III. Health.

- 1931. III. 3. Annual Report of the Health Organisation for 1130. 70%.
- 1931. III. 5. Health Committee Minutes of the Seventeenth Session held at Geneva from May 4th to 8th, 1931. 1194.
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LEAGUE OF NATIONS

ANNUAL REPORT

OF THE

HEALTH ORGANISATION

FOR 1930

The present report describes the work of the Health Organisation of the League of Nations during 1930, and is the sixth of a series prepared by the Health Section to give effect to a resolution adopted by the Health Committee in April 1925.

Series of League of Nations Publications

III. HEALTH. \ 1931. III. 3.

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Chapter I.

I. COUNCIL DECISIONS ON THE WORK OF THE HEALTH ORGANISATION.

The decisions of the Council during its fifty-ninth and sixty-first sessions are described under the appropriate chapters of the report.

II. DECISIONS OF THE ASSEMBLY ON THE WORK OF THE HEALTH ORGANISATION.

The work of the Health Organisation was reviewed by the Assembly at its eleventh session. The delegate from Australia spoke of the enquiry into the health conditions on certain Pacific islands undertaken by the Health Organisation at the request of the Pacific Health Conference convened by his Government, and considered that it would be desirable for the Malaria Commission to undertake a mosquito survey of Malanesia. He hoped the work of the Singapore Bureau would develop into a general branch of the Health Organisation in the Far East.

The delegate of Japan hoped that the leprosy studies undertaken by the Health Organisation would be extended, and expressed the wish of his Government that the Eastern Bureau at Singapore might act as a general branch of the health work of the League. Japan was also anxious that the system of fellowships for the benefit of specialised health officers from the East should be maintained.

The delegate of Venezuela suggested that the Health Committee should study the systematic utilisation of medicinal plants.

The delegates of India and Persia desired to see studies of plague and cholera undertaken by the Health Organisation and suggested that the Eastern Bureau at Singapore was well fitted to carry out such work.

The delegate of Hungary proposed that the Health Organisation should study the possibilities

of international reciprocity in the care of the sick.

Information concerning the action of the Health Committee on these proposals will be found in the appropriate chapters of this report.

The delegate of Great Britain as rapporteur (document A.56.1930.III) reviewed the development of the work from the beginning, dividing it into three periods.

During the first period, the Health Organisation was mainly occupied by general studies and surveys in order to learn the needs of the various health administrations and to define the problems which might be susceptible of solution by international action.

During the second period, it formed general conclusions. This was illustrated by the work of the Malaria Commission, which, after carrying out numerous surveys, set out some general principles of action which would be invaluable for any Government which has to organise its

In the third period, the Health Organisation responded to the application of various Governments for advice or assistance in health matters.

The Assembly adopted the following resolution:

"The Assembly,

"Recognising the importance of the work of the Health Organisation to the League as a whole, and the value of that work in connection with problems of development in all countries; "Expresses the hope that the experience gained by this Organisation may be made available in increasing measure to Member States of the League;

"Notes with satisfaction that the activities of the Health Organisation continue to extend to countries in all parts of the world, and that, during the past year, they have been especially exercised in certain countries which have invited the technical advice of the League in the development of their public health services;
"Approves the work carried on by the Organisation since the last session of the Assembly;

"Expresses its appreciation to the members of the Health Committee, as well as to the different health administrations and individual experts, who have contributed in so large a measure to the success of their activities."

The Fourth Committee approved the budget of the Health Organisation for 1931 (see Appendix II).

Chapter II.

SERVICE OF EPIDEMIOLOGICAL INTELLIGENCE AND PUBLIC HEALTH STATISTICS.

A. Geneva.

This service was carried on according to the programme established in previous years.

The Annual Epidemiological Report (E.I.13) for the year 1928 published in August 1930

was restricted to tabular material, without text, as in the case of the previous number.

The following reviews on special subjects appeared in the Monthly Epidemiological Reports issued in 1930: tularemia, in January; acute poliomyelitis, in February and March; psittacosis, in April; plague, in May; cholera, in June; maternal mortality, in July; cerebro-spinal fever and encephalitis lethargica, in August; scarlet fever and diphtheria, in September; undulant fever, in October; measles and whooping-cough, in November; relapsing fever, in December.

The Weekly Epidemiological Record appears every Thursday evening and contains on the first pages the official communiqué of the Office international d'Hygiène publique. This communiqué has appeared regularly in the Weekly Record since November 1928. Information concerning plague, cholera, yellow fever, smallpox and typhus fever, received by the Health Section during the week (principally from the Singapore Bureau), is published in the second part of the Record. The most striking facts of the week are illustrated by charts and maps.

The Weekly Record also contains reviews on the movement of diseases which have become unusually prevalent. For example, during the first eight months of 1930, there appeared, in addition to data on the quarantinable diseases, information on psittacosis, epidemic cerebro-spinal fever, influenza and acute poliomyelitis. Statistics on the movement of acute poliomyelitis occurring in the summer of 1930 in the middle and lower Rhine valleys appeared week by week. The epidemiological information in the Weekly Record is brought up to date by the publication two or three times a week of a bulletin, The Latest Epidemiological Intelligence, of which 156 numbers appeared in 1930.

B. THE EASTERN BUREAU AT SINGAPORE.

The sixth session of the Advisory Council was held at Singapore in December, 1930.1

In his report to the Advisory Council, the Director of the Bureau stated that the position regarding the graver epidemic diseases in Eastern ports had improved considerably over that of previous years, the only unusual event having been the outbreak of cholera during the summer in the principal ports of the Philippine Islands. Despite further extensions in its intelligence service, the information received by the Bureau had therefore shown a notable decrease.

Since the port health service of Shanghai was taken over by the new National Quarantine Service on July 1st, weekly telegraphic information on the incidence of cholera, smallpox and cerebro-spinal fever in Greater Shanghai has been sent to the Bureau. Information from Amoy is also being regularly supplied, both by cable and letter.

A weekly cable has been received since September 1929 from the Chief Quarantine Officer at Bushire regarding health conditions in the South Persian ports.

Returns received for the first time in 1930 (by post) were:

Boletim noso-necrologico semanal, Macao; Weekly Statistical Return, Tanga (Tanganyika); Weekly Return, Amoy.

Progress reports on the outbreaks of cholera in Shanghai and of plague in Inner Mongolia were received and published in the Weekly Fasciculus.

¹ The following attended: Dr. J. VAN LONKHUYZEN (Chairman), Dutch East Indies; Dr. F. H. Guérin (Vice-Chairman), French Indo-China; Dr. A. L. Hoops, British Colonies and Dependencies; Major-General J. D. Graham, India; Dr. S. C. Yin, China; Dr. M. Katsumata, Japan; Dr. K. Shimojo, Japanese Colonies; Dr. Phya Boriraksh Vejkar, Siam; Dr. C. J. Wilson, Federated Malay States. Dr. S. B. Grubbs, Hawaiian Islands (United States Public Health Service), and Dr. R. W. Hart, Philippine Islands, attended as observers. Dr. R. Gautier, the present Director of the Bureau, Dr. C. L. Park, the incoming Director, and Dr. T. Ouchi, Deputy Director, were also present.

Broadcast in Code.

The weekly bulletin in code was broadcasted as usual by the wireless stations at Saigon, Malabar and Antananarivo during the year. The number of failures in reception was again reduced from thirteen in 1929 to ten in 1930, and in some cases of failure the broadcast in clear from other stations made it unnecessary to send cables. It was not necessary to continue the broadcast from Karachi.

Broadcast in Clear.

The weekly bulletin in clear for the benefit of shipping is now broadcast from stations at Malabar, Tokio, Karachi, Madras, Hong-Kong and Shanghai.

The following table gives an idea of the working of this system:

Station	Reception attempts	Reception successful	Reception unsuccessful	Percentage of successful attempts
Malabar	. 82	63	19	76.8
Tokio	33	30	3	91
Karachi	23	17	6	74
Madras	15	9	6	60
Hong-Kong	. 13	13		100
Shanghai	. II	10	I	91

The message from Malabar is broadcast daily and has been picked up by ships on Sundays.

Cables.

The Bureau sent the weekly message by cable to Teheran, Seychelles, Aden and British Somaliland during all or part of 1930.

Infected Ships.

The number of ships reported to the Bureau as having had cases of the major infectious diseases on board fell from 102 in 1929 to 63 in 1930, as follows:

Plague	I
Cholera	8
Smallpox	44
Cerebro-spinal fever	8
Typhus exanthematicus	2
Total	63

In twenty-eight instances telegraphic notice of the prospective arrival of an infected ship was made to the next port of call.

In sixty-five instances ships arriving in the ports of India were notified as having on board minor infectious diseases.

International Sanitary Convention.

During 1930, the Governor of the French Possessions in India notified the Bureau that he agreed to the territories under his jurisdiction being related to the Eastern Bureau at Singapore for the purposes of the Convention. ¹

Co-ordination of Research.

Bacteriophage. — The Bureau published a review of the position of bacteriophage from the therapeutic point of view in the East. A choleraphage prepared by Dr. I. N. Ashehov was distributed by the Bureau for clinical and prophylactic studies to institutions and research workers in Singapore, Kuala Lumpur, Bandoeng, Manila, Shanghai and Johannesburg.

Pneumonia. — Documents on tropical pneumonia have been assembled and a preliminary study of the disease from the clinical, bacteriological, etiological, statistical, therapeutic and preventive points of view was prepared by the Bureau and distributed to the Advisory Council. The study, when completed, will be published by the Health Organisation at Geneva.

¹ Under Article 7 of the Convention, the Eastern Bureau acts in its area as a regional Bureau for the purposes of the Convention.

Plague. — The Bureau received the following papers contributed by Japanese workers on the lines of the research programme drawn up by the Plague Expert Commission in 1927:

"Study on Domestic and Wild Rodents found in the City and Suburban Districts of

Tokio", by Dr. T. Omoto, of the Metropolitan Police Board, Tokio.

"Description of Animals connected with Plague Dissemination in Japan: Survey of Rats and Rat-fleas in Kobe", by Dr. S. Yamada, Government Institute for Infectious

Study on Plague Epidemics in Japan";

"On the Prevention of Plague" "Plague Invasion of Osaka Wharves in 1929 and Preventive Measures taken";

"Studies on Certain Plague-disseminating Vermin in Japan", by Dr. Y. Iimura, Central Sanitary Bureau.

Oral Vaccination.

Dr. W. Kouwenaar, Director of the Pathological Laboratory at Medan, has agreed to undertake

a trial of vaccination per os against dysentery on a rubber estate in Sumatra.

The Prophylactic Department of the Tokio Metropolitan Police Board is carrying out an extensive oral vaccination experiment against dysentery among children between 3 and 7 in four suburban districts of Tokio. So far, 12,418 have been vaccinated, and the morbidity rate among them has been 2.8 per thousand, against 11.4 per thousand among controls.

Dry Smallpox Vaccine.

Dr. W. H. Kauntze, deputy director of the laboratory services at Kenya, sent a report to the Bureau describing experiments made with dry lymph samples supplied to him by the Eastern Bureau, which received them from the Pasteur Institute, Saigon, and the Institut de vaccine animale, Paris.

His results were extremely satisfactory, the average of successful "takes" in primary vaccinations ranging from 84 per cent to 100 per cent after these lymphs had been kept for from six to nine months at a shade temperature reaching sometimes 110° F.

The report concludes that the power of resistance of dry lymph renders it ideal for stations

where inaccessibility precludes the use of glycerinated lymph.

The Public Health Commissioner with the Government of India reported in the "Epidemic Diseases Summary":

"There is no doubt that the method (dry lymph) is a great advance on that of the moist vaccine for use in tropical countries, where exposure to great variations of temperature is unavoidable and long distances have to be traversed in transit."

Liaison in Laboratory Work.

The Bureau acted as a liaison agent between a number of public health laboratories in the Far East.

Finance.

During the year 1930, contributions to the Bureau's budget were received as follows:

	Value in Straits dollars
Japan (for 1929) £1,523 8s. 9d. equiv. (approx.)	13,150.21
(for 1930) £1,527 6s. 10d. equiv. (approx.)	13,150.21
Straits Settlements (for 1930)	3,027
Dutch East Indies (for 1930)	7,083
Government of Hong-Kong French Indo-China piastres 6,000	2,367.71
Federated Malay States (for 1929)	4,147.50
I IIII PUIIC ISIAIIUS (IOI 1030)	3,000
Federated Malay States (for 1930)	2,000
7 (1930)	3,000

Resolutions of the Advisory Council.

The following resolutions were adopted by the Advisory Council of the Eastern Bureau during its sixth session held at Singapore from December 27th to 30th, 1930:

"I. The Advisory Council approves the report of the Director of the Eastern Bureau for 1930.'

- "2. The Advisory Council approves the estimate of Straits dollars 112,707 for the year 1932."
- "3. The Advisory Council notes with satisfaction the statement made by the President of the Permanent Committee of the Office international d'Hygiène publique, at their session of May 1930, that there would be no objection to the "Office" forwarding information telegraphically to the Eastern Bureau regarding measures applying to countries in the East, as nothing calculated to facilitate the work of the regional bureaux should be neglected by the "Office". The Advisory Council expresses the hope that, in the interest of the health of the East, this will be interpreted in a very liberal way."
- "4. The Advisory Council notes with satisfaction the fact that the F.E.A.T.M. at their eighth Congress, have recognised the danger of the introduction of yellow fever virus into the East, and, by the resolution adopted at their Congress at Bangkok, have endorsed the views expressed by the Advisory Council in Resolution 10 of their fifth session held at Bandoeng in February 1930."
- "5. The Advisory Council, on the departure of Dr. Gautier, on completion of four years' work as Director of the Eastern Bureau, wishes to place on record its appreciation of the excellent services he has rendered to the Bureau, both by stabilising its organisation and by developing its rôle in connection with the prevention of disease in the regional area of the Bureau."

Chapter III.

NEW PROPOSALS OF GOVERNMENTS.

PROPOSAL OF THE FRENCH GOVERNMENT FOR THE ESTABLISHMENT IN PARIS, UNDER THE AUSPICES OF THE LEAGUE OF NATIONS, OF AN INTERNATIONAL SCHOOL FOR ADVANCED HEALTH STUDIES.

In September 1930, the French Government addressed a letter (see document C.538. 1930.III) to the Secretary-General, proposing to establish in Paris, under the auspices of the League, an International School for Advanced Health Studies, for the purpose of facilitating the work of the League in this field.

In the memorandum which accompanied this letter, the French Government described the problem of training senior health staff which the Health Organisation had to face when it was called upon by a number of States for assistance in raising the standard of their public

health services.

The success obtained by the Health Organisation's systems of missions, study tours and international courses indicated that it should be developed methodically, in order to convert transient contacts into permanent relations and to establish an organised plan of general training adapted to the needs of health administrations faced with the complex problems of modern life.

The proposed international school would not in any way conflict with the various national schools of hygiene, which were intended mainly for students of the country concerned. It would supplement the work of these schools in the international field, and would, it was hoped, attract biologists, administrators, medical statisticians and sociologists in addition to public health officers.

An attempt would be made to contrast the ideas, methods and institutions of the different countries, and comparative hygiene would occupy an important rôle in the teaching.

The school would not restrict itself to theoretical teaching but would organise practical

field work in selected districts.

At its session in September 1930, the Council invited the Health Organisation and the competent services of the Secretariat to undertake a technical study of the project, on the basis of detailed information to be supplied by the French Government and of the observations contained in the report presented by the Rapporteur, and to submit to the Council the results of such study.

The following plan was presented by the Health Committee in its report on the project:

I. Teaching Staff.

Instruction will be given in French by a certain number of French and foreign professors, the latter to be chosen among persons best qualified to deal with questions of public health and the sciences relating to Health, belonging to countries which have acquired special experience in these subjects, so as to represent the progress of health knowledge throughout the world.

2. Students.

These will come from various sources, doctors and scientists specialising in a branch of hygiene, public health administrators, future directors of national services of national schools of hygiene. The students, whether French or foreigners, may receive scholarships granted by the League of Nations, Governments, or other official or private organisations.

General Programme of Instructions. — The school will give theoretical and practical courses, the former consisting mainly of seminars, while the practical work will consist of study tours in the field, in France and other countries.

In addition to the basic programme, there will be advanced technical studies on special subjects.

The theoretical programme will be divided into:

A. Comparative General Hygiene:

General organisation: economic, political and social bases of hygiene.

Public health in its different forms.

Social hygiene.

Rural hygiene.

Industrial hygiene and occupational diseases.

Medical assistance and hospitals.

Housing and town planning.

Port health sanitation and maritime hygiene—quarantine. Sanitary technique—sanitary engineering.

Laboratories and their relation to public health work.

Popular health education.

B. New Knowledge acquired in Public Health and in the Sciences relating thereto:

In addition to physics, chemistry and biology, there will be instruction in sociology, ethnographical geography, legislation and administration, in so far as they come within the scope of national or international health work.

The problems of populations, races, sexual life, conditions of labour and others of this type which affect the physical and moral life of individuals and peoples will be considered from the social as well as the scientific aspect.

Some of the subjects which come under this heading are:

General epidemiology;

Statistics

Biological sciences:

Physiology;

Bacteriology; Immunology and serology;

Parasitology;

Social aspects of disease;

Tropical diseases;

Physiology and hygiene of nutrition.

Examples of new questions to be dealt with in lectures and seminars are:

New methods of immunisation;

Sleeping-sickness;

The progress of research work on yellow fever;

Chemotherapy of leprosy;
Movements of population in countries of colonisation and immigration;

Hygiene of marriage and eugenics.

C. International Health Co-operation:

The progress of public health throughout the world. International Health Conferences and Conventions. The Health Work of the League of Nations.

The work of the Office international d'Hygiène publique.

The work of private international associations and agencies in matters of hygiene.

Administration and Financial Organisation. — There is to be a Governing Body and a Committee of Directors. The Governing Body will be composed of members of the Health Committee acting in a private capacity, with the President of the Committee acting as President

of the Governing Body ex-officio.

