coal feeding and coke withdrawing appliances, hydraulic mains, etc., are built on the usual vertical retort lines and need no description. The general principle adopted is to attempt to combine the advantages of both internal and external heating, and up to 25 per cent. of the heating gases are passed upwards through the descending charge, while the external combustion chambers are arranged in three or four horizontal zones. The external heating takes place on one side of the twin retorts only, the central chamber being left as a passage for the gases and volatile products.

The heating chambers can be maintained at various temperatures. For average low temperature work the top zone may be at, say, 400°C. for hydrocarbon and oil formation, the next at 750°C. for ammonia and gas evolution and the final stage for gas evolution and coking at 800°C. It will be observed that by adopting a carbonising temperature of from 700 to 800°C., Mr. Everard Davies considerably exceeds the limits usually set, viz., 500-600°C. The use of a high temperature reduces the time of carbonisation. Mr. Davies also aims at a coke with 10 to 15 per cent. of volatile matter, instead of the generally accepted limits of 6-12 per cent. Such a fuel is said to be smokeless, to ignite more readily, yet still hard enough for general purposes but for such conditions the volatile matter in the raw coal must exceed 30 per cent.

The swelling and frothing of coals which have been the cause of the failure of so many low temperatures carbonisation processes, generally commence about 350-400°C, and it is stated that the chief difficulty with this action in externally heated retorts, is that the slow heat transmission results in only 15-25 per cent. of the total time of carbonisation being available for resolidification, and so the expansion taking place in one stage only results in jamming of the retort. By carbonising in 3 or 4 zones the foaming and swelling take place in successive stages and are said to be much less severe. Moreover, the quicker heat transmission, aided by internal heating, leaves 30 to 50 per cent. of the period of carbonisation for resolidification.

By the use of a small volume of gas for the internal heating, it is claimed that the only result in the final exit gases from the retorts with say, 31.5 to 40 per cent. volatile matter in the coal, is a reduction in quality to 400-500 B. T. U. instead of the inferior and low grade gas of 120-275 B.T.U. obtained from internal heating methods alone.

In all low temperature processes there are two opposing factors, low temperatures to increase the oil yield and the value of the liquid products by the absence of cracking, and high temperatures to benefit gas yield and the quality and value of the residual smokeless fuel. Mr. Everard Davies has certainly produced an ingenious system in which an attempt is made to mitigate the results of these opposing factors as far as seems possible, but whether it will prove economically sound or not has still to be seen. A great deal depends on the character of the coal used and in this process as in many others, blending of various varieties, coking and non-coking, may in the long run prove most suitable.

To conclude the description of this interesting retort by the following comparative tables, those in Table I are based on a standard average coal of 12,000 B.T. U. per lb. with not less than 30 per cent. volatile matter, or over 8 per cent. water and 10 per cent. ash, carbonised by existing high temperature methods in ordinary horizontal and vertical retorts. In Table II are given the alleged results with a similar coal, carbonised for 3 hours at 750°C. by the Everard Davies process.

Table I.

	Horizontal Retort.	Vertical Retort.
Coal Gas (stripped)	12,000 c. ft. (500 B. T. U.)	14,000 c. ft. (450 B. T. U.)
Coal Tar	10 gallons	12 gallons.
Benzol and Toluol (from stripping)	3 gallons	3 gallons.
Sulphate of Ammonia	25 lbs.	45 lbs.
Salable Coke	12.5 cwts.	12 cwts.

Table II.

Coal Gas	8,000 cu. ft. (500 B. T. Us.)
Coal tar	15 galls. (includes 10 galls. Diesel oil.)
Benzol	3 gallons.
Sulphate of Ammonia	30 lbs.
Saleable low temporary coke (10—15 per cent. volatile matter)	14 cwts.

*Proposed scheme for distillation of Kargali (Ramgarh-Bokaro) Coal.
(Becker Process.)*

The writer is indebted to Mr. J. Thomas for details of the scheme outlined below, which is of great interest and importance.

Obstacles in Treating Raw Coal.—It is now recognised that to attempt to carbonise raw coal for the manufacture of semi-coke without first subjecting the coal to a preliminary process of pre-heating, briquetting, or blending is to court failure. The causes of failure in this direction are due to :

(1) The expansion of the coal on heating to about 500°C and the fact that secondary contraction of the coke does not take place until a high temperature is reached. This causes the semi-coke to stick in the retort and it becomes difficult to discharge the mass.