The Committee of Directors will consist of seven members, six of them nominated by the Governing Body and one by the French Government. A French member of the Governing Body

will act as Chairman of the Committee

The functions and terms of office of the Committee of Directors will be fixed by the Governing

The Medical Director of the Health Section of the Secretariat of the League will be ex-officio

Secretary of the Governing Body and of the Committee of Directors. The staff will consist of a Director appointed by the Governing Body, with the approval of the French Government; higher officials appointed by the Committee of Directors; minor officials and employees appointed by the Director.

A report on the work of the school will be forwarded each year by the Governing Body to

the Council to Members of the League and to the French Government.

The French Government has undertaken to bear the expense of installing the school, of providing the necessary buildings and of asking Parliament for a yearly grant of one million

The undertaking is given for a period of seven years, and it is to remain in force for further periods of seven years unless the French Government or the League of Nations notifies its

intention of withdrawing at least two years before the expiration of any such period.

In October 1930, the Council approved the report submitted by the Health Committee and expressed its gratification to the French Government.

PROPOSAL OF THE SPANISH GOVERNMENT REGARDING THE CONVOCATION OF A EUROPEAN CONFERENCE ON RURAL HYGIENE, TO BE HELD AT GENEVA, COMMENCING JUNE 29TH, 1931.

In September 1930, the Spanish Government proposed that the League should convene at Geneva a conference of representatives of European States for the purpose of a technical international study of rural hygiene.

The Council referred the proposal to the Health Committee.

The Committee appointed a Sub-Committee, which, together with a representative of the International Institute of Agriculture at Rome, was to act as the preparatory committee for the

The Sub-Committee pointed out that, even in countries where medical assistance is provided on a large scale, there are still defects in the organisation of public health work in rural districts. The difficulties in the way of improvement are obvious and recourse must be had to other means, such as completely changing the methods of constructing rural houses, introducing improved

systems for the supply of drinking-water, improving the land from the hydrographic and agricultural points of view through close and continuous co-operation between engineers and biologists, adapting medical assistance to rural needs, etc.

The Sub-Committee recommended that the programme of the Conference should be limited

to the following questions:

(a) Guiding principles and suitable methods for ensuring effective medical assistance in rural communities;

The most effective methods of organising health services in rural districts; The sanitation of rural districts; the most effective and economical methods. (b)

The study of the best methods of health propaganda should be included under group (b) and group (c) should include questions relating to rural housing conditions.

On the Health Committee's recommendation, the Council approved the above proposals. The Conference will be held on June 29th, 1931.

The following is a summary of the recommendations of the Preparatory Committee which held a second session in Paris:

1. That English and French experts and a representative of the International Labour Office be added to the Committee (see list of members in Appendix I).

- 2. That the members of the various delegations to the Conference should be experienced in social questions as well as representative of all the interests involved in rural hygiene, hygienic, agricultural, economic and social, including those of the agricultural employer and labourer. It would be desirable to have at least five members in each delegation.
- 3. Three rapporteurs would be selected by the Committee to present reports to the Conference on each of the three items on the provisional agenda.
- 4. The Commission on Rural Health Centres, which met at Budapest in October and prepared a report on this method of organising the health services in rural districts, was asked to consider other methods as well at its next meeting.
- 5. Two groups of experts were to be convened to prepare reports on the first and third items on the provisional agenda. Two representatives of rural insurance funds, nominated by the International Labour Office, were to be invited to attend the groups of experts preparing reports on the first and second items of the agenda respectively.
- In order to avoid the difficulty of defining precisely the term rural, the Committee decided that its usual meaning should be accepted—that is, an area where agriculture is the chief or even the sole industry, and where all other industries are of small importance and in the main dependent upon agriculture.
- 7. The following sub-division of the three items on the agenda was recommended by the Committee, in view of the reports to be submitted by the various delegations and the discussions of the Conference:

First Item.

The guiding principles and appropriate methods for ensuring effective medical assistance in rural districts are:

A. Personnel:

- (I) The doctor;
 - The number and distribution of doctors in rural districts;
 - Methods for ensuring an adequate number of doctors in rural districts:

- (i) The law of supply and demand—no State or public regulation;
 (ii) Public medicine—every doctor a public official;
 (iii) Inducements offered to doctors to settle in rural districts—bonus, house, transport, conditional payment of medical school fees, full or part-time employment in hospitals, by the community, health centres and similar institutions:
- (iv) Organisation of social groups for medical treatment—sickness insurance, co-operatives, etc.;
- Economic and financial, transport and social conditions as they affect the distribution of physicians.

The nurse;

Auxiliary medical personnel—pharmacists, feldshers, kininars.

B. Medical Institutions:

Number, distribution and capacity of hospitals, maternity homes, dispensaries, sanatoria, preventoria, ambulatoria, policlinics, etc., in rural districts.

Second Item.

The most effective methods of organising the public health services in rural districts:

A. Form of organisation:

A complete State health service:

Local autonomy in health services. (2)

B. Method of organisation:

- Older form (ordinary administrative form). Part-time health officers in all political sub-divisions with restricted legal powers and duties.
- (2) The "modern" form. Full-time health officers in large districts with full responsibility for all health work:

The health centre and county health unit plans.

- C. Subjects to be considered under the item:
 - (I) The most important health problems in the rural area (malaria, infectious diseases, etc.) as determined by a survey;
 (2) Infant and maternal welfare;

- Welfare of the child of pre-school age;
- School hygiene; welfare of the child of school age;

The campaign against tuberculosis;

The campaign against venereal diseases;

Sanitation;1

- Popular education in hygiene; Provision of medical treatment, including first aid in urgent cases and supervision of transport of sick and accident cases.
- D. The milk supply:

Limited strictly to considerations which affect rural districts.

Third Item.

The sanitation of rural districts; the most effective and economical methods:

A. Water supplies:

- Collective water systems for two or more villages;
- Wells:
- Springs;
- Cisterns.

B. Sewage and refuse disposal:

- Night-soil—the latrine, cesspool, sewers, sewer effluents;
- Manure-pits;
- Garbage and other refuse.

C. Housing, including living-in conditions of agricultural labour:

Public buildings, schools, sanitary institutions (hospitals, etc.);

Private houses;

Settlements—model villages;

- Administration; financial and economic aspects-loans, legislation, etc.
- D. Land improvements (bonifications):

Minor and major sanitary improvements; Drainage.

Statistical Chapter.

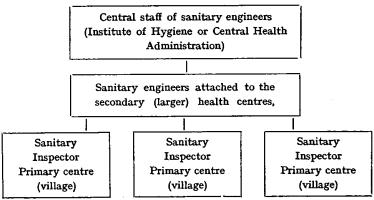
A. Population:

- Analysis of the movement of rural population in European countries;
- Discussion of trend of rural population to the cities.

B. Mortality and morbidity:

Comparative study of mortality and morbidity rates in rural and urban districts of Europe, restricted to the more important diseases and conditions—general death rates, infant death rates, tuberculosis, diphtheria, malaria, typhoid fever, etc.

¹ The Conference at Budapest considered that the service of sanitation in rural districts should be organised as follows:



- C. Number and distribution of doctors and of medical institutions in rural districts. Comparative study.
- D. Financial and economic conditions of rural life: A very brief general description, including data on transport, if possible, as well as on the co-operative movement, etc.
- 8. The Preparatory Committee also asked the Council to postpone the Conference until June 29th, 1931, in order to give more time for the preparatory work. Proposals regarding the presidency of the Conference will be submitted to the Council in May by the Preparatory Committee.

III. PROPOSAL OF THE HUNGARIAN GOVERNMENT ON INTERNATIONAL RECIPROCITY IN THE CARE OF THE SICK.

In August 1930, the Secretary-General received a letter from the Hungarian Government (document A.24.1930.III) expressing the hope that the Assembly would include the study of "International Reciprocity in the Care of the Sick" in the work of the League.

The Hungarian Government considered that a multilateral convention concerning treatment of foreigners abroad should be framed under the auspices of the League, or that the League should recommend to its Members the conclusion of bilateral agreements on the subject. It

suggested that a convention it had concluded with Bulgaria in 1929 might be taken as a model. The Assembly passed this proposal on to the Health Committee, which appointed a

sub-committee to report to the next session.

Chapter IV.

TECHNICAL COLLABORATION WITH VARIOUS GOVERNMENTS.

PROPOSALS OF THE NATIONAL GOVERNMENT OF THE REPUBLIC OF CHINA FOR COLLABORATION WITH THE LEAGUE IN HEALTH MATTERS.

These proposals described in last year's annual report may be summarised as follows:

- r. Collaboration of the League in obtaining the benefit of the experience of health services in other countries and in accelerating the building up of confidence in the re-organised port health administration. The steps necessary to be taken in the transfer and re-organisation of the present quarantine service to be studied by the Health Organisation in collaboration with the Transit Organisation.
- 2. Collaboration of the League in drawing up the plan for the central field health station of the Ministry of Health, to which the Ministry proposed to detail its technical staff; provision of facilities for the training abroad of certain officers selected for important posts in the station and the association of an expert from the Health Organisation during the early stages of its organisation and development.
- 3. Assistance in planning the first National and Chekiang hospitals (at Nanking and Hangchow respectively), facilities for their senior administrators to study hospital administration abroad, and advice on the development of the preventive work of these institutions.
- 4. Co-operation in medical education with the Health Organisation's Commission on that subject, which would prepare a memorandum containing the principles which emerge from a study of the reform of medical education in the principal countries; opportunities for the official in charge of post-graduate instruction to study abroad, and the delegation to China of a League expert to advise with the National Commission on Medical Education.
 - 5. Collaboration in the campaign against cholera and smallpox in the Shanghai area.

The Minister of Health expressed the hope that the services of the Health Organisation for the study of these problems, as well as in a general advisory capacity, might be available through the acceptance by the League of the Government of China's request for continued collaboration.

These proposals and the report of the Medical Director on his visit to China (document C.II8.M.38.1930.III) were approved by the Health Committee and subsequently by the Council.

ACTION TAKEN BY THE HEALTH ORGANISATION IN 1930.

I. Organisation of the Central Field Health Station.

As the Ministry of Health in the National Government of the Republic of China intends that this station shall carry on much the same work that is done by institutes and schools of hygiene in Europe, the Health Organisation asked the advice of the directors of schools of hygiene, in May 1930, concerning the organisation and programme of the station. A memorandum on these subjects was drawn up and forwarded to the Minister of Health of China.

According to this plan (document C.H.876) the central station will have the following duties:

- To study the medico-social problems, including medical relief, which most press for solution;

- (2) To establish and organise the various institutions necessary for the foregoing;
 (3) To supervise all field work in the application areas;
 (4) To organise a system of vital statistics;
 (5) To supervise the application of measures for the control of infectious diseases;
 (6) To be responsible for the training of medical and health officers, public health visitors, midwives, sanitary secretaries and other auxiliary health personnel;
 (7) To be the centre for popular health education in all its branches.

¹ In the plan prepared by the Ministry of Health with a view to the collaboration of the Health Organisation, certain areas were selected for the first application of medical and health measures.

The work of the Central Station would be organised as follows:

Laboratories (bacteriological, serological and clinical) and epidemic disease control; Parasitology, including malaria;

Sanitation

Medical relief and social medicine; Maternity and child hygiene;

School hygiene;

Industrial hygiene;

Epidemiology and vital statistics;

Health training and popular health education.

Recommendations were made as to the organisation and technical competence of the staff, the necessity for protecting it from political disturbances and the advisability of having an advisory council to deal with the most important questions.

The plan proposes that the first national hospital should be in close proximity to and affiliated

with the station.

The director of the station should be appointed a member of the League Commission on

Schools of Hygiene, to which Commission the annual report of the station will be communicated.

The Health Organisation secured the services of Dr. Berislav Borčič, Director of the State School of Hygiene at Zagreb, to collaborate with the Ministry of Health during the organisation

and development of the station.

Dr. P. Z. King, of Nanking, who was appointed Director of the station by the Ministry of Health, attended the March session of the Health Committee, as the representative of the Minister of Health (Dr. J. Heng Liu) who is a Vice-President of the new Committee. During that session, Dr. King announced that a large plot of land adjoining the central hospital had been purchased by the Government for the station. Clinics which have become part of the station had begun to work in the hospital and space in the buildings of the Ministry of Health was set aside for the

installation of temporary laboratories.

The central hospital, which will be a part of the central field health station, had been erected by means of an appropriation of \$200,000 (silver) and some two hundred patients were already receiving treatment. Some hundred outpatients attended the dispensary daily.

2. The Chekiang Hospital.

In 1930, the Government of the Province of Chekiang set aside the sum of \$200,000 (silver) for the establishment of this hospital.

3. Medical Education.

Dr. Knud Faber, of the University of Copenhagen, was requested by the Health Organisation to act as the expert co-operating with the Chinese National Commission on Medical Education. He spent two months in China, studying the system of education and the existing medical schools. His report is now being issued and will be referred to a Commission on Medical Education to be set up by the Health Committee.

4. The Campaign against Cholera and Smallpox in the Shanghai Area.

In the annual report for 1929, are described the steps taken by the Ministry of Health to co-ordinate the efforts of the various authorities in the Shanghai area in the campaign against

cholera and smallpox, always serious health problems.

In response to the invitation of the Minister of Health, the Director of the Singapore Bureau of the Health Organisation visited Shanghai in January 1930, and placed his services at the disposal of the authorities concerned. The Chief Statistician of the Health Organisation at Geneva also visited Shanghai early in the year to plan the epidemiological study of cholera which the health authorities had decided to undertake.

The campaign against cholera began on May 15th, and by September 1st more than 500,000 persons had been vaccinated by the authorities of the three municipalities (namely, the Chinese City of Greater Shanghai, the International Settlement and the French Concession) acting in

co-operation with the Ministry of Health.

A member of the Health Section from Geneva, detailed to organise the interchange of port health officers in the Far East also co-operated with the Ministry in organising this campaign.

In addition to mass vaccination against cholera, a number of other measures were applied, such as the organisation of a central office, provision of pure drinking-water by means of artesian wells, destruction of flies, protection of food supplies, laboratory investigations, arrangements for prompt notification and hospitalisation and popular education.

The number of cases of cholera which developed was unusually small—i.e., 127, and 16

The number of vaccinations against smallpox performed during the campaign was expected to reach 300,000 before the end of the winter, and more than 100,000 had been vaccinated before the end of the year.

5. Re-organisation of the Quarantine Services in Chinese Ports.

A preliminary survey of the quarantine arrangements in certain Chinese ports was made in November and December 1930 by the Mission from the Health Organisation. Dr. C. L. Park, of the Health Section, was sent to China in the summer of 1930 to complete the survey and to report to the Health Committee on the plan which the Ministry of Health had formulated to take over the quarantine services from the Ministry of Finance and to re-organise and modernise them.

In order to take account of the problems with which the new services would have to deal and to study the methods of quarantine used in the East, a study tour of Far-Eastern port health officers was organised by Dr. Park on behalf of the Health Organisation. A description of this

study tour will be found in Chapter V.

The information obtained by this study was taken into consideration in drawing up the report on the re-organisation of the port health services of China (document C.H.906). This report gives a short history of quarantine in China, a general review of the present services, and the plan of organisation and administration of the new services.

The following is a summary of the plan as found in the report:

The re-organised National Quarantine Service for China would comprise:

Central Administration;

Local organisations in individual ports.

I. Central Administration.

The Central Administration has already been created in the form of a temporary department

responsible directly to the Minister of Health.

This administration, which commenced to function on July 1st, 1930, under the direction of Dr. Wu-Lien-Teh, has its headquarters at Shanghai. It has assumed responsibility for the quarantine service of Shanghai, and will be responsible, in time, for the service provided by

the Nationalist Government throughout China.

Each local service will form part of the National Service, and will be responsible to the Central Administration. It shall apply the necessary measures of quarantine according to the directions received from the Central Organisation, and shall inform that organisation

immediately of:

Every quarantine emergency with which it is called upon to deal;

The measures taken in regard to vessels which are proceeding to other ports; (b)and regularly regarding,

The complete quarantine activities of the port.

Each local organisation would be responsible for:

Medical inspection under the regulations of vessels on arrival; Supervision of the health of crews of vessels while in port, so far as staff considerations will permit;

Sanitary inspection of vessels in port, including a determination of the extent (c) of the rat population;

Deratisation within the limits of the equipment provided; Arrangements for treatment of cases of ordinary infectious disease on vessels (e) in port,

Arrangements for treatment of cases of venereal disease among the crews of vessels; (g) The application of such measures contained in the regulations as the equipment of the port will permit in dealing with infected or suspected ships;

The application of measures against the exportation of disease when the port is (h)

infected;

Keeping the shore health authorities advised in regard to the presence of and action taken in respect of cases of ordinary infectious disease on ships in port;
(j) Carrying out, by arrangement with the Central Organisation, of public health

duties in conjunction with or on behalf of the shore health service.

In addition, the organisation of the larger ports will be responsible for such other duties as their equipment entails, including the control of quarantine establishments or emigration depots.

2. Local Organisation in Individual Ports.

Shanghai.

The following organisation, directed by Dr. Wu Lien Teh, was set up in order to take over the control of the service on July 1st, 1930:

- Administrative division, which has one medical assistant and the necessary secretarial staff;
 - (ii) Medical inspection division:

Two medical officers; Boarding-launch and crew; Sanitary station and staff.

The foreign medical officer was to resign on July 31st, 1930, and the services of the foreign sergeant who assisted in boarding vessels and controlled the sanitary station has been made available again to the Customs department, from which he had been loaned. (iii) Fumigation division:

One medical officer in charge;

Clerical staff;

Fumigating barge with tow-boat and crew and equipment for using carbon monoxide or sulphur.

The above personnel will require training, which it is proposed to commence with the return of the medical officer, who has been studying quarantine in Europe.

B. Proposals:

- (1) Administration: To be controlled by the Central Administration, which should have the necessary technical and secretarial assistance in order to administer the following services:
 - (2) Medical Inspection:
 - (a) A permanent service at Woosung with three or four medical officers, assistants and necessary launch facilities.

(b) If junk traffic is to be controlled, additional services at Jessfield and Lungwha.

(3) Quarantine station with:

Administrative and staff quarters;

Hospital;

Laboratory; Detention blocks; Bath and disinfection blocks;

Baggage stores; Power-house;

Laundry;

Mortuary, crematorium.

(4) Sanitary inspection and deratisation division:

Sanitary inspection of vessels; Examination for conditions of rat infestation; Deratisation service and issue of certificates;

Service for examination of rats and their fleas.

(5) Provision for treatment of cases of venereal disease in the mercantile marine by arrangement with shore authorities.

Newchwang.

The control of the service might be transferred at any time to the Central Organisation of the National Service. This would involve (a) the medical inspection service now under the control of the Customs department, and (b) the quarantine station now under the control of the North Manchurian Plague Prevention Service.

The double transfer would place the whole organisation under the one control and provide

the following service:

Medical inspection;

Quarantine station, where there are the following:

Bacteriological laboratory;

Hospital for general and infectious cases; Disinfection bath block;

Accommodation for contacts;

(3) Fumigation by sulphur in pots.

Tientsin.

There exists at present at Taku a quarantine station to serve Tientsin, which forms the base from which the quarantine officers carry out their work. The equipment of the port is not sufficient even to enable medical inspection to be carried out efficiently and, in consequence, the whole system needs re-organising. The local administration should form a part of and be responsible to the Central Quarantine Organisation, which should provide the medical and other staff presents. other staff necessary.

The local administration should control:

(a) Medical staff for inspection of vessels with adequate launch facilities.
 (b) Small bacteriological laboratory equipped to carry out routine diagnostic work.

This presupposes a trained bacteriologist on the staff.

(c) Emergency accommodation for ten patients until transfer to a larger hospital, can be carried out.
(d) Equipment for fumigation, when necessary, of empty vessels by means of sulphur.

In the event of the arrival of an infected vessel having many passengers whom it was required to keep under observation, the vessel could be sent on to Newchwang (if practicable) or ordered to Shanghai (a distance of 740 miles).

Tsingtao. *

Administration: The control of the quarantine administration should, at the proper time be transferred to the National Quarantine Service. The essential equipment would comprise:

(b) A small bateriological laboratory;
(c) Repair of quarantine station to provide for staff quarters, laboratory, hospital of ten beds and limited accommodation for close contacts up to one hundred beds;
(d) Necessary pots and sulphur for fumigation of vessels which correct to the staff quarters. Necessary pots and sulphur for fumigation of vessels which cannot be fumigated

at Shanghai.

Amoy and Swatow.

Administration: This should be transferred to the National Quarantine Service. essential organisation would comprise:

An efficient medical inspection service;

A laboratory in connection with the service or, in the case of Amoy, the university; Arrangements to supervise health of emigrants either at a quarantine station or (c) other premises;
(d) A fumigation service using sulphur dioxide.

Canton.

Administration: The officer administering the quarantine service should be directly responsible to the Central Administration of the National Quarantine Service. The organisation should provide for:

A regular medical inspection service and supervision of the health of crews of vessels in port;

(b) Laboratory facilities to assist in diagnosis and to control measures of detention;

Suitable provision in shore hospitals for isolation of infected persons and their immediate contacts;

(d) Suitable provision for treatment of cases of venereal disease among the crew of vessels in port;
(e) Fumigation by sulphur dioxide;

Sanitary inspection of vessels;

A permanent service for rat-catching and examination on the water-front.

Antung.

Administration: The administration should be transferred to the Central Organisation of the National Service. The organisation should provide for:

A regular medical inspection service;

(b) A quarantine establishment with laboratory, isolation hospital, disinfection plant and contact accommodation;

(c) Fumigation by sulphur dioxide.

Other Ports.

Other ports of call for foreign vessels should be provided with facilities for medical inspection. These would include Chinwangtao, Wei-hai-wei, Chefoo.

In the case of Chefoo, there should be provision for the examination of emigrants prior

to their departure.

The medical examinations may be provided through the agency of part-time medical officers, responsible to the Central Organisation.

In view of the fact that the port health regulations applied in the various Chinese ports were not altogether based on modern practice, the Ministry of Health promulgated new regulations, which came into force on July 1st, 1930. These are generally in accord with the provisions of the International Sanitary Convention of 1926.

The Commission entrusted by the Health Committee with the study of quarantine measures in China adopted the following resolution, which received the approval of the Health Committee

and the Council (document C.627.M.248.1930.III):

" The Commission,

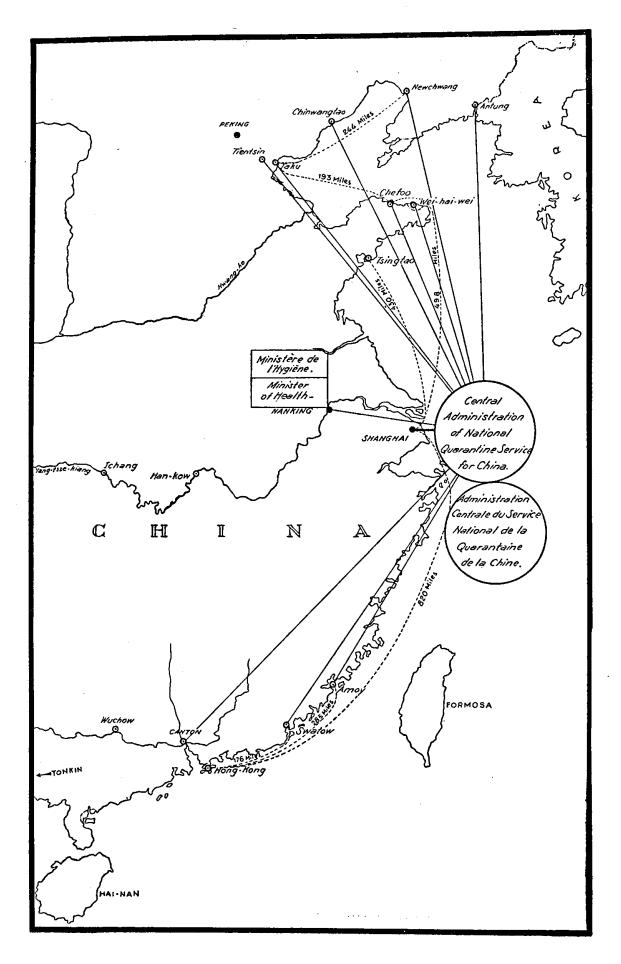
"Having considered the report prepared by Dr. Park on his survey of Chinese ports; "Having heard the views of the Commission for Quarantine Measures in China which has studied the proposals contained in the report for the re-organisation of the quarantine measures of China, and the regulations promulgated by the Minister of Health:

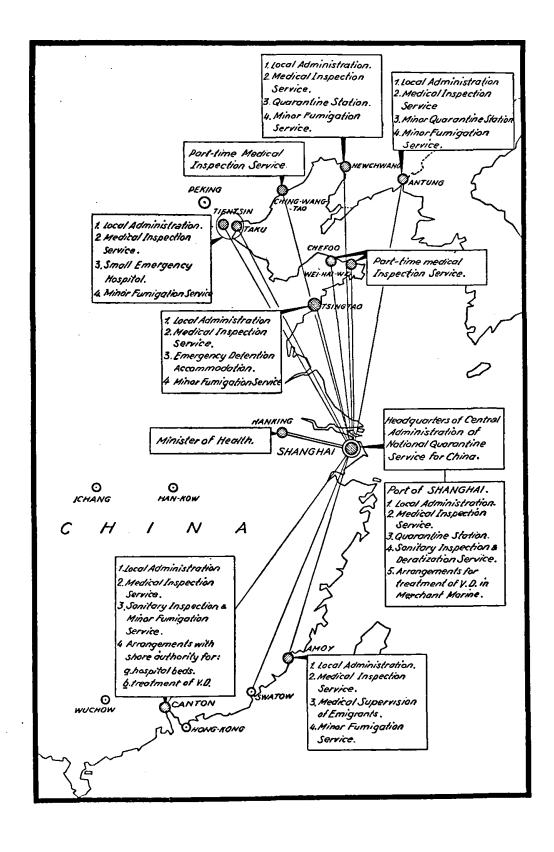
"Approves the scheme proposed, with any modifications which may be made, after conferring with the experts delegated by the Communications and Transit Organisation;

"And requests the Medical Director to submit the scheme to the Chinese National Government.

Accordingly, this Commission and the experts nominated by the Organisation for Transit and Communications met at Paris in October 1930, and approved the plan set out in Dr. Park's report.

Scheme for National Quarantine Service for China.





The new services have begun by taking over the quarantine arrangements at Shanghai, and will extend gradually to the other ports of China. For the time being, Shanghai will be the only port authorised to carry out deratisation of ships and to issue the international certificates of deratisation.

The Quarantine Service reserved the right in normal times to exempt from medical inspection and other quarantine requirements vessels on short and regular journeys from adjacent overseas ports, and bacteriological examinations for detection of cholera carriers are not to be a routine

procedure.

The Health Organisation has been informed that the port health work at Amoy has now been

organised by the new Quarantine Service.

In January 1931, the representative of the Irish Free State, Rapporteur, made the following statement to the Council:

"The Council will no doubt be gratified to learn that it has been found possible to conclude within a year this study, which was begun in December 1929. This result is due to the cordial support and co-operation of all the interests concerned—the Ministry of Health of the National Government of China, the health services of the principal maritime Powers, the Health Committee, the delegates of the Organisation for Communications and Transit and the President of the Sanitary Commission of the International Shipping Conference.

"The Health Committee will, in due course, have before it a further report from the Medical Director on the progress made in corruing into effect the health as agreeication plan admited

Director on the progress made in carrying into effect the health re-organisation plan adopted by the Chinese Government."

6. Individual Missions.

Dr. E. B. Young, Assistant Director of the Quarantine Hospital at Yunkow, studied the port health work at Hamburg and Bremenhaven in Germany, Rotterdam in the Netherlands, London and Liverpool in England, and Montreal, New York, Baltimore, New Orleans and San Francisco in North America. On his return to China he was appointed Assistant Director of the port health service of Shanghai.

Dr. Tsai-Hong, in charge of the Division of Quarantine and Epidemiology in the National Health Department of China, studied health practice in French, Spanish, German, English and North American ports, and spent some time in Yugoslavia, Hungary, France and England investigating the modern applications of epidemiology.

In addition to these officers, the following took part in the interchange of port health officers in the For Forth provinced and England.

in the Far East, previously mentioned.

Dr. Wu-Lien-Teh, Chief Technical Expert (Quarantine), Ministry of Health, Nanking; Dr. Eu-ya Ching, Medical Officer, Ministry of Health, Nanking. Dr. Chang, Medical Officer, Department of Health, Canton.

Dr. L. C. Yen, Chief of the Division of Medical Administration in the Central Health Department, studied public health administration, licensing of doctors and registration of midwives in Germany, Hungary and Yugoslavia. He also participated in the first half of the general interchange in France and studied the school of hygiene in London. His return via the United States of America gave him an opportunity to examine various health and medical institutions

in several of its larger cities.

Dr. P. Z. King visited Yugoslavia, Hungary, Czechoslovakia and Poland to study the organisation and work of the respective institutes of hygiene, which have somewhat similar functions to those of the central field health station at Nanking which he will direct. He also

visited various medical institutions in Paris and the London School of Hygiene.

Dr. Chen Wan Li, Health Commissioner of the Province of Chekiang, one of the areas selected by the Ministry of Health for the application of its new health programme, studied generally public health work as well as sanitary and medical institutions in Yugoslavia, Hungary, Austria, Czechoslovakia, Poland, Denmark, the Netherlands and England.

On the invitation of the President of the Republic of China the Medical Director left for China in December to discuss with the Government new administrative reforms which were forecast.

He returned in March 1931.

II. COLLABORATION WITH THE GREEK GOVERNMENT IN THE SANITARY RE-ORGANISATION OF GREECE.

During 1930, considerable progress was made in the application of the plan 1 adopted by the Greek Government for the sanitary re-organisation of the country.

¹ For information in regard to the elaboration of the plan and the collaboration requested of the Health Committee of the League of Nations, see annual report of the Health Organisation for 1929 (document A.9.1930.III).

In accordance with that plan, the Under-Secretariat of State for Health was attached to the Prime Minister's Office, and His Excellency Dr. Pappas was appointed Under-Secretary of State in the Ministry.

The post of Director-General of the Athens Centre was filled by the appointment of M. A. Pallis, who also acts as Secretary-General of the Under-Secretariat of State for Health, thus ensuring a permanent liaison between the present administrative sections of that Under-Secretariat, the detached sanitary services in other Ministries and the new technical

services created under the plan, including the school of hygiene.

Dr. F. Norman White, seconded from the Health Section of the League, was appointed Director of the Athens School of Hygiene and Professor of Hygiene and Preventive Medicine

by the Greek Government.

The plan provides that the Athens centre shall consist of six divisions:

Division of Hygiene and Preventive Medicine, including the school of hygiene; Division of Malariology; Division of Sanitary Engineering;

Division of Pharmacology and Bio-chemistry;

Division of Research;

Division of School Hygiene.

Under the plan, the Director of the School and the professors of malariology and sanitary engineering are required:

- (a) To serve as technical advisers to the Central Sanitary Administration on public health work and preventive measures carried out in the regions to which the new plan of organisation will apply (these regions will be utilised for the practical training of the students of the new school of hydroge): of hygiene);
 - (b) To report to the head of the Central Sanitary Administration.

Dr. Marshall C. Balfour, member of the International Health Division of the Rockefeller Foundation, was seconded by the Foundation to serve as the Director of the Division of Malariology and Mr. Daniel E. Wright was appointed Director of the Division of Sanitary Engineering. The Foundation supplied the credits for these two posts.

Professor Joachimoglou, of the University of Athens, was made Director of the Division of Pharmacology and Bio-chemistry, and Dr. Lampadarios, Director of the Division of School

Hygiene.

The Division of Research was entrusted to the Hellenic Pasteur Institute directed by Dr. Blanc.

Courses for the training of assistant health visitors have been given by the Hellenic Red Cross, so that a small staff is now available for work in the districts to which the plan will be applied. A small number of qualified public health nurses is also available for work in the health centres and other institutions which are to be organised in these districts in 1931.

The work of transferring the present prefectural health organisation to the new services began in the islands of Crete and Corfu, and is being extended to certain parts of Macedonia and to the

Prefecture of Yannina.

Dr. Julius Tandler, of Vienna, was appointed as an expert municipal health officer late in 1930 to draw up a plan of health services for the Athens Piræus area.

A special emergency organisation was set up by the Under-Secretary of State for Health for

the control of malaria in selected areas.

Dr. Pappas, representing the Greek Government, informed the Health Committee that a Malaria Council had been set up with a budget of twenty-four million drachmæ (equivalent to

about 1,632,000 Swiss francs) at its disposal.

A certain number of main centres and travelling units had been established, directed by doctors who had been given special training. In Epirus, for example, where there was a centre and five travelling units, 21,000 patients had been examined, 600,000 doses of quinine distributed, and 7,400 injections made. In fifty-one villages the necessary sanitary work had been carried out by means of labour and money provided by the villages themselves.

Dr. Pappas invited the Secretary of the Malaria Commission to visit Greece.

The Central Health Services intended to begin the campaign against tuberculosis during 1930 by means of anti-tuberculosis dispensaries and sanatoria.

Four new anti-rabies centres had been established.

Three units were travelling in Macedonia and Epirus in connection with the campaign against venereal diseases.

M. A. Pallis, who also attended this session of the Health Committee, presented a report describing the progress made in the application of the plan.

A law was passed in August 1929 for the creation of the Athens Centre of Hygiene, and the transfer to the Ministry of Health of certain health services now in other Ministries.

This law provides for the creation of the centre under the authority of the Ministry of Health, for placing the school of hygiene under the direction of the centre, and authorises the Government to engage three foreign specialists as technical advisers.

Candidates for the school of hygiene will be of two sorts: Officials already in the Government service and young medical graduates; the latter must be between 25 and 35 years of age, in possession of a recognised medical qualification, with two years of practical experience. They must also have a working knowledge of English, French or German.

The Government purchased a building in Athens for the school, which began work on March 16th, 1931. The number of candidates to be admitted for the first course leading to the diploma of public health has been fixed at twenty-four.

Marathon, Drama and four villages on the south coast of Corinth were selected for special

malaria study in 1930.

Mr. D. E. Wright has made reports on existing and proposed water-supplies and sewagedisposal projects for various towns and villages. He has designed latrines, septic tanks for schools and other public buildings, etc. Swampy areas have been suweyed wich a view to drainage, and some of this time has been devoted to the solution of sanitary problems in Athens, including a critical survey of the proposed system of sewerage.

PROGRAMME OF THE SCHOOL OF HYGIENE.

The programme of the school of hygiene, established as a result of the discussions between the director of the school and a sub-committee of the Commission on Education in Hygiene and Preventive Medicine, is given below:

Bacteriology. — Thirty-one hours lectures and seminars; ninety-three hours practical * laboratory work.

Malaria. — Fifteen lectures; forty-five hours laboratory work, one month field work after second trimester.

Other Protozoa. — Four lectures; twelve hours laboratory work.

Helminthology. — Six lectures; twelve hours laboratory work.

Entomology (other than mosquitoes). — Seven lectures; seventeen hours laboratory work.

Physiology. — Thirty hours lectures and seminars; eight hours laboratory work.

Meteorology. — Five hours.

Chemistry. — Twenty-one lectures and seminars; sixty hours laboratory work.

Statistics. — Fourteen lectures and seminars; twenty-eight hours practical work.

Epidemiology. — Fifty lectures and seminars; twelve half-days at infectious diseases hospital, plus two weeks at end of course.

Tuberculosis. — Seventeen lectures and seminars — fifteen afternoons' work in tuberculosis dispensary or hospital.

Venereal Diseases. — Twelve afternoons devoted to instructional work in venereal diseases hospital and clinic.