(2) As a result of the swelling of the coal the semi-coke is very porous and friable, and will not stand transport well. Moreover, the huge bulk of a comparatively small weight involves extra cost in handling and carriage, especially for delivery.

(3) The porous nature of the swelling coal prevents rapid heat penetration, hence the carbonising process proves slow. This is also aggravated owing to the low temperature-gradient as compared with the temperature-gradient in high temperature practice. The net result of the foregoing is that small throughputs are obtained unless the coal is pre-treated or blended.

Notes on Pre-Heating and Briquetting.—Attempts to overcome the expansion of coal by designing retorts to respond to swelling have not proved highly successful. The nearest approach to success brings about a reduction in the capacity of the retort. Further, even should such systems prove successful in dealing with swelling coals they do not improve the rate of heat transmission.

The prevention of expansion can be brought about by pre-heating coal at temperatures in the region of 300°C, but this procedure is not recommended, since it is possible to bring about the desired result in a one-stage process.

The briquetting of coal prior to carbonisation, results in rapid carbonisation, increased throughputs and the removal of sticking troubles, but it is usually necessary to blend the coal with inert substances, such as coke or non-coking coal, to ensure non-swelling briquettes. An improved process of blending necessitating the use of a minimum of pitch has been devised by the Research Staff of the Woodall-Duckham Companies for adoption with their vertical retorts. This system, however, is not being recommended in this case.

Blending of Coals with Inerts.—The simplest and best method of dealing with swelling coals (such as Kargali coal) to prevent expansion, is by the admixture of non-coking coal or fine coke with the coal before charging into the retort. As a non-coking coal is not available at the Dhori Colliery, coke dust must be used. In the first instance this should be imported from the Jharia field, but subsequently sufficient semi-coke dust will be made locally for the purpose, as at every carbonising plant.

Conditions essential to Success.—Laboratory investigations and large scale tests on a works plant under running conditions have shown that the following conditions are essential to success :—

- (1) The correct blending of coal with inert to prevent expansion, facilitate heat penetration and ensure that the semi-coke is of the required density, hardness and toughness, and of nearly uniform texture.
- (2) Heat penetration should be rapid in order that the binding material (or "resinic matter") is not destroyed before it fulfils its proper function.
- (3) The most economic width of horizontal retort, or coke oven, is about 14 inches, which is the standard width of the Becker Oven.
- (4) The length of oven will depend on local requirements, but the smaller type is recommended. This is 23½ feet long and 12½ feet in depth.

Semi-coke Manufacture Under High Temperature Conditions.—A low-temperature fuel, that is, a semi-coke having from 5 to 8 per cent. of volatile matter, can be manufactured under high-temperature conditions. That is to say, by maintaining the first three conditions mentioned above, heat is transmitted through the charge sufficiently rapidly to ensure that by the time the middle of the charge reaches a temperature of 550°C., or thereabouts, the average content of the charge will be about one-fourth of the original

volatile content of the coal. The charge is then strong enough to be pushed from the retort.

When semi-coke is made under high-temperature conditions the by-products are essentially the same in properties and quality as those obtained in ordinary coke-oven practice. The uses and markets for these products are already established, hence the disadvantage attending low-temperature work does not arise in the system now advocated.

Behaviour on Coking.—The Kargali coal is a very good coking coal yielding a dense coke. Both the washed and unwashed samples behave much the same in this respect. Considerable excess binding material is present and this should be utilised for binding inert material and hastening the process of carbonising.

The coal as submitted is in a finer state of division than would be recommended, the fine state being partly responsible for the density of the coke. As dense coke is not required, the coal should be ground to pass a $\frac{3}{4}$ inch or $\frac{1}{2}$ inch sieve, as may best be determined from tests on the slack as produced in the mine.

The proportion of coke dust to give good results with rapid heating should be from 20 to 25 per cent. The optimum laboratory blend with 500 grams in a small electric muffle (full muffle charge) is: coal 75 per cent., coke 25 per cent. In retorts that do not ensure quick heating the proportion of coke must be reduced. In a Becker Coke Oven about 20 per cent. should give good results.