Public Health, including Administration and Legislation. — Ninety hours lectures and seminars; work in health centres and district work, thirty-six hours; school hygiene practical work, eighteen hours.

Sanitation and Sanitary Engineering. — Thirty-eight hours lectures and seminars; thirty-two hours' inspection and field work.

Eighteen hours are reserved for visits to additional places of special public health interest.

During the last three months of the course arrangements will be made for:

Work in tuberculosis dispensary (fifteen half-days); Detailed health and sanitary surveys of limited areas and discussion of survey (2)reports;

(3) Two weeks fever hospital work; and, Practical experience of health administration and practice in re-organised districts of Greece.

The course will extend over twenty-four weeks.

Visit of the Secretary of the Malaria Commission to Greece.

See Chapter VI under "Malaria Commission".

III. REQUEST OF THE BULGARIAN GOVERNMENT FOR THE CO-OPERATION OF THE HEALTH ORGANISATION IN THE CAMPAIGN AGAINST SYPHILIS IN CERTAIN AREAS OF BULGARIA.

In March 1930, the Health Committee recommended the acceptance of the Bulgarian authorities' proposal made in 1929 for the co-operation of the Health Organisation. The League Commissariat for the Settlement of Bulgarian Refugees had assumed responsibility for the expenses of the preliminary enquiry, the training of the necessary personnel and the carrying out of the campaign. The Health Committee invited its Commission of Experts on syphilis to provide

technical assistance including the placing of an expert at the disposal of the Bulgarian authorities.

Accordingly Professor Jessner, first Assistant Director of the Breslau University Clinic for Skin and Venereal Diseases, and Doctor Olsen of the Health Section visited Bulgaria in March and placed themselves at the disposal of the authorities. After visiting the Department of Burgas they conferred with the Health Administration and medical experts at Sofia.

Professor Jessner was delegated to act as adviser to the Bulgarian Government at its request, in the initial stages of the epidemiological enquiry and during the establishment of the treatment centres, while the administration of the campaign was entrusted to a Chief Medical Officer.

As a result of conferences between the authorities and Professor Jessner, the following scheme was adopted:

General Organisation.

1. An expert, at Burgas, to be entrusted with the supervision of the syphilis campaign in the department and to direct the Hospital Department for Venereal Diseases and the dispensaries in Burgas.

2. In the districts of the department, the district physicians to be entrusted with the supervision of the treatment, the search for fresh cases and the education of the public.

3. The physicians entrusted with local work in the "sanitary communes" and the "sanitary rayons" will also be required to treat the cases in neighbouring villages which are staffed only with feldschers.

4. In arrondissements, where the number of physicians is insufficient for the requirements of the villages staffed only with feldschers, the district physician is to be provided with an assistant

medical officer, who will perform the treatment.

5. In Burgas, two dispensaries for venereal diseases (one for men and the other for women) will be erected on the lines of a modified type of refugee house.

The Hospital at Burgas will be provided with an annex for detailed examination and treatment of venereal diseases; if necessary, new buildings will be erected to accommodate these cases. Thirty beds are to be provided.

6. In Vassiliko, a dispensary will be

6. In Vassiliko, a dispensary will be erected on the same lines as at Burgas. The arrondissement of Vassiliko is to be provided with two mobile brigades, consisting of physicians and feldschers.

Training of Staff.

Special courses in the treatment of syphilis will be organised for the physicians of the department. There will be several successive courses, so that all the physicians of the department may be admitted in a fairly short time.

Diagnosis.

The serological examinations will be carried out in the central laboratory belonging to the Anti-malaria Institute in Burgas.

The Kahn method will mainly be employed; in doubtful cases, it will be supplemented

In such cases, the departmental specialist is to be consulted; to this end he will travel to the different arrondissements at fixed intervals.

Treatment.

The method of treatment will depend upon local conditions and will be carried out after consultation with the departmental specialist, the remedies to be employed being neo-salvarsan, myo-salvarsan, spirocid and bismuth.

The treatment will be carried out in all cases where the diagnosis has given definite results, and only in these cases.

The mobile brigades working in the arrondissement of Vassiliko will, in the intervals of treatment, proceed to other villages not yet visited in order to carry out the examination of all their inhabitants. their inhabitants.

This scheme has been put into execution:

All the doctors have received special instruction and have been equipped with the apparatus and instruments required.

Dr. Schauloff, has been nominated as expert syphilologist.
 The assistant medical officers attached to the district physicians have been nominated.
 The two dispensaries at Burgas and the dispensary of Vassiliko are ready.
 The annex of the Hospital of Burgas, to be used for stationary treatment of venereal

diseases, is in course of construction.

One of the two mobile brigades proposed for the Vassiliko district is at work.

At the Health Committee's session in October 1930, Professor Jessner reported on the progress made at the time of his visit to Bulgaria in June and July; the serological department and the dispensaries had started work and the hospital ward at Burgas was nearing completion. The treatment was being given free, the physicians receiving payment from the local councils.

IV. CO-OPERATION WITH THE HEALTH ADMINISTRATIONS OF LATIN-AMERICAN COUNTRIES.

A. Request of the Government of Bolivia for Collaboration with the League in Health Matters.

The request of the Bolivian Government (annual report for 1929) was approved by the Council on August 31st, 1929, in the following terms :

"The Council,

"Invites the Health Committee to give, in accordance with the terms of the Bolivian Government's letter, its assistance in the preparation, as well as in the later development, of the plan for the re-organisation of the health service of Bolivia.

Doctor MacKenzie (of the Health Section) and Doctor Pascua (Spain) left in April 1930 for Bolivia to confer with the authorities in Bolivia on the plan of collaboration to be submitted to the Health Committee.

In accordance with the preliminary programme proposed by the Bolivian Department of Health, the survey was to take account of vaccination against smallpox, malaria, ankylostomiasis, child welfare and the organisation throughout the country of departmental health services.

The survey was carried out in accordance with the programme, despite the lack of communication

in certain districts and the disturbed state of the country at the time.

It included a number of districts representative of the different types of country including the capital city of La Paz, mining towns and rural districts on the high plateau, the mines themselves, towns in the foot-hills of the Andes and the town and district of Santa Cruz in the tropical part of the country.

The mission was accompanied throughout by the Bolivian Director-General of Public Health. The Government, the local officials and university and medical authorities afforded the mission every facility, and the Government defrayed all travelling expenses, including the use of aeroplanes

to cross the Andes.

After hearing an account of the survey from Dr. MacKenzie, the Health Committee at its sixteenth session adopted the following resolution:

" The Health Committee,

"Decides to place at the disposal of the Bolivian authorities the facilities of its system of liaison with health administrations, and requests its Bureau to proceed with the study of the programme of collaboration, in consultation with the Director-General of Health of Bolivia."

This resolution received the approval of the Council on January 19th, 1931, and the Bureau will meet the Director-General of Public Health of Bolivia in March 1931 to study the further programme.

B. INFANT MORTALITY (LIMA CONFERENCE).

On the invitation of the Peruvian Government and with the co-operation of the health authorities of that country, the Health Organisation convened a Conference of Health Experts on Child Welfare at Lima in July, in connection with the sixth Pan-American Congress on Child Welfare. The object of this Conference was to discuss the results of the enquiries into infant mortality carried out under the auspices of the Health Organisation in the Argentine, Brazil, Chile and Uruguay, in pursuance of the resolutions of the Montevideo Conference of 1927, held under the auspices of the League, to compare these results with those of the European investigations and to consider the organisation of similar enquiries in other South-American countries.

After the Lima Conference, a mission consisting of one of the European experts, Professor R. Debré, and a member of the League Health Section, visited Santiago, Buenos Aires, Montevideo, Rio de Janeiro and Sao Paulo to discuss with the experts of those countries the practical application of the conclusions of the Conference. In addition to the experts present at the Montevideo Conference the Lima Conference was attended by the Health Experts of Peru, Bolivia, Colombia,

Ecuador, Paraguay and Venezuela.

The comparison of the four reports on the enquiries with the European reports demonstrated the importance of the South-American enquiry and of the need for further extension. The European enquiry had revealed two important groups of factors: (I) still-births and infant mortality during the first days of life; (2) deaths occurring later due to diseases of the digestive system, acute infectious diseases and diseases of the respiratory system. As the causes of these two groups of mortality are not the same, different prophylactic measures are required. To prevent still-births and deaths during the first days of life, provision should be made for pre-natal, natal and post-natal hygiene and the social and legislative protection of pregnant and parturient women and of infants, especially premature and weakly infants, during the first days of life. For the prevention of diseases of the digestive system, acute infectious diseases and diseases of the

respiratory system, arrangements must be made for the supply of pure milk, for anti-syphilitic measures, and for the prophylaxis of infectious diseases among young children.

These two groups of factors were also revealed in the South-American reports as well as the differences in the mortality according to whether the district is urban or rural.

The following is a summary of the four reports:

In the Argentine (Professor Araoz Alfaro), the death rate in different districts varies considerably. While the average infant mortality for the Republic as a whole is at present approximately 110, it is 78 to 80 for the city of Buenos Aires, 90 for the province of Buenos Aires, and 120, 140, 170 and even 230 and 260 in certain provinces of the sub-tropical zone. In the city of Buenos Aires,

the death rate in the twelfth district, which is comparatively prosperous, is only 51 per thousand. Unfortunately, the enquiry into still-births had not yet proceeded far enough to be of much value. The number of deaths during the first month is very considerable, from 36 to 50 per cent due primarily to congenital diseases and diseases of the new-born; malformations, obstetrical traumatism, infection during the first few days. That is the first group of diseases, as defined by the European enquiry, which is the most difficult to combat. Turning to the diseases in the second group (digestive system and infectious diseases) it is found that they are the main causes of death in districts with an average or high death rate (25 to 41 per cent) while their importance is practically nil in districts with a low death rate (under 10 per cent). These are the diseases which can most easily be prevented by proper feeding and general infant hygiene-factors which, at the present time, constitute a fairly reliable index of the degree of civilisation of a country. The necessity for supervision is clearly shown by the fact that there are a large number of deaths among babies breast-fed by their mother or a wet-nurse. The need for special care is demonstrated by the example of Tucumán, where the large number of deaths due to affections of the digestive system has been attributed to the sub-tropical climate, whereas the real cause is bad hygiene. The tentative efforts at organisation made during the last few years have already reduced this number; moreover, the death rate is lower at Tucumán, where the climate is very hot, than at Azul, which has a cool

It had not yet been possible to determine the part played by hereditary syphilis, as the results of biological reactions and post-mortems are not available.

In Brazil (Dr. J. B. Barreto and Dr. E. Janssen de Mello), specific communicable diseases have caused more deaths in the towns than digestive affections; in rural districts, the position is reversed. Pre-natal, natal and post-natal causes appear to account for double the mortality in towns as compared with country districts. The Brazilian report shows the great importance of syphilis as regards premature births. The importance of syphilis almost equals that of the pre-natal, natal and post-natal causes, and this importance is even greater in country districts. than in the towns. Hereditary syphilis as a cause of death is of practically the same importance in towns and country districts.

The causes of pre-natal, natal and post-natal morbidity are particularly pronounced in the case of twins. Legitimacy or illegitimacy plays a very small part; what chiefly matters is the financial position of the family—whether it is well-to-do or poor. On the whole, the enquiry shows that diseases of the digestive system and of nutrition come first, communicable diseases—notwith-standing the relative importance of syphilis—taking the second place.

Among the cases of still-births, 12 per cent were premature births (24 per cent in the State of Rio). As regard still-births and the incidence of maternal traumatism, the figures for the rural

districts are four or five times as high as those for urban districts.

The Brazilian investigators mention the following curious fact. When breast-feeding by the mother is replaced during the first three months by artificial feeding or nursing, infant mortality declines as from that time, more especially in the case of mixed feeding. On the other hand, when the method of feeding is changed during the second three months, infant mortality chiefly declines in cases of artificial feeding.

In Chile (Professor Calvo McKenna), infant mortality is extremely high, and is very much the same all over the country. On the whole, digestive disturbances cause a larger number of deaths than infectious diseases. Of 468 deaths analysed, there were 45 cases of obstetrical traumatism, 29 premature births and 2 congenital malformations. This fact explains the high mortality during the first weeks. Out of these 468 deaths, there were 45 on the first day, 79 in the first week and 158 during the first month. All deaths during gestation, were due to syphilis. Syphilis and abnormal confinement are the two causes of still-births. Obstetrical traumatism and prematurity are the causes of death during the first month. Professor Calvo McKenna attributes to improper feeding the main responsibility for death after the first month; this question had, for the past year, been receiving the attention of the Government, and the establishment of a National Institute of Nutrition had been decided upon.

In Uruguay (Professor Morquio), there is a great difference in the figures for the capital (which is relatively of considerable size) and the country districts, the conditions in the latter being fairly uniform. Although it has only been possible to examine a limited number of cases, syphilis is recognised to be one of the chief causes of still-birth and congenital debility.

The total figures per thousand are:

21.6 Still-births. . Deaths during the first month 310 Deaths during the first year 100

Of these 100 deaths, diseases of the digestive and respiratory systems are each responsible or approximately one-third. It was emphasised that the most important factor of infant hygiene

was that the child should be nursed by its mother as long as possible, and it was urged that special attention should be paid to the question of pure milk and preventive hygiene as a whole, which should be based on a census of mothers and infants: this does not yet exist. More than 50 per cent of the babies who died received no medical attention. Only 16 per cent of the babies observed received medical attention. A maternal and infant welfare centre should be established, from which the greatest benefits may be expected in view of the success of the Casa del Niño of Montevideo.

The full report on these enquiries into infant mortality in South America was presented to the Health Committee during its sixteenth session by Professor Debré who also made a statement on the subject.

The Health Committee adopted the following resolution:

"The Health Committee,

"Having listened to an account by Professor Debré of the mission which he had carried out in Latin America on the occasion of the Conference of Latin-American Experts on Infant

Mortality (Lima, July 13th, 14th, and 15th, 1930):

"Takes note of the results obtained and will be pleased to place its technical services, as far as possible, at the disposal of those countries which may desire to use them in the pursuance of these studies."

The report has since been published in French and English (document C.H.908(1)) and communicated to the Health Administrations of Latin-American countries.

C. Serological Conference at Montevideo.

On the invitation of the Government of Uruguay, the Health Committee selected one of its members, Professor Jadassohn, to preside over the South-American Serological Conference convened in September 1930 by the Institute for the Prevention of Syphilis at Montevideo (document C.627.M.248.1930.III, page 82). Professor José Scoseria (President of the National Health Council of Uruguay) was Chairman of the organising committee for the Conference, and the technical secretariat work was entrusted to Dr. Moerch, of the Danish State Serum Institute

and Dr. Olsen of the Health Section, League of Nations Secretariat.

Thanks to the generosity of the Government of Uruguay, experts from the Argentine Republic, Brazil, Chile, Uruguay and Paraguay, as well as the authors of the serological methods which had given the best results at Laboratory Conferences convened by the Health Organisation in Europe, were invited to carry out at this Conference comparative studies on the value of the different methods employed. These studies were made in conformity with the principles on which previous Laboratory Conferences of this character had been based.

The results of the Montevideo Conference are described in detail in a report which will be

Syphilis

Controle

Cantagla

published shortly.

During the Conference, 966 samples of serum and 200 samples of cerebro-spinal fluid were examined, while twelve different methods of serological diagnosis were compared. The results are shown in the following table:

Method	Syphilis Percentage of positive reactions	Controls Percentage of positive reactions	Controls Number of positive reactions
Less than I per cent of non-specific	reactions.		
Rahn's "presumptive" test (carried out by Professor R. L. Kahn, Ann Arbor, Michigan, U.S.A.)	C	1.0	3
Kahn's "standard" test (carried out he Destand	69.3	0.7	2
Modified BW. 1 test (carried out by Dr. A. Sordelli	63.9	o	ó
Modified BW. 1, test (carried out by Dr. F. J. Wylor	55.9	0	0
Modified BW. 1 test (carried out by Dr. R. Scaltwitti	54.4	0	0
and Dr. J. Cassiniga, of Montevideo)	49.9	0	0
More than I per cent of non-specific	reactions.		
Modified BW. 1 test (carried out by Dr. T. F. Moreou			
Montevideo). Meinicke's (clarification) test (carried out by	64.7	13.9	42
Dr. E. Dussert-Jolland, Santiago de Chile) Modified BW. 1 test (carried out by Dr. J. Torraza	62.2	2.4	6
Modified BW. 1 test (carried out by Dr. A. do Agri-	55.5	2.6	8
Sero-hæmo-flocculation test (carried out by D.	54.9	4.3	13
Modified BW. 1 test (carried out by Dr. P. Dunne	52.4	4.5	6
Montevideo)	45.4	5.6	17
·			

The following resolution was adopted:

" The Conference,

"Congratulates the Montevideo Institute for the Prevention of Syphilis on its action in convening in South America a Laboratory Conference on the serodiagnosis of syphilis, organised on the same principles as the Conferences of this nature previously convened by the League of Nations Health Organisation, and

Nations Health Organisation, and

"Recognising the great value of the results of this Conference, due to the fact that the serologists of the different South-American countries were enabled, by employing as experimental material, the same sera and cerebro-spinal fluids, to compare the efficacy of their methods in relation to those found to be best at the previous Laboratory Conference held at Copenhagen:

"Recommends that the Health Organisation of the League of Nations should invite the Montevideo Institute for the Prevention of Symbilis to continue the work of the Conference

"Recommends that the Health Organisation of the League of Nations should invite the Montevideo Institute for the Prevention of Syphilis to continue the work of the Conference on the serodiagnosis of syphilis and should co-ordinate, in collaboration with the Danish State Serum Institute—which acts as the central laboratory of the Health Organisation—and with the League of Nations Secretariat, comparative studies on this subject by the various South-American serological laboratories".

This resolution, together with the report on the work of this first Laboratory Conference in South America, will be communicated to the Health Committee at its seventeenth session in May 1931.

Chapter V.

SYSTEM OF LIAISON WITH THE HEALTH ADMINISTRATIONS OF THE VARIOUS GOVERNMENTS.

A.

r. COLLECTIVE STUDY-TOURS.

Three collective study-tours were organised in 1930; the first in France, the second in Roumania and Yugoslavia, and the third in the Far East.

(a) GENERAL INTERCHANGE IN FRANCE.

The French authorities appointed a Committee, presided over by Professor Léon Bernard member of the Health Committee, to prepare information for the participants and to arrange the programme of visits.

A very complete handbook on health and medical conditions in France was published (Public

Health in France, in two volumes, with a set of maps).

The interchange opened on May 26th in Paris and terminated with a final conference at Geneva on July 7th. There were sixteen participants from twelve countries.¹ The programme began with a study of the work of the Office national d'Hygiène sociale in Paris and of other national and central organisations and institutions, such as the National Anti-Tuberculosis Committee (Comité national de défense contre la tuberculose) and its school for public health nurses, tuberculosis dispensaries, hospitals and sanatoria in or near Paris, and inspection of the measures for the protection of the food supply.

The various forms of departmental health organisation were studied in the departments of Seine-et-Marne, Aisne, Seine-Inférieure and Hérault, while the participants were given an opportunity of seeing the development of municipal hygiene in Paris, Lyons, Nancy, Hayre,

Rouen, Suresnes and a few of the smaller French towns.

In addition to visits to the Medical Faculty of the University of Paris, the participants inspected a provincial medical school at Clermont-Ferrand, and the institutes of hygiene at Nancy and Lyons.

In the department du Nord the work of reconstruction was inspected, with particular reference to housing, sanitation, industrial hygiene and the organisation of voluntary and official health agencies.

The group was received by the Minister of Health, by the City of Paris, by the Medical Faculty of the University of Paris, by prefects of departments, mayors of towns, public health officers, directors of private health agencies and the medical profession.

The French Government secured very substantial reductions and special arrangements for the comfort of participants from all the railroad companies.

Several most interesting reports have been received from the participants.

(b) THE BALKAN INTERCHANGE.

This interchange was restricted to Roumania and Yugoslavia, the period from June 1st to June 16th being spent in the former, and from June 16th to July 6th in the latter country. There were three participants each from Bulgaria, Greece, Roumania and Yugoslavia, and two from Czechoslovakia.

The interchange began at Timisoara and the visit to Roumania was concluded by a conference at Baile Herculane. During this period, visits were paid to Arad, Cluj, Sovata, Borsec, Jassy, Galatz, Sulina, Tulcea, Constanza, Techirghiol, Calimanesti, Govora, Craiova and Bucharest, as well as a number of other towns *en route*.

¹ Bulgaria, China, Czechoslovakia, Germany, Great Britain, Greece, Italy, Netherlands, Poland, Roumania, Spain and Yugoslavia.

The participants studied in detail the public health and medical organisation in Roumania, including sanatoria, hospitals, dispensaries, institutes of hygiene, welfare institutions, wateringplaces and health centres.

The Roumanian Government made generous arrangements for railroad and motor transport, and all the authorities and agencies extended most generous hospitality.

During the second half of this interchange in Yugoslavia, visits were paid to Novi-Sad, Belgrade, Ljubljana, Zagreb, Split, Trogir, Dubrovnik, Sarajevo, Nish, Skoplje and Prishtina. In each centre, all the work of the Institute of Hygiene was studied.

For the benefit of the participants, a special volume on the public health services in Yugoslavia was prepared by Dr. Ivanić and Dr. Konstantinović, of the Central Institute of Hygiene at Zagreb,

(c) THE FAR-EAST INTERCHANGE.

On the approval of the Health Committee, an interchange of port health officers was arranged in 1930. Nine such officers from six health administrations participated 1 and the interchange began at Singapore on June 27th, terminating at Tokio on August 19th, 1930. Dr. C. L. Park, of the Health Section, accompanied the group.

The port health officer was in each case asked to collect beforehand the data on the following points: Administration of quarantine services, arrangements of the ports, rat destruction measures, laboratory services, vessels entering the port and cargoes, medical inspection of vessels, health of crew, special measures against smallpox, cholera, plague, food inspection, quarantine stations, measures against the introduction of disease by air services, etc.

The following ports were visited: Singapore, Batavia, Saigon, Hong-Kong, Canton, Manila, Shanghai, Kobe, Yokohama, and Tokio. The final conference was held at Tokio, where the group discussed the following subjects:

Administration of quarantine services in Far-Eastern countries; The International Sanitary Convention and methods of preventing importation and exportation of cholera, plague, smallpox, etc.;

Methods of fumigation;

Value of quarantine stations in the Far East;

Methods of supervising: (a) pilgrims, (b) emigrants;

Methods of preventing and treating disease in the mercantile marine and among workers

A further report on the results of these discussions will be presented to the Health Committee.

The authorities had collected much valuable information and arranged the visits in such a way that the group, in the limited time at their disposal, were able to study all the quarantine arrangements as well as other matters of outstanding public health interest.

The final conference was held at the official residence of the Minister for Home Affairs and was opened by the Director of the Central Sanitary Bureau.

This was the third collective study tour for port health officers arranged by the Health Organisation of the League; the first was limited to Mediterranean ports (in 1925), the second to Baltic and North Sea Ports (in 1926).

2. PROGRAMME OF INTERCHANGES IN 1931.

An interchange for study of the milk supply will be organised in 1931; the programme will be divided into two stages.

During the first stage, a small number of experts in subjects relating to the protection of the milk supply (bacteriologists, physicians, veterinarians, chemists, etc.) will visit a few centres in the United States of America and Canada. On their return to Europe, these will act as Rapporteurs to a larger group, which will consist of medical officers and administrators responsible for the protection of the milk supply in the cities in which they are responsible for the health services.

The European or second stage of the interchange will begin in Denmark and visit a few centres in England, the Netherlands, West Germany and Switzerland.

¹ From China, French Indo-China, Japan, Dutch East Indies, Siam and Straits Settlements. The port health officer of the Philippine Islands was unable to attend owing to an outbreak of cholera in those islands.

B.

I. INDIVIDUAL MISSIONS.

A certain number of individual missions were provided for health officers from Bolivia, China and Greece, appointed to important posts in the health services. These are described in Chapter IV of this report.

Opportunities for studies abroad were also provided for medical officers who were responsible for work of special international interest within the programme of the Health Organisation—infant mortality enquiries along the lines laid down by the experts convened by the Health Organisation (in Czechoslovakia, Roumania, Spain, Yugoslavia), rural hygiene, the teaching of hygiene, the serodiagnosis of syphilis and anti-malarial work.

A few "missions" were also provided for medical officers nominated by their health administrations, to enable them to profit by the experience of other countries in particular branches

of public health.

2. INDIVIDUAL MISSIONS IN 1931.

In accordance with the decisions of the Council and the resolutions of the Health Committee a number of individual missions will be reserved for health officers of Governments with which the League is co-operating in health matters.

The International School for Advanced Health Studies, to be established in Paris under the auspices of the League by the French Government, will greatly facilitate the studies of these

The Health Organisation will continue to offer a few scholarships to malariologists nominated by their health administrations for the malaria courses organised under its auspices at Hamburg, London, Paris and Rome (see under "Work of the Malaria Commission", in Chapter V).

Chapter VI.

ORGANISATION AND WORK OF THE COMMISSIONS.

I. DECISIONS OF THE HEALTH COMMITTEE ON THE ORGANISATION AND WORK OF ITS COMMISSIONS.

During its sixteenth session, the Committee reviewed the position of its various Commissions. The Governments had come to look upon the work of some commissions, such as Standardisation and the Malaria Commissions, as practically permanent. Other commissions, such

as that on leprosy, set up only a short time ago, were only beginning their real work.

Other studies undertaken in the past were necessarily of a temporary character, such as the study of fumigation of ships, which should be completed during the life of the present Health

Attention was drawn to cases where a Government asked the Health Committee for advice on the organisation of public health services, and on technical schemes in matters of public health. The advice given by the Committee should constitute a declaration of the present state of practice and knowledge in the various fields of public health.

Such declarations were needed in regard to maternal and infant welfare, protection of the child of pre-school and school age and the adolescent, the venereal diseases, cancer, rheumatism and heart diseases, rural health centres and the rôle of local authorities in the administration

of medical assistance.

The Health Committee thought that such reports containing advice could be produced within six to twelve months if their preparation were entrusted to small drafting committees, consisting of a chairman and three or four experts with special knowledge. These reports would be submitted to the Health Committee.

Such a procedure would simplify considerably the work of such a Commission as the Joint Commission on Health Insurance, by providing it with declarations of modern practice in respect of the subjects which it was studying.

The Health Committee approved the recommendation of the directors of schools of hygiene, who met in Paris and Dresden, that the Health Organisation should convene periodically the directors of such schools to permit of a continuous interchange of views.

In the East, the problem of nutrition is of fundamental importance to health and an interchange of the problem of the problem of the problem of the problem.

investigation on rice should be made in the near future.

The Health Committee set up a number of commissions, reporting committees and groups of experts, including:

I. Permanent Standards Commission:

Chairman: Dr. Th. MADSEN.

2. Opium Commission:

Chairman: Dr. CARRIÈRE.

3. Malaria Commission:

Chairman: Professor Vittorio Ascoli. -

4. Leprosy Commission:

Chairman: Professor Carlos Chagas.

5. Study of Whooping-cough, Diphtheria and Scarlet Fever:

Entrusted to investigators, with the option of consulting other experts, after reference to the Bureau.

Investigators:

Whooping-cough: Professor J. Bordet.

Diphtheria: Scarlet Fever:

Professor GORTER. Professor R. Debré.

6. Commission on Fumigation of Ships:

Chairman: Surgeon-General H. S. CUMMING.

Since deceased.

7. Rapporteur on Questions relating to Smallpox:

Professor Ricardo JORGE.

8. Periodical Conferences of Directors of Schools of Hygiene:

Convened under the chairmanship of Professor FITZGERALD and in his absence under that of Professor Léon BERNARD for meetings limited to European Schools.

Reporting Committee for Maternal Welfare and Hygiene of Infants and Children of preschool age:

Chairman: Dame Janet CAMPBELL.

10. Reporting Committee for Hygiene of Children of School Age and of Adolescence: Programme of study to be prepared by the Medical Director, in collaboration with Professor Tandler, of Vienna.

Reporting Committee on Questions relating to the Control of Tuberculosis:

Chairman: Professor Léon BERNARD.

Reporting Committee on Questions relating to Venereal Diseases:

Chairman: Professor JADASSOHN.

13. Reporting Committees on Cancer, Rheumatism and Heart Diseases:

Chairman: Sir George Buchanan, who will draw up a list of collaborators, after consultation with the Bureau.

14. Reporting Committee for the Study of Health Centres:

Chairman: Dr. Сноргко.

Reporting Committee for the Study of the Rôle of Local Authorities in the Administration of Medical Care:

Chairman: M. Velghe, who will draw up a programme of study and, after consultation with the Bureau, suggest a list of collaborators.

16. Joint Commission on Public Health Insurance:

Chairman: Sir George Newman.

To retain its present membership including Sub-Commissions.

17. Study of Medical Education:

Entrusted to the President who, with the Medical Director, will consult various experts on the subject of establishing a plan of study and presenting a report at the next session of the Health Committee, on the basis of the preliminary enquiries.

18. Commission of Experts for the co-ordination of Studies on Human Trypanosomiasis:

Chairman: Sir Andrew Balfour. 1

19. Studies on the Question of Nutrition:

The Medical Director will present a memorandum at the next session of the Committee. In the meantime, a special study of the Rice problem in the Far East will be undertaken, in consultation with the Eastern Bureau. Proposals regarding the appointment of a small study group will be presented at the next session.

20. Expert Group for the Study of Physical Education:

Set up under the chairmanship of Professor Ottolenghi, who will make suggestions as to the membership.

21. Sub-Commission for the Study of the Budget and Annual Report of the Eastern Bureau: Chairman: Dr. J. JITTA.

In regard to the President's proposal to call together the Medical Directors of the health services of Colonial Ministries, the Committee adopted the following resolution:

"The Health Committee,

"Bearing in mind the results obtained through the collaboration, under its auspices, of

the heads of certain colonial medical services in the study of sleeping-sickness;
"Desiring to place the facilities of the Health Organisation of the League of Nations at the disposal of colonial medical services in order to ensure continuity in the studies regarding methods of combating those diseases particularly prevalent in colonial territories, as well as to improve the welfare of native populations:

¹ Since deceased.

"Decides to take the necessary steps to ascertain whether it might be expedient to hold a meeting, under the chairmanship of the President of the Health Committee, of Medical Directors of the Colonial Ministries of countries having possessions in Africa, as well as of the Public Health Administrations of other African countries, with a view to ascertaining in what way the Health Organisation might be of service to them in securing continuity of study in the way the Health Organisation might be of service to them in securing continuity of study in the questions referred to above, and to presenting, if necessary, proposals to the Health Committee regarding the particular problems the consideration of which would, in their opinion, be expedient."

II. MALARIA COMMISSION.

The Commission met at Algiers, with Dr. Lutrario in the chair, on May 20th and 21st, 1930 in connection with the Second International Congress on Malariology. Twenty-five members and experts took part in the discussions on the questions appearing on the agenda, viz.:

> Report on the study tour to India; Secondary alkaloids and quinetums (3) Malaria in deltas (Danube, Ebro, Po).

After study of the Report on India, with the collaboration of General I. D. Graham, I.M.S., Public Health Commissioner with the Government of India, and Colonel S. R. Christophers, C.I.E., I.M.S., Director of the Kasauli Central Research Institute, and of the evidence in regard to secondary alkaloids and quinetums and problems of malaria in deltas, the Commission passed the following resolutions:

" 1. The Malaria Commission,

"Having taken note of the report on the study tour to India between August 23rd and December 28th, 1929, of certain of its members:

"Approves the report in question and decides to submit it to the Health Committee at

its next meeting.

"2. The Malaria Commission,

"Having examined recent reports on the properties of the secondary alkaloids of quinine

and quinetums, after discussion of the data collected:

"Is of opinion that the experimental evidence collected up to the present is of real practical interest, and is already sufficiently extensive and advanced to make it possible to draw conclusions of value in the struggle against malaria; and consequently,

"Proposes that a first report should be published for the use of any health administrations

interested; and,

"Further, bearing in mind the fact that certain questions relating to the long-range action, preparation and control of quinetums are not sufficiently elucidated;

"Draws attention to the value of continued research in accordance with the programme at the same time inviting the co-operation of the State already approved at previous meetings, at the same time inviting the co-operation of the State quinine factory of the Kingdom of Italy;

"Recommends the collection by the Secretariat of complete documentary material with

- regard to plasmoquine stovarsol and quiniostovarsol; and "Expresses the wish to be supplied, through the direct collaboration of specialist experts, with exact agricultural, technical and economic data to enable it to come to a practical conclusion as to the consumption of the cinchona alkaloids to be recommended to the public.
 - "3. The Malaria Commission,

"Expresses its desire for a special meeting to be devoted to the study and discussion of the problems connected with the deltas of the Danube, Ebro and Po, and for the continuance of these studies, taking into account the work done in the deltas of the big rivers in general."

The report of the President of the Malaria Commission (document C.H.901) of October 1930 gives a complete summary of the documentary material examined by the members of the Commission and of the discussions which took place.

The members of the Commission belonging to the Health Committee, with whom was associated Professor Schüffner, met on September 30th, 1930, with Dr. Lutrario in the chair, in order to examine the work of the Commission during its first term of office from 1923 to 1930, and to discuss the work to be done during the new term.

The Commission's responsibilities have increased in relation to all malarial countries, and in particular in relation to those who have applied to the League of Nations for the organisation

of their public health services.

The inquiries and researches involved by the numerous problems raised by the Commission, the important and far-reaching question of the extension of the treatment of sick persons in relation to the extension of the disease and the present position regarding the available supplies of quinine, the experiments made to ascertain the efficacy of the secondary alkaloids and alkaloid mixtures and other new drugs, call for increasing collaboration of the experts in the various malarial countries. The Commission has accordingly co-opted as members a certain number of experts whose extensive knowledge and co-ordinated research is calculated to promote the solution of the various problems connected with malaria.

The Commission is composed of seven members belonging to the Health Committee and forty-eight expert and corresponding members. In order to facilitate the execution of the programme of studies, it has appointed a Sub-Committee of its members with the task of examining reports received. This Sub-Committee is entitled to split itself up into further sub-committees of specialists for handling different problems of a special character. The members of these sub-committees will be asked to act as Rapporteurs and to draft the final reports, particularly in the case of inquiries into international problems.

The Commission further took decisions on:

The drafting of a report for the use of health administrations regarding the problem of quinetum and the alkaloids, after taking the opinion of chemical, pharmacological and therapeutical experts on the preparation, standardisation and methods of control of these products;

The preparation of the work with a view to a possible international conference on quinine;

The collection of information in regard to the agricultural and economic side of the same

auestion.

MALARIA COURSES.

As the campaign against malaria is to some extent hampered by the lack of doctors who have specialised in the epidemiology of malaria and the methods of contending against this disease, the Commission suggested to the Health Committee in 1925 to establish courses as a partial remedy for this shortage. The proposal of the Commission was accepted, and, at the end of its session in November 1925, the Health Committee approached Professors Balfour, Brumpt and Nocht, the directors of the saveral institutions dealing with this problem in London. Paris and Nocht, the directors of the several institutions dealing with this problem in London, Paris and Nocht, the directors of the several institutions dealing with this problem in London, ratis and Hamburg, with the request that they should draw up programmes of courses which they would be prepared to give in their respective institutions. Provision was also made for periods of field work in certain countries exceptionally well fitted for the study of malaria problems (Spain, Italy and Yugoslavia). In 1926, courses were held in London, Paris and Hamburg. The number of participants showed the interest taken in the courses, which were repeated in successive ways. In 1928, the Sough Superiors di Malariologie of Rome agreed to organise successive years. In 1928, the Scuola Superiore di Malariologia of Rome agreed to organise a course on similar lines to those given in the three institutions referred to.

In 1930, there were seven participants in the Hamburg course, three of whom were in receipt

of scholarships from the Health Organisation.