Kargali coal has been coked under high-temperature conditions to produce a domestic coke containing *from 5 to 8 per cent. of volatile*. Such coke is recognised as being very suitable for domestic use in England. The *average volatile content of the coke made was 6.5 per cent.*, and the texture of the coke was very satisfactory, but rather dense. Coke with a higher volatile content can be made in the same manner, if required, but not exceeding 10 per cent.

Proposals.—It is recommended that the installation of a small battery of Becker Coke Ovens for the manufacture of smokeless domestic fuel should be undertaken, the ovens to be operated under regular high-temperature conditions, except that the retorts should be discharged when the middle of the charges attain a temperature of about 650°C.

The Becker Coke Oven is said to be the latest and most approved development of coke oven at present being built in the United States, where many

batteries have been completed or are in course of construction. The oven ensures most rapid carbonisation with the conservation of resinics and gives large throughputs of coke. It can be constructed for the manufacture of semi-coke, yielding throughputs of 20 to 30 tons per oven day, depending on the length adopted. The oven walls are of silica construction.

The Maclaurin Retort.

In 1909, the Corporation of Glasgow, according to Lander and McKay, appointed a Committee to "enquire into and report on any process of gas-making that will produce a form of coal-residue that may be available for use in ordinary domestic grates." After examining all the then-known processes, it was decided in 1915 to erect a plant on the Maclaurin system at Port Dundas, near Glasgow, to carbonise 20 tons of coal per day. It is presumed that this experiment was successful, as the Glasgow Corporation is at the present moment erecting a battery of 5 units, at their gas-works, each of which is capable of carbonising 20 tons of coal per day of 24 hours.

Many accounts of the Maclaurin system have appeared. The following is taken from a paper read by the inventor, before the Ceramic Society.

The fuel is carbonised in an internally heated vertical retort, which in outward appearance and internal structure resembles a miniature blast furnace. Each retort is about 45 feet high and 8 feet across at its widest portion, tapering to top and bottom. It is built square instead of circular to allow of greater uniformity in the air distribution. The air blast is introduced about 12 feet above the discharging doors, which are four in number. The blast is distributed through a large number of narrow brick ports in the side walls, and also in a dividing wall which is carried across the plant for the purpose of ensuring more uniformity in the distribution. The plant tapers upwards above these ports until the opening is reduced to about 3 feet 6 inches. At this point the brickwork stops and a cylindrical iron tank 8 feet wide and about 10 feet high, completes the main part of the structure. The bottom of this tank is projected upwards towards the centre so as to provide a well, within which oil and water can collect. Within this outer cylinder a second cylinder, about 4 inches less in diameter, is placed. Instead of resting on the bottom this cylinder rests on supports, which raise it about an inch or so from the bottom, thereby leaving a free passage for the oil. This cylinder is termed the condenser, and on it are fixed both the charging bell and a small hopper capable of holding approximately one ton of coal.

The discharge is by the four doors at the bottom. Here the coal rests on a cutter plate, which can be moved by a lever, and the escape of gas is stopped

by a small water seal which can be swung into place by the movement of a second lever. The discharging doors are about 6 feet from the ground, so that the coke or residue can be dropped into tubs or on to a conveyor. The plant, when full, holds about 30 tons of fuel. After the plant has been started, working is continuous. Coal is put in at the top at the rate of about one ton per hour, and the coke or residue is withdrawn at the bottom.

If the plant is being changed over from working for coke to working to complete gasification, the only alteration required is in the adjustment of the valve controlling the air blast and the valve controlling the exit gas. The control of these valves allows the operator to obtain either a black smokeless fuel or a hard grey coke, or an ashy residue. The plant, though continuous, can be considered to be divided into five zones: a cooling zone, a combustion zone, an ammonia-making zone, a distillation zone, and a condensing zone. *From coals that would not by themselves form a coke in a coke oven, good coke is said to be obtained in the Maclaurin plant.* The reason for this is that large coal is used and, therefore, the cellular fabric of the coal is not destroyed, as it is by grinding for use in coke ovens, and whereas the amount of binding agent in the low cooking coals is not sufficient to cement together a lot of small granules of coal not in intimate contact, there is, in almost all bituminous coals, sufficient binding material to penetrate and bind into one structure, cellular material in very close contact, as such material is in the unground coal. Coal heated in a high temperature vertical, a low temperature vertical, and a Maclaurin retort may be considered as being present in layers. The layers would be at different temperatures. When the centre has reached 400°C, the outer layers in the three cases may be taken at 1,000°C, for the high temperature retort, 650°C, for the low temperature retort, and probably 450°C, for the Maclaurin retort.