Twenty-three persons took part in the Paris course, ten of whom were in receipt of scholarships

from the Health Organisation.

The following table gives particulars of the number of persons taking part in the courses and in the field work since 1926:

Number of participants. (Malaria Courses.)

		(Maiaria Course				
	1926	1927	1928	1929	1930	
London Paris Hamburg Rome	7 14 3 (Rome did no until 1	40 23 et collaborate 1928.)	 37 14 46	IO I3 6 7 (No entries were made through us; and we have not enquired as to the numbers attending the theoretical course in Rome.)		
		(Field work.)				
	1926 1	1927	1928	1929	1930	
Spain Italy Yugoslavia	6 20 10	12 18 10	11 18 8	5 20 15	12 19 5	

A special scholarship was given to Dr. S. N. Sur, Assistant Director for Malaria in the Public Health Service of Bengal, to enable him to study various malaria problems in Spain from June 15th to July 8th, and in the Netherlands from July 9th to 31st.

COLLABORATION WITH BULGARIA.

Professor Swellengrebel, a member of the Commission, undertook a fourth study tour to the districts occupied by the refugees, having agreed at the request of the Health Committee to collaborate in the anti-malaria organisation in these districts.

In the conclusions of his fourth report (document C.H.899) he insists on the fact that the struggle against malaria should not be treated as an isolated matter, but should be developed on parallel lines to the other services of health reorganisation. The Bulgarian Finance Minister undertook to do everything in his power to maintain the general scheme of anti-malaria action, when the anti-malaria service passed on April 1st, 1931, from the hands of the Refugee Commissariat to the Bulgarian Government.

¹ In 1926, some of those attending also did field work in Corsica.

COLLABORATION WITH THE GREEK GOVERNMENT.

Following on the invitation addressed to the Health Committee by the Greek Under-Secretary of State for Public Health, the Secretary of the Malaria Commission proceeded to Greece to study the new anti-malaria organisation in that country. Particulars of this journey are contained in document C.H./Malaria/154.

The extent and complexity of the malaria problem in Greece justify to the full the efforts made by the Government, as is proved by the investigations made during the first year of the new anti-malaria organisation's activity. Sixty doctors and 180 assistants are in charge of the anti-malaria campaign, which affects an agricultural population of 4,220,763 inhabitants. The

Government, in the course of the year, distributed 3,994 kilos of quinine.

The operation of the new anti-malaria stations and the attendance at them showed from the first how valuable they are. The difficulties encountered in the struggle against malaria will undoubtedly be solved, thanks to the general organisation of the health services as the latter The effective co-operation of the Malariology and Technical Sanitation Departments of the School of Hygiene in the specific campaign against malaria is already assured. A technical Committee, combining the instructional capacity and experience of the school on the one hand. and the knowledge of the country which the malaria inspectors possess on the other, might make possible a uniform programme of work and determine the details of the campaign on the basis of the study of the disease and of the local epidemiological factors.

COLLABORATION WITH THE SIAMESE GOVERNMENT.

The Siamese Government having in November 1930 put in a request through the Director of the Singapore Bureau for the co-operation of Dr. Anigstein, a member of the Commission, as technical adviser on questions connected with malaria, the President of the Commission authorised his appointment. The Health Organisation has therefore given a favourable reply to the Siamese Government's request, and has agreed in advance to any such future collaboration of the Malaria Commission as the Siamese Government may subsquently request as a result of Dr. Anigstein's recommendations.

Dr. Anigstein began work on January 15th, 1931.

DOCUMENTS RECEIVED IN 1930.

The Secretariat of the Health Organisation keeps in touch with the institutions and experts who have undertaken to study the problems submitted by the Malaria Commission. The Kuala Lumpur Institute forwarded to the Malaria Commission:

(1) A work by Dr. Richard Green on "Observations on Some Factors influencing the Infectivity of Malarial Gamete-Carriers in Malaya to Anopheles Maculatus";
(2) Two memoranda by Dr. C. Russell Amies on "The Effect of Quinine on the Production of Gametocytes in Sub-Tertian Malaria" and on "The Use of Plasmoquine in Sub-Tertian Malaria" Tertian Malaria'

Three memoranda by Dr. R. Green on "The Treatment of Carriers of Crescents with Composite Plasmoquine", on "The Treatment of Quartan Fever with Plasmoquine", and on "The Treatment with Dimeplasmin" have also been received.

The following reports have been received and roneved or printed in the course of the year:

- "The Cinchona Alkaloids in the Treatment of Benign Tertian Malaria", by Major W. BIRD, R.A.M.C., Kasauli (document C.H./Malaria/140);
- "Summary of Experiments on the Value of the Different Cinchona Alkaloids in the Treatment of Malaria", by Major J. A. Sinton, I.M.S., Kasauli (document C.H./Malaria/144):
- "The Therapeutic Value of Mixtures of Plasmoquine and Quinine", by I. J. KLIGLER and G. MER (document C.H./Malaria/141);
- "Résumé des recherches sur le traitement du paludisme des oiseaux par les alcaloïdes du quinquina" ("Summary of Researches into the Treatment of Malaria in Birds by the Cinchona Alkaloids"), by E. SERGENT (document C.H./Malaria/146);
- "Le stovarsol et le quiniostovarsol dans le traitement du paludisme" ("Stovarsol and Quiniostovarsol in the Treatment of Malaria"), a critique by M. Peltier (document C.H./ Malaria/150);
- "Les quinetums et les alcaloïdes secondaires dans le traitement du paludisme" ("Quinetums and Secondary Alkaloids in the Treatment of Malaria"), by M. CIUCA (document C.H./Malaria/

"Immunité dans le paludisme expérimental" ("Immunity in Experimental Malaria"), by M. Ciuca, L. Baillif and M. Vieru (document C.H./Malaria/145);

"Long-range Dispersion of Anopheles during the Pre-hibernating Period", by I. J. KLIGLER

and G. MER (document C.H./Malaria/141);

"L'état du paludisme dans le delta du Danube" ("Position in regard to Malaria in the Danube Delta"), by Professor J. Cantacuzène and G. Zotta (document C.H./Malaria/143);

"Housing and Malaria", a critical summary of the literature dealing with the subject by Lt.-Col. CLAYTON-LANE (will appear shortly).

QUININE.

The Secretariat addressed a circular letter (No. 19.1930.III) to all public health administrations in malarial countries, whether possessing cinchona plantations or not, asking whether they considered it desirable to summon a meeting to discuss problems relating to quinine and whether they would be prepared to collect the necessary information and documentary material for such a conference with regard to:

(1) The present extension of malaria in their particular country (with, if possible, figures

- for the last 4 or 5 years);
 (2) The total number of malarial cases treated annually (in dispensaries, out-patient departments, in hospitals, by persons distributing quinine, etc.);
 (3) The total quantity of quinine or secondary alkaloids of cinchona (cinchonine, cinchonidine, quindine, or alkaloid mixtures such as quinetum, chineto, cinchona febrifuge, etc.) imported into the country, with particulars of:
 - The quantity imported directly by the State; (b) The quantity purchased on the market and utilised as free quinine (with particulars covering the last ten years);
- The total quantity of quinine or sencondary alkaloids distributed annually by public health administrations, with particulars of:

 - Quinine sold at a low price through the intermediary of the State;
- (5) The actual annual quantity of quinine needed by the Government to meet the national requirements;

(6) Legislation in regard to quinine.

As soon as the necessary material has been collected, it will be examined by the Quinine Sub-Commission, which will appoint Rapporteurs with a view to the general report which is to serve as the basis of discussion.

III. PERMANENT COMMISSION ON THE STANDARDISATION OF SERA, SEROLOGICAL REACTIONS AND BIOLOGICAL PRODUCTS.

1. The work of the Commission since 1921 (documents C.H.734 and C.H.832) has resulted in the international standardisation of the following products:

Sera and Bacterial Products:

Anti-diphtheritic serum; Anti-tetanic serum; Anti-dysenteric serum.

Pharmacological Products:

Insulin, digitalis, ouabain (strophanthus);

Pituitary (posterior lobe);

Arsenobenzenes:

Dioxydiamino-arsenobenzene dihydrochloride (syn.: salvarsan, arsphenamine, arseno-

benzol, etc.);
Dioxydiamino-arsenobenzene sulphoxylate of sodium (syn.: neosalvarsan, neoarsphenamine, novarsenobenzol, etc.);

Neosilver salvarsan;

Sulpharsphenamine (syn.: sulfarsenol).

In Germany, Denmark and Great Britain, the majority of the Commission's recommendations have been put into effect under Government supervision. In Austria, anti-diphtheric and antitetanic sera are standardised by the National Serum Control Institute; in France similar measures are taken by the Pasteur Institute; in Greece such measures are applied as regards anti-diphtheric serum; in Hungary and Poland, the State Institute of Hygiene apply the methods and standards

recommended by the Commission.

In reply to its communication, drawing attention to the results of the Standardisation Commission's work, the Health Section received replies from a number of Governments:

Egypt has not yet enforced standardisation, but any laboratories established with this object will certainly follow the Health Committee's recommendation. The Sudan receives all its products of this nature from abroad and has not itself applied standardisation.

In Spain, the Technical Verification Institute employs the standards recommended by the Health Committee.

Haiti imports its products, but its Health Director has informed his Government that he is adopting the Health Committee standards.

The Irish Free State intends to bring in a bill concerning standardisation. The Government will support the Health Committee's recommendations before Parliament.

Iceland receives all her sera from Denmark and, in practice, thus follows the Committee's recommendations. As regards biological products, nothing has yet been decided.

Lithuania is preparing a new pharmacopœia which will embody the methods of standardisation recommended by the Health Committee, and the University proposes the establishment of an institution reponsible for standardisation.

Monaco imports all these products from France so that the question of standardisation does not arise.

In the Netherlands, anti-diphtheritic and anti-tetanic sera are being standardised according to the Health Committee's recommendations. The question of anti-dysenteric serum is still under consideration and the international unit will probably be adopted. The recommendations concerning blood groups are already being applied.

Turkey has adopted the international standard for anti-diphtheritic serum. The standard-isation of the other sera will follow shortly.

Uruguay has adopted the recommendations in practice.

Yugoslavia (Law of January 31st, 1930) has adopted sera standardisation in conformity with the Health Committee's recommendations. A special committee is studying the standardisation of biological products.

2. Blood Groups. — In accordance with the decision of the Health Committee at its fifteenth session in March 1930, a Laboratory Conference on blood groups was held in the Pasteur Institute at Paris from July 21st to 25th. Eleven members took part in the laboratory tests (tests of increasing dilutions of twelve sera against homologous blood corpuscles). The result represented an advance on the tests carried out by the participants in their own laboratories.

The group discussed the following points:

- (a) How to achieve more perfect uniformity. The group prepared a questionnaire to be communicated to the workers in this field. This will form a basis for more precise technique which will in future be recommended to all participants for the purpose of comparing results. Special attention was devoted to the deterioration of sera in transit. It was proposed that future research should include new standards of dried sera prepared by evaporation in vacuo, and rabbit sera immunised against sheep's blood corpuscles (anti-sheep serum) in place of human serum B (anti-A).
- (b) Nomenclature. The group directed attention to the resolution of the Frankfort Conference (April 25th, 1928) relating to the nomenclature proposed by von Dungern and Hirszfeld for the classification of blood groups, and recommending its adoption for international use as follows:

O A B AB

The resolution also suggested the use of the following to facilitate the change from the nomenclature hitherto employed:

 $\begin{array}{cccc} Jansky & O(I) & A(II) & B(III) & AB(IV) \\ Moss & O(IV) & A(II) & B(III) & AB(I) \end{array}$

and recommended the following methods of designating test-sera:

Test-serum A (anti-B); Test-serum B (anti-A).

The Conference at Paris thought that the object might be attained if each institute which supplied standard sera used solely this nomenclature, and if the editors of scientific journals insisted upon its exclusive use.

The Conference recommended that the Permanent Standards Commission should arrange to have these resolutions communicated to the persons and organisations concerned, and for historical reasons decided that the blood group reaction should henceforth be described as the "Landsteiner test".

The Conference also suggested that its members should study atypical cases (by exchange of such sera) and accidents due to transfusion. It asked the Permanent Standards Commission to collect information on the methods employed in the various countries for obtaining donors, and urged the necessity of careful preservation of all records of experiments on blood groups.

3. Serological Reactions. — The Health Organisation took advantage of the presence of a number of serological experts at the eighth International Congress on Venereal Diseases, Skin Diseases and Syphilis (Copenhagen, August 1930) to carry out comparative serological tests with various new methods.

Six investigators tested different flocculation methods and the Bordet-Wassermann reaction. The Kahn, Kline, Meinicke (micro-methods) and Müller (M.B. R.II.) flocculation methods gave concordant results and a high degree of sensibility and specificity as far as can be judged by the small number (26) of samples examined.

The experts present considered it desirable to draw the attention of all the serologists and venereal disease specialists at the Congress to the principles of the sero-diagnosis of syphilis as set out in the resolutions of the Second Laboratory Conference at Copenhagen in 1928. Accordingly, Professors Madsen and Jadassohn read reports on these subjects at the Congress.

4. Meeting of the Permanent Standards Commission, Geneva, October 8th, 1930. — The Commission decided in October 1930 that two sub-commissions of experts, one on serological and biological questions, the other on vitamins, should be held simultaneously in London in June 1931. After these sub-commissions had prepared the work, the Permanent Commission would also meet.

The Commission further decided to carry out comparative tests of samples of antidiphtheria serum of different avidity and of formol-toxins (anatoxin).

Comparative examinations of two different Schick toxins were also to be made by various institutes. Preparatory work was decided on in regard to perfringens antitoxin and anthrax serum. The adoption of an international standard for tuberculin was placed on the agenda for the next meeting and it was decided to hold a meeting of experts on the standardisation of vitamins, in particular that of vitamin D.

5. The State Serum Institute of Copenhagen and the National Institute for Medical Research in London have continued to act as central laboratories on behalf of the Health Organisation for the co-ordination of standardisation researches carried on in the different countries. They are also centres for the distribution of many international standards to all state and private institutes. A large number of requests for standards was referred by the Health Section to these Institutes during 1930.

The Latin-American Serological Conference held at Montevideo in September 1930 is described in the Chapter on Co-operation with the Health Administrations of Latin America.

IV. LEPROSY COMMISSION.

In 1929, the Secretary of the Leprosy Commission made an enquiry into Leprosy in Latin America. In 1930, this enquiry was completed by visits in the Far East to India, Burma, the Federated Malay States and Straits Settlements, Dutch East Indies, Indo-China, the Philippines and China, Japan and Honolulu.

His report on these visits (document C.H.887) contains a digest of the information collected on the prevalence, treatment and prevention of leprosy in the countries of Europe, America and Asia. The conclusions of this report may be summarised as follows:

The most vivid impression derived from the enquiry was the amazing diversity of conditions prevailing (in regard to no other infectious disease does one find the same diversity of opinion, of feeling or of method).

Some countries have no leprosy laws at all—others have an extensive legislation.

There may or may not be an administrative or technical centre or a centre combining administrative, technical and scientific features.

Measures may consist simply of compulsory segregation in leprosaria; elsewhere such institutions are practically unknown. In some countries, treatment stations and dispensaries are established; some leprologists attach the greatest importance to free treatment. In some leprosaria, owing to a scarcity of doctors, there is practically no treatment. Only rarely is administrative and medical pressure brought to bear on lepers in the conviction that proper treatment is in their interest.

While lepers require the best of food and an abundance of vitamins, funds do not always permit of such liberal diet. Accessory medical treatment is a special feature in some leprosaria, and physiotherapy, including light treatment, is beginning to be introduced. Laboratories, whether for routine work or research, vary greatly as regards activities and results. Every shade of opinion is found among Governments and peoples as regards the disease, from the mediaeval policy of banishing a social menace to the enlightened views of modern hygienists.

Compulsory Notification and Isolation.

Most regulations provide for compulsory notification and isolation, some compulsory segregation. Some regulations require that the lepers shall be treated. While the spirit of the regulations is segregationist, practice in some countries has outstripped legislation in the social and medical aspects.

Segregation.

Leprologists are divided into two definite camps: segregationists and anti-segregationists. The most ardent segregationists no longer advocate the summary methods of the Middle Ages, while anti-segregationists agree as to the necessity of homes for indigent and mutilated lepers. Divergence becomes less acute when the leper camp is divided into a home for lepers and a separate treatment station. The fundamental divergence, however, is that one group insists on the leper being given his liberty (a right, they declare, as incontestable as in the case of tuberculosis), whereas the other remains wedded to the idea of compulsion, and each group regards its own principle as an essential condition for the stamping out of leprosy.

The problem of segregation is linked up with other problems. Leprosaria must continue to exist in large numbers unless dispensaries can be set up and epidemiological supervision of lepers established.

Treatment.

This question dominates all others in the field of leprosy. While the great importance of general treatment is recognised, treatment of leprosy implies essentially treatment with chaulmoogra oil and its derivatives. There is a lack of general agreement as to the methods to be used as well as of the results obtained. It is universally agreed, however, that early treatment offers the best chance of success.

Whatever the form of chaulmoogra treatment preferred, the grave objection raised at Honolulu dominates all the discussion—that there is no proof that general dietetic treatment plus chaulmoogra yields better results than general dietetic treatment alone. The crucial test of a comparison of two like groups of patients, one group treated by chaulmoogra, the other not, has never been carried out. Such an experiment would be of international interest.

Research.

- 1. Research needs to be organised and co-ordinated; the scientific workers and the patients should be brought together and the publication of records facilitated.
- 2. Research should be organised with a view to practical application. While all research into leprosy is valuable, there are certain practical problems which might be speedily solved if research were organised; problems of clinical and serological diagnosis, the perfecting of hydnocarpus remedies, a comparison of the various forms of chaulmoogra treatment and the efficacy of chaulmoogra in general. A big research centre should be established on clinical, bacteriological and chemical lines. Europe no longer has enough lepers in any one place to form a useful centre for applied research.
- 3. It is absolutely necessary for research workers to keep in touch with one another, not only through publications and the proceedings of learned societies but also by personal contact.
- 4. Research cannot be standardised, but there are important elements and technical methods which would be the better for standardisation—such as the preparation of chaulmoogra remedies. A universal terminology is needed if any consensus of opinion is to be obtained on the results of treatment. Leprosy statistics require a uniform language extending to all the records used in leprosaria and dispensaries.

Bases for International Agreement and Action.

There is a general opinion among leprologists that there must be a world-wide campaign against leprosy.

There are also a number of new forms of organisation concerned in the treatment and prevention of leprosy and a number of important practical questions which have gradually emerged from the welter of discussion and which may be solved in the near future. These will constitute an initial field of action.

Legislation follows on usage, and it is not surprising that the majority of regulations are far behind the progress of hygiene. Under the influence of an international group of experts, leprosy laws may be brought into agreement with scientific knowledge of the disease.

Early treatment offers the most hopeful prospect. Such treatment has never yet been carried out methodically and has never been generalised in any country where leprosy exists.

In the matter of practical research, the first question calling for attention is the improvement of treatment. A noteworthy beginning in laboratory research has been made in respect of serological diagnosis. Leprosy bacillus culture and experimental inoculations have reached a point where co-ordination between the work of properly-equipped centres under the direction of experienced workers may result in decisive progress.

A number of practical questions regarding leprosaria and the treatment given to their inmates deserve general attention.

A large number of leprologists agree that leprosy prophylaxis should be on the same lines as the prophylaxis of tuberculosis.

The scientific prophylaxis of leprosy is just beginning. It would be encouraged and supported by international action along the lines indicated.

The Secretary of the Commission also presented the following draft programme for the future work of the Leprosy Commission:

In view of the opinions widely expressed by leprologists, the Commission will have to act not only as a centre for the exchange of information and workers but also as a centre for international action.

It may be said that leprologists throughout the world expect the Commission, backed by the prestige of the League of Nations, to give a decided impetus to the prophylaxis of leprosy:

I. As a Centre for International Action:

Establishment of an international study centre at Rio de Janeiro; Possible establishment of another international centre in the Far East, at Tokio; Co-ordination of work on leprosy; endeavours to give priority to questions of outstanding practical importance, such as epidemiology, therapy, chemotherapy, in the programmes not only of the international centres but of all centres where leprosy is studied;

The promotion of agreement between leprologists upon a practical programme of

prophylaxis

Co-ordination of the statistics of lepers, and of statistics of the treatment in leprosaria and dispensaries.

2. As a Centre for the Exchange of Information and Workers:

Scholarships at the international centres; Study tours; exchanges of staff between various treatment centres and laboratories; Relations with national centres (Bergen, Calcutta, Carville, Honolulu, Manila, etc.); Relations with scientific and philanthropic societies; Collection of material concerning the distribution of leprosy, the number of persons

in leprosaria, the medical staff of the leper settlements, treatment; the publication of such information either separately or in the International Year Book.

These documents, with a verbal statement by the Secretary of the Commission, were communicated to the Health Committee during its sixteenth session.

Reference was made to two proposed international centres for the study of leprosy, one in Brazil and the other at Tokio. The Brazilian Government had proposed to the Council of the League that an international centre should be established at Rio de Janeiro, and official correspondence was exchanged between the Council and the Federal Government of Brazil in 1928 (document C.H.710).

The Japanese Government had also welcomed the proposal to set up an International Centre at Tokio, and to collaborate closely with the Health Organisation of the League, it being understood

that existing medical and research institutions would be utilised.

The Health Committee decided to submit the report of the Secretary of the Leprosy Commission (Dr. Etienne Burnet) and the programme of future work to the Leprosy Commission, took note of the observations regarding the programme of international centres of study at Rio de Janeiro and Tokio, and requested the Commission to study the matter in detail.

On the invitation of the Government of Siam, the Leprosy Commission met at Bangkok in November 1930 1. During this meeting, one general session of the Congress of the Far Eastern Association of Tropical Medicine was devoted to leprosy and presided over by Professor Nocht.

The following is the summary of the report (document C.H.970) as set out by the Commission:

Summary and Conclusions.

Prophylaxis of leprosy is not a problem that admits of solution by the application of any one measure, since the means of dealing with it obviously vary with geographical, economic, administrative, financial and social conditions and with the incidence of the disease.
 There is no reliable system of prophylaxis without treatment, and it is generally accepted that the earlier the treatment is instituted the better will be the results.

¹ The following attended:

Professor B. Nocht, Director of the Institute of Tropical Diseases at Hamburg (Chairman, in the absence of

Professor B. Nocht, Director of the Institute of Tropical Diseases at Hamburg (Chairman, in the absence of Professor Chagas, who was unable to attend);

Major-General J. D. Graham, Public Health Commissioner with the Government of India;

Dr. G. Alexander Mitchell, Chief Health Officer for the Union of South Africa;

Professor E. Muir, Leprosy Research Laboratory, School of Tropical Medicine and Hygiene, at Calcutta;

Dr. Masao Ota, Tohoku Imperial University, Sendai, Japan (replacing Professor Nagayo, who was unable to attend):

attend);
Dr. H. Windsor Wade, Chief Pathologist of the Philippine Islands Public Health Service, and Medical Director of the Leonard Wood Memorial;
Dr. N. E. Wayson, of the United States Public Health Service (Leprosy Investigation Station, Honolulu) (representing Surgeon-General Cumming, unable to attend);
Dr. Etienne Burnet (Health Section), Secretary.

- 3. Leprosy resembles tuberculosis in being, in certain stages, a contagious but curable disease: curable at least in the sense that bacteriological examination becomes negative and other active signs disappear and remain absent permanently or for an undetermined period.
- 4. The prophylaxis of leprosy may be achieved by a system of medical, educative and legislative measures. It should provide for the isolation and treatment of infections lepers and particularly for the treatment of early cases in clinics and dispensaries: also for the periodical examination of suspects. Special measures should be adopted for dealing with the children of lepers and for patients who have recovered either after treatment or spontaneously.
- 5. It is desirable that each country where leprosy exists to an important degree should have at least one centre for the study of the disease, with research laboratories and special courses for the medical profession and their assistants. Where this is not practicable, men should be sent to some foreign centre for training.
- 6. Arrangements should be made to include instruction in leprosy in the curriculum of all medical schools and colleges.
- 7. It is necessary to educate the public in regard to leprosy by modern methods of popular teaching and propaganda.
- 8. Isolation of infectious lepers is a necessary measure in a comprehensive campaign against leprosy, but it cannot be regarded *per se* as the sole means of prophylaxis. Its drawbacks can be mitigated by other measures applied concurrently. Isolation should be applied only to cases that are considered infectious.
- 9. Any form of treatment in order to give satisfactory results requires to be combined with suitable dietic and general hygienic conditions.
- 10. For special treatment, oils of the chaulmoogra group and their esters and soaps are recommended.
- II. The system of prophylaxis must be animated by the spirit of preventive medicine and social hygiene.

In addition to adopting these principles of prophylaxis of leprosy, the Commission made a number of technical suggestions relating to (1) treatment and (2) uniformity of terminology, of records and of technical examination.

As regards uniformity of terminology, the Commission drew attention to the serious handicap resulting from the present lack of uniformity which makes it impossible to compare the results obtained by different workers and which minimises the value of work done; for example, the term "leper" is used in some institutions in regard to cases which are bacteriologically positive, and in others without any such distinction. There is no uniformity of practice as regards classification of cases. There should be standardised criteria by which active lesions may be distinguished from permanent, inactive lesions. Uniformity is necessary also in regard to leprosy statistics, and this implies the adoption of standard record forms by health administrations and leprosy institutions. The standardisation of the technique and examination is important in that the maximum of efficiency may be attained and the results achieved by the various workers be comparable.

The full report of the Leprosy Commission as adopted at its Bangkok meeting (see document C.H.970) will be presented to the Health Committee at its seventeenth session.

V. COMMISSION ON RURAL HEALTH CENTRES.

In October 1930, a letter was received from the Secretary of State in the Hungarian Ministry of Public Welfare and Labour, inviting the Health Organisation to convene a group of experts on rural health centres at Budapest on the occasion of the opening of the health centre at Gödollō and of the school for public health nursing and the physician's house at the Hungarian Institute of Hygiene.

The Health Committee asked Doctor Chodzko to preside over the Commission on Rural Health Centres.

The members of the Commission and certain other experts adopted a report dealing with the organisation and administration of primary and secondary health centres in rural districts. Primary health centres were described as the smaller centres in villages and secondary centres as larger institutions in counties or districts.

The rural health centre was defined as an institution for the promotion of the health and welfare of the people in a given area which seeks to achieve its purpose by grouping under one roof or co-ordinating in some other manner, under the direction of the health officer, all the health work of that area, together with such welfare and relief organisations as may be related to the general health work.

It was pointed out that in districts which had been organised for some time such grouping under one roof might be difficult. Nevertheless, efforts should be made to secure the co-ordination described above.

The health centre was considered to be the best method of organising the rural health services in new territory.

The programme of a primary health centre must vary according to the public health needs. Its minimum programme should be:

(I) Campaign against those diseases which a survey has shown to be of the first importance (malaria, tuberculosis, hookworm, etc.);

Maternal welfare work; Infant welfare including pre-school and school hygiene; Instruction of the public in hygiene; Sanitation; all the sanitary conditions affecting the people;

(6) Provision of first aid in urgent cases;
(7) The health centre should also provide for medical treatment if there are too few physicians, or persons unable to receive proper treatment elsewhere. Otherwise the treatment furnished should be limited to that necessitated by the requirements of social prophylaxis.

The staff of the primary health centre would consist of the director (a local physician with special training or a medical officer of health) the public health nurse or nurses, doing generalised nursing, the midwife and the sanitary inspector.

The larger or secondary centre directs and co-ordinates the work of primary centres, and ensures liaison between them and all other health agencies. In addition to acting as primary centre in its immediate neighbourhood it would carry on more specialised work in respect of:

The campaign against the most important health problem (malaria, etc.) in the district;

Anti-tuberculosis work;

Anti-venereal work; Maternal welfare work;

Infant welfare, including pre-school and school hygiene;

Health education;

Sanitation;

Laboratory analyses of a simple character.

The secondary centre would be directed by a medical officer of health. The programme of sanitation would be in charge of a sanitary engineer. There would also be specialists (X-ray, etc.), if necessary, and nurses, midwives and sanitary inspectors, in addition to clerical assistants.

The Conference made a number of suggestions regarding the organisation of the sanitary engineering services, and the value of committees of local persons to assist the nursing work. Reference was also made to the equipment and relationship of rural health centres.

The report of the Conference on Rural Health Centres (document C.H. 947) was utilised by the Preparatory Committee for the Rural Hygiene Conference in connection with the reports being prepared on the three items on the provisional agenda. The Preparatory Committee asked the Commission to consider other methods of organising health services in rural districts. The Committee will meet in April 1931.

VI. WORK OF THE CANCER COMMISSION.

The Chairman of the Cancer Commission (Sir George Buchanan, Senior Medical Officer, Ministry of Health, London) made certain proposals regarding the future work of the Health Committee on this subject during the Committee's sixteenth session (September 29th to October

The Cancer Commission began its work in 1923 and was reappointed in 1926. Up to 1927, its principal work consisted in endeavouring to ascertain the causes which produced very notable differences in the mortality from cancer in certain, mainly European, countries.

The sites chosen for study were the breast and uterus, and the enquiry was pursued by expert statistical analysis of massed figures and special sampling investigations organised by the Commission. When the enquiry came to an end in October 1927, there were both failures and successes to record; failures in that every conceivable method of analysis open to the Commission and its experts had failed to produce any single clear-cut explanation of the divergencies in the national mortalities from cancer in the countries studied; successes, in that many plausible a priori explanations had been tested and found wanting. The ground was cleared of all kinds of misconceptions about the effect of registration systems, age distribution, marital state, racial proclivity, and the like—work which could only have been secured by the special international methods of enquiry. The natural "duration" of cancer in these sites was determined on a broad basis of observation and the predominating importance of early diagnosis and early operative or radiological treatment was illustrated equally for every country.

On the advice of the Cancer Commission, the Health Committee in 1928 decided to regard these comparative enquiries as completed.

Two quite different and very specialised lines of investigation were then conducted through expert Commissions—namely, the study of (1) occupational cancer and (2) radiological treatment of uterine cancer.

1. Occupational Cancer.

It seemed possible that, by working on international lines, some new and useful evidence might be obtained concerning:

(a) The occurrence of cancer in some occupations in some countries, and its absence

from like occupations in others;

The occurrence of new forms of occupational cancer not hitherto suspected; or, The occurrence of known forms of occupational cancer in places where it had not been supposed to exist.

This work, carried on with the help of the Hygiene Section of the International Labour Office, resulted in the collection of a number of valuable reports on the occurrence and character of occupational cancer. It would be useful to continue to receive such reports, to arrange that an analysis thereof be submitted from time to time to the Health Committee, and that they should be distributed to the administrations and experts interested.

2. Radiological Treatment.

The work of the Sub-Commission on this subject culminated in the publication of a report (document C.H.788) in June 1929 containing some general directions on the use of radiotherapy and descriptions of the way in which radiotherapy is applied to cancer of the uterus in Paris, Munich and Stockholm. Stress was laid on the necessity of standardising observations and records, including facts as to recurrence of the growth and length of survival after treatment.

The enquiry revealed that there was no satisfactory way of comparing or assessing the results of the different radiotherapeutic methods unless the principal radium and gynæcological institutes will agree to adopt (1) a standard nomenclature to describe the stages of the disease, (2) a standard method of case-recording and (3) a satisfactory system of following up cases treated to ascertain their condition at least three years after treatment.

The standard requirements were laid down and endorsed by the Health Committee at its fourteenth session in May 1929. Letters drawing attention to the recommendations of the Sub-Commission and copies of its report were addressed to Health Administrations.

The Health Administration of the following countries have made arrangements to have these studies carried out:

Australia Belgium Canada Czechoslovakia Denmark France Great Britain

Italy Irish Free State Japan Norway Spain United States of America Uruguay

The Chairman of the Cancer Commission made the following recommendations to the Health

(1) A member of the Health Committee should be designated as its Rapporteur on cancer

questions;
(2) The liaison with the Hygiene Section of the International Labour Office should be maintained and reports giving new knowledge of occupational cancer should be welcomed and appropriately circulated.

(3) The three experts who drew up the scheme associated with the Rapporteur may advantageously be constituted as an expert committee to advise when required on the practical results of the 1929 report (document C.H. 788).

The Health Committee accordingly appointed the Chairman of the Cancer Commission Rapporteur on questions relating to cancer (document C.596.1930.III, Resolution IV. A).

VII. WORK OF THE OPIUM COMMISSION.

The Opium Commission met in Geneva in March 1930 to examine questions relating to Articles 8 and 10 of the International Opium Convention signed at Geneva, February 19th, 1925.

Ad Article 8.

The Commission concurred in the opinion of the Office international d'Hygiène publique concerning the application of Article 8 of the Convention to the preparations proposed by the Governments of France, Germany, British India, Roumania, Bulgaria, the Irish Free State, Poland and Great Britain (document C.H.843). The Commission also received from the German and Swiss Governments further lists of preparations (document C.H.850) in respect of which exemption was requested under Article 8 of the Convention. Ad Article 10.

Certain States, on the recommendation of the Health Committee, have already made eucodal, dicodide, dilaudide and the esters of morphine subject to the measures of control provided by the Geneva Convention. The British Government's request, as to whether preparations made from these substances should be subjected to this control, necessitated an enquiry. The Commission concurred with the opinion given by the Office international, that such preparations ought to be subject to control whatever their narcotic content. The same question subsequently arose in connection with the salts of these substances, and the Commission decided that the salts should be submitted to the same measures of control as the substances and the preparations.

The Commission proposed the following resolutions which were adopted by the Health Committee during its fifteenth session (document C.190.M.90.1930.III).

"I. The Health Committee adopts all the conclusions contained in the report of the Office international d'Hygiène publique concerning the application of Article 8 of the Opium Convention signed at Geneva on February 19th, 1925, to the preparations proposed by the Governments of France, Germany, British India, Roumania, Bulgaria, the Irish Free State, Poland and Great Britain as given in document C.H. 843."

The Health Committee decides to refer to the Permanent Committee of the Office international d'Hygiène publique for advice and report in accordance with the procedure established by Article 8 of the Opium Convention of Geneva the two lists of preparations proposed by the Governments of Germany and Switzerland as given in document C.H. 850.

"III. The Health Committee is of opinion that preparations which contain either esters (acylate derivatives, ether-salts) of morphine, or dihydro-oxycodeinone, dihydrocodeinone (dicodide) of dihydromorphine (dilaudide), should be superior of dihydromorphine (dilaudide), should be superior of dihydromorphine (dilaudide), should be superior of different the Committee of the Commi containing diacetylmorphine; that is to say, they should fall within the scope of the Convention whatever the percentage of narcotic substances contained may be. It also considers that all the salts of the substances mentioned above should fall within the scope of the Convention in accordance with the provisions of Article 10 of the said Convention.

The following questions were submitted to the Health Committee by the Opium and Social Section and the Permanent Central Opium Board respectively:

(a) Should synthetic morphine be treated in the same manner as natural morphine and subjected to control?

(b) Would it be possible to produce eucodal and dicodide commercially from morphine and codeine (document C.H. 851)?

The Committee of Experts of the Office international, to whom these questions were submitted unofficially, decided that the definition of morphine in the Convention covered also synthetic morphine which has not yet been placed on the market.

It was not considered likely that eucodal and dicodide would be produced commercially from morphine and codeine on account of the greater expense involved, but such production was

theoretically and industrially possible.

A report from Professor Knaffl-Lenz on the point, as well as the opinion of the experts, was circulated to those concerned.

The Opium Commission met for the second time on October 2nd, 1930.

Ad Article 8.