The oily vapours are caught in the ascending stream of hot gases as they leave the surface of the coal in the Maclaurin plant, and pass upwards to the constriction, where they are moving with a fair velocity. Above this point they are rapidly spread out through the comparatively cold incoming fuel, where the velocity as well as the temperature decrease quickly. Condensation of the oils, therefore, takes place, and also of water, and these condensates trickle down into the well of the condenser. Here they accumulate, passing below the inner cylinder, which acts as a seal and so forces the gases to rise through the incoming coal, and down the space between the inner and outer cylinders, where further condensation takes place. After the oil and liquor in the well have once reached the level of the gas exit pipe near the bottom of the outer cylinder, gas, oil, and water flow along this pipe to the

hydraulic main, coolers, and scrubbers, where the remainder of the oil and ammonia and the bulk of the water are condensed out. Nothing but clean, cool gas, therefore, passes to the suction fan, which delivers it to the points of utilisation. When working for coke the gas leaves the plant between 60°C and 80°C, and as the coke being discharged is also cooled, the heat losses in the process are remarkably small.

The heat necessary to maintain the temperature is supplied by the combustion of a small quantity of the carbon of the fuel, but the carbon monoxide formed is afterwards available in the gas produced. A few words on the by-products may here be desirable, as their value has a very direct bearing on the cost of the gas.

Coke.—The coke generally resembles in size and appearance the lumps of coal going into the plant. The higher the coking index of the coal the more it is liable to change in appearance due to softening. In non-coking and low-coking coals a considerable quantity of the limey and pyritic bands break off and become concentrated in the dust. *The large coke obtained by screening, in consequence, often contains considerably less ash than would be anticipated from the ash in the coal used.* Stony matter can also be readily separated out after carbonisation by the difference in specific gravity of the coke and stone.

The fuel made can be varied according to the blast used. A black and easily ignited fuel is obtained, or, at will, a silvery grey furnace coke. Both types of fuel are hard; generally much harder than the original coal. The average resistance to crushing of 34 samples tested amounted to 804 lbs. per square inch. The volatile matter, however, differs very little in these two fuels, being usually between 5 per cent. and 3 per cent. The change from black to grey is apparently due more to a physical change than to any appreciable difference in the percentage of volatile matter. Several hundred tons of this coke have gone through the blast furnaces in Scotland.

Oil.—Values: The oil yields range from a very few gallons per ton, with strongly coking coals of low volatile content, to 30 and 40 gallons per ton with coals of a canneloid nature. The average yield for bituminous coals lies between 14 and 20 gallons. The oil yields are the highest possible from the kind of coal used, as less decomposition of the oil is said to take place than in any plant hitherto designed.

Conclusions regarding Low Temperature Carbonisation.

(1) A market already exists in India for soft coke (smokeless fuel), which differentiates India at once from countries like Great Britain, where an adequate outlet has to be created and developed.

(2) Indian soft coles vary extremely in quality. They are made by haphazard processes and the crudest methods, yet, apparently, are sold in large quantities, at prices which in these abnormal times range from Rs. 6 to 9 per ton. Further, they are manufactured in many cases from coals which have practically no saleable value, and there is a total waste of the by-products.

(3) It seems feasible that if a soft coke of uniform quality were produced on a large scale, it should be possible for it not only to supply the present demand but even to capture a part of the market held at present by raw coal, while the recovery of the by-products ought to constitute a source of profit.

(4) It has been demonstrated that at least some of the so-called non-coking coals are suitable for the manufacture of soft coke. For example, the non-coking coals of the Raniganj field and of the Pench Valley appear to give good results.

This has an important bearing on the question of the conservation of the reserves of metallurgical coking coals.

(5) As soon as a process of low temperature carbonisation has been worked out on an economic basis in the United Kingdom, no time should be lost in considering its applicability for India, where conditions are more favourable than they are there. It will probably be found that a simple retort of the vertical type will eventually provide the solution of the Indian problem.

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