The Commission considered the report of the Permanent Committee of the Office international d'Hygiène publique on three lists of preparations for which the Governments of Germany, Great Britain and Siam asked for exemption under Article 8, these lists having been referred to the Office international for opinion and report.

Ad Article 10.

The Commission considered the case of a new narcotic, acedicone, which had been referred to the Office international for opinion and report, and decided that it should be subject to the provisions of Article 10 of the Convention.

The Commission's proposals may be summarised as follows:

To exempt under Article 8 of the Geneva Convention the preparations in the British

(1) To exempt under Article 8 of the Geneva Convention the preparations in the British list and a number of the preparations in the Siamese list, and to leave the question open in the case of the three preparations in the new German list;

(2) To exempt under Article 8 the "oculets" and solutions of morphine (or eucodal) with atropine, with a maximum of 2 per cent of morphine or eucodal salts, and a minimum of 0.05 per cent of atropine salts, such solutions to be delivered only in phials of 1.1 cc.; and to decline to exempt under this article dry solutions (pastilles, tablets, etc.) of morphine (or eucodal) with atropine, and also any preparations of morphine (or eucodal) with scopalamine;

(3) To recommend to Governments the control of acedicone.

On the proposal of the Opium Commission the Health Committee at its sixteenth session adopted the following resolution:

"The Health Committee,

"Having considered the report of its Opium Commission on certain questions arising from the application of Articles 8 and 10 of the Geneva International Opium Convention, and the

opinion given by the Permanent Committee of the Office international d'Hygiène publique in virtue of these articles:

- "(a) Adopts all the conclusions of the report of the Office international d'Hygiène publique on the application of Article 8 to the preparations proposed by the Governments of Germany, Great Britain and Siam as they appear in document C.H. 892;
- "(b) Decides, in virtue of Article 10 of the Convention, to inform the Council of the League of Nations that acedicone (acetyldimethyldihydrothebaine) is liable to similar abuse and productive of similar ill-effects as the substances to which Chapter III of the International Opium Convention of 1925 applies, and recommends that the provisions of the said Convention should be applied to it;
- "(c) Decides to transmit to the Office international d'Hygiène publique, for opinion and report, the list of preparations proposed for exemption under Article 8 by the Estonian Government (see document C.H. 892)."

Chapter VII.

CO-OPERATION OF EXPERTS IN THE WORK OF THE HEALTH ORGANISATION.

I. ENQUIRY INTO THE TREATMENT OF SYPHILIS.

The enquiry of the Commission, which is expected to throw light on the general results of treatment of syphilis by different methods, has continued during 1930. The cause of this enquiry was the fact that the results in the fight against syphilis had not been so great as the progress of syphilis-therapy would give reason to expect, and that the explanation was that the advances in syphilis diagnosis and therapy had not been exploited everywhere as rapidly and effectively as would be desirable.

The participating clinics and dispensaries of Germany, Denmark, the United States of America, France and Great Britain have continued to fill in the individual case records which the Commission had drawn up. Professor Martenstein of the Reich Dermatological Clinic of Breslau, who is analysing these records, had received some 24,000 at the end of 1930.

The compilation work will not be finished before the second half of 1931.

The Commission met at Copenhagen on August 6th, 1930, to take note of the progress of the enquiry. The number of cases of congenital syphilis and syphilis in pregnancy reported was agreed to be small for statistical utilisation. Since useful studies have been published on the treatment of these cases the meeting decided to leave this out of the present statistical enquiry.

Colonel L. W. Harrison, Director of the Dermatological Clinic of St. Thomas's Hospital,

London, submitted a note to the meeting on a new method of treatment which has given considerably better immediate results than the ordinary method. He suggested that the experts might perhaps give it a trial. This method, which provided for rather long intervals between the separate injections, might prove particularly applicable, if its results were good, to the treatment of seamen and other people to whom it was difficult to apply the system of short repeated injections (document C.H.896).

II. ENQUIRY INTO SCARLET FEVER, DIPHTHERIA AND WHOOPING-COUGH.

The researches into scarlet fever and diphtheria which were undertaken in 1929 and subsequently on the lines of a joint enquiry by experts 1 in those European countries where the two diseases constitute real epidemiological problems, have produced sufficient material to be made the subject of critical examination by the Commission which is to meet in London in June 1931.

In view of the technical difficulties met with by all countries which have endeavoured to apply all the immunisation control tests, the Secretary of the Commission, who had occasion to visit the majority of the countries in which these researches are being carried out, realised the importance of simultaneous critical examination—independently of the strict letter of the conditions laid down for the enquiry—of all the data collected with regard to anti-diphtheritic and anti-scarlet fever vaccination in all the centres where vaccination is practised on a large scale, provided that a scientific standard for estimating the value of the methods in question exists influence of vaccination on the morbidity and mortality rates, having regard to the course of epidemic waves).

¹ The Director of the State School of Public Health, Zagreb, Yugoslavia; Professor Cantacuzène, Director of the Institute of Experimental Medicine, Bucharest; Professor Friedemann, of the Rudolph Viochow Hospital, Berlin; Dr. Hirszfeld, State Health Institute, Warsaw; Dr. O'Brien, Director, "Wellcome" Research Laboratories, Beckenham, Kent; Dr. Ramon, Director of the Institut Pasteur, Garches, Seine-et-Oise; Dr. Tomcsik, State Hygiene Institute, Budapest; Professor E. Gorter, Director of the Children's Clinic of Leyden University, Netherland:; Dr. R. Debré, Professeur agrégé at the Faculty of Medicine, Paris; Dr. E. H. R. Harries, Medical Superintendent, City Fever Hospital, Birmingham; Dr. O. Schubert, State Health Institute, Prague; Professor Finkelstein, Kinderkrankenhaus, Berlin; Dr. Bie, Blegdamshopitalet, Copenhagen.

With a view to the meeting proposed, the Secretariat requested the experts to submit a report before March 25th on the results obtained, so as to give the Committee of Rapporteurs the time required for drafting the joint report to serve as a basis of discussion for the experts at their meeting. The discussion will deal with:

Scarlet Fever:

The comparative immunising value of the antigens used for the vaccination;

The Dick test and susceptibility to scarlet fever; Local and general reactions after vaccination; The Dick test in the case of vaccinated patients;

The neutralising effect of the serum of vaccinated persons on the toxin of the hæmolytic

Immunity to the Dick test and protection against scarlet fever.

Diphtheria.

Vaccination methods;

Comparative immunising value of the antigens used for vaccination (Ramon's anatoxin, O'Brien's T. A. toxoid);

Local and general reactions after vaccination with these antigens;

Schick test in the case of vaccinated persons;

Antitoxin content of the serum of vaccinated persons;

Comparative morbidity and mortality in the case of vaccinated and non-vaccinated persons; Virulence and toxigenic properties of the strains of the diphtheria bacillus isolated in vaccinated and non-vaccinated persons.

MALIGNANT DIPHTHERIA WITH FATAL ISSUE IN SPITE OF SERUM TREATMENT.

A meeting of experts held in Berlin in November 1930, at which Dr. Madsen, Dr. Hamel, Dr. Bessau, Dr. Friedemann, Dr. Reiche, and Dr. Prausnitz were present, enabled the Secretariat to obtain information as to the growing wave of diphtheria in Germany and the increase in the

mortality of serious cases in spite of active serum treatment.

The discussions of the members present as to the definition of "grave cases" of diphtheria and methods of treatment, and serum treatment in particular, led to the adoption of a draft questionnaire submitted by Professor Bie for forwarding to a certain number of clinicians in countries in which the diphtheria wave is claiming a large number of victims.

VACCINATION TREATMENT FOR WHOOPING-COUGH.

At the last session of the Health Committee in September-October 1930, Professor Bordet proposed an enquiry into the vaccination treatment of whooping-cough. The Health Committee agreed to take up his proposal and requested Professor Bordet to undertake the preparation of the vaccine necessary for the experiments and to forward it to the experts taking part in such experiments.

Researches are proceeding in Belgium, Denmark, France, Germany, Great Britain, the

Netherlands, Roumania and Spain.

III. WORK OF THE CONFERENCES OF DIRECTORS OF SCHOOLS OF HYGIENE AT PARIS AND DRESDEN.

The Health Organisation has convened periodic Conferences of Directors of Schools of Hygiene ever since April 1926 when the Commission on Education in Hygiene and Preventive Medicine was invited to attend the opening of the new Warsaw School of Hygiene.

The second conference was held at Budapest and Zagreb at the new schools of hygiene in

those cities.

The third and fourth conferences were held at Paris and Dresden in 1930.

At these conferences the subjects of discussion were:

The special work of schools of hygiene in training the future medical officers of health, the auxiliary personnel, school-teachers and the general public, as well as the methods of organisation and administrations best adapted to enable them to perform this work;

(b) The training in social and preventive medicine required by the medical student;
(c) Supplementary instruction in social and preventive medicine for medical officers of health, communal health officers, medical practitioners and the auxiliary sanitary personnel.

The following points were discussed:

The character of the scientific research work;

The character of instruction in sanitary engineering; The methods, character and extent of the field training.

The inclusion in the programme of the schools of hygiene of such other activities as actual health administration and health instruction of the general public was also discussed.

Work and Organisation of Schools of Hygiene.

As the outcome of the discussions of the Paris Conference, the following conclusions were adopted by the Dresden Conference:

- A. The permanent value of the school of hygiene as an integral part of the public health machinery is definitely established; but, in view of the purely technical, non-administrative character of these schools, they should be established as autonomous institutions.
- B. Owing to the varying local conditions existing in the different countries, it has not everywhere proved practicable to form a close connection between the school of hygiene and the university. But, in every instance, it has been found satisfactory to include university professors in the teaching staff. In any case, close collaboration between the universities and the schools of hygiene would be profitable for both.
- C. The main functions of the school of hygiene must consist of both research and teaching. But, in several countries, public health field-work administration and public health propaganda are also included in the school of the school of hygiene must consist of both research and teaching. are also included in the activities of these institutions.
- Original research work is essential for the maintenance of the scientific atmosphere upon which the life of the school of hygiene depends; its value both for the teachers and the students cannot be over-emphasised. Whether this research work is what is frequently referred to as "pure research" or "applied research", is of little moment, although the school of hygiene must obviously concern itself mainly with matters of practical importance to the country concerned.
- E. In certain countries it has been found practicable for the school of hygiene to supervise, or even to undertake, executive duties in connection with the public health work of a district or larger unit of the country; where health demonstration areas have thus been instituted, their value both to the community and to the teaching work of the school is fully recognised.

 In any case, every school of hygiene should have at its disposal for training purposes one or more health centres or health demonstration areas, which may or may not be under the administrative control of the school.

- F. The Minimum Requirements for the Instruction of Medical Officers of Health are as follows:
 - I. Instruction within the School:
 - (a) Fundamental subjects as applied to hygiene (lectures and laboratory work):

 - Physiology; Chemistry and physics; Bacteriology, immunology and serology, parasitology; entomology;
 - Clinical training in the diagnosis and treatment of acute contagious diseases;

Sanitation as applied to houses, rural and urban communities;

- Lectures and practical work:
 - Vital statistics, as applied to hygiene;
 - Epidemiology;
- $\stackrel{(i)}{(ii)}$ Elementary sociology;
 - The environmental and social conditions in relation to health and disease;

(iii) Eugenics;

- Physical education; (iv)
- Social services:

Dispensary services: pre-matrimonial, pre-natal, maternity, infant and child welfare, school health, vocational guidance, tuberculosis, venereal diseases, cancer, alcoholism, care of the physically and mentally deficient and the poor (also such other services as may be required by the local conditions—e.g., malaria, scabies, trachoma legrossy atc.): trachoma, leprosy, etc.);

Industrial hygiene;

Hospitals and other organised medical services;

Social insurance;

- Public health law and administration; Teaching of the methods of health propaganda.

The duration of, and the importance assigned to, the different sections of this instruction should be proportioned and adapted to the degree of instruction which students in each particular country possess on entering the school.

II. Field Work:

The Commission is of the opinion that:

- (a) Organised field work should be an essential part of the course of training for health officers;
 - (b) It should comprise at least three months—i.e., one-third of the total course;

- (c) The student should take an active part in all branches of field work—viz.:
 - In the work of social hygiene organisations;

In sanitation work;

- In public health administration;
- (iv)In general health propaganda work;
- (d) It is desirable that the medical officers of health to whom the students are assigned for field training should be attached to the school of hygiene as members of its teaching staff.

III. General Suggestions:

In a number of countries, legislation already requires that candidates for posts in the public health services, both State and municipal services, should possess diplomas obtained at the school of hygiene. This practice has given such excellent results that the Conference strongly recommends its extension to other countries.

IV. Suggestions as to Administration:

In schools of hygiene which are independent units, it is proposed that an administration along the following lines should be provided:

- The Director or Dean of the school.
- (b) An Administrative or Advisory Council.

(c) The teaching and research work of the school naturally falls into several sections. Each section should have at least one full-time permanent professor or lecturer, and such part-time teachers and assistants as may be required.

The experience of existing schools shows that the main subjects are: Physiology, chemistry and bacteriology as applied to hygiene, sanitary engineering, vital statistics,

epidemiology, social hygiene, public health administration.

Certain of these subjects may be grouped at the outset into a small number of sections, such a procedure facilitating the administration of a school in its early days; but, as the activities of the school develop, this number will doubtless increase.

The field work, whilst connected with each of these sections, is mainly incumbent upon the section of public health; it should, therefore, as a rule, be under the control of that section.

- (d) It is desirable that as much as possible of the routine teaching of the school should be given by permanent full-time professors or lecturers, the functions of visiting lecturers being rather limited to instruction in specialised subjects.
- The teaching work of the school of hygiene can in no case be limited to the training of medical officers of health. Every school should actively participate in the hygiene education of the entire medical profession, the auxiliary sanitary personnel, and the public in general. To this end it should at least place all its facilities—e.g., its lecturers, laboratories, collections, museum, demonstration areas and other propaganda material—at the disposal of those concerned.

The following resolutions were also adopted at the Dresden Conference:

A. Training in Hygiene for the Medical Student:

- (r) The number of specialised medical practitioners devoting themselves wholly to preventive work and to the administration of the public health services must always be comparatively small. It is therefore to the main body of general practitioners that the people must look for personal guidance in the prevention and detection of disease. Moreover, the of the general practitioner cannot be limited to the treatment of the individual patient; it must also take due account of the effect of social and environmental influences upon the patient's state of health, and of the influence exerted by the patient himself upon his environment. Anything in the nature of a cleavage between curative and preventive medicine must at all costs be avoided. To this end, it is required that fuller instruction in preventive medicine and social medicine be given to the medical student.
- (2) This part of the instruction given to the student should consist of the following subjects: elements of public health legislation and administration, and of vital statistics, personal hygiene, maternity, infant and child welfare, care of the school child, care of the adolescent and the adult (with special regard to industrial hygiene and occupational diseases), the control and prevention of communicable diseases, the influence of environment (with special reference to housing, air and water), the relations between food and the public health.
- Regular medical supervision of all students from the beginning of their career is the best introduction to the teaching of hygiene. It serves to inculcate the notions and habits of hygienic life into their minds. 2

¹ This training will also enable the medical practitioner to be better qualified for the many duties he is called upon to perform in the field of social medicine (social insurance and medical relief).

2 This holds good, not only for the medical student, but for all students without exception.

- (4) The knowledge of preventive medicine required by the medical student will best be obtained by arranging for the instruction to be carried out from two points of view:
 - (a) Every professor teaching in medical faculties or medical schools should constantly emphasise the preventive aspect of his particular subject; this aspect should, in fact, pervade the entire medical training.
 - (b) After the student has thus been fully prepared, the final course, by the professor of hygiene, will become the keystone of these studies.

In order that this double form of instruction should be successful, it would be desirable for the professor of hygiene to use his influence in this direction with the other professors of his faculty, or school of medicine. This professor should, moreover, himself have a thorough experience of practical hygiene; but it is also desirable that he should have adequate experience of clinical medicine. of clinical medicine.

(5) Instruction in hygiene should not be limited to theoretical teaching. The student should obtain practical experience by actually taking part in the practical work connected with all the subjects coming under this branch of his training. It is recognised that this will not be applicable with equal ease in all countries, and that it will be particularly difficult in those faculties or schools of medicine where the number of students is comparatively large. Yet, even in these instances, the student should at least be made acquainted with the types of practical work in all the subjects in question. This will be effected if he is required to take active part in the various branches of dispensary and medical relief work, and if arrangements can be made for him to work for a certain time under the supervision of a medical officer of health.

The purpose of the schools of hygiene is not to take part directly in the training of the medical student, but they will be able to render valuable help by placing their museums and other apparatus and facilities at the disposal of the medical faculties or medical schools concerned.

- The provision of suitable examination tests is of far less consequence than the establishment of adequate courses of instruction. At the same time, it has not infrequently been shown that the only means of securing the regular attendance of the students has been by the rigid enforcement of examinations. It is especially desirable that the preventive aspect should be prominently considered in every subject of medical examination.
- Thorough training of the medical student on the lines recommended will not only raise the efficiency of the general practitioner, it will also render the task of post-graduate instruction in public health easier, and will thus allow for a more intensified training of the future health officer.
- B. Supplementary Instruction in Social and Preventive Medicine:
 - (1) The object of supplementary training is twofold:
 - Specialised instruction designed as training for special duties; and Periodical courses designed to refresh the memory, to systematise knowledge already acquired and to teach the latest developments in the sciences underlying the practice of public health.
- (2) For the general practitioner, supplementary courses in public health and preventive medicine should take particular account of the social point of view, thus filling the gaps which university medical training may have left in his knowledge of social hygiene and social medicine.
- The work of medical officers of health is of such a character as to require their regular participation in supplementary courses; these should therefore be *compulsory*. Social hygiene and preventive medicine should be the principal subjects of instruction. It is suggested that the participants should be assigned for duty to a certain number of medical institutions of different types, so that they would receive special practical training in the different branches of social hygiene work one after another. In addition, they should receive theoretical instruction in social hygiene.
- (4) For those communal health officers who are only appointed as part-time officers, post-graduate instruction in the various branches of public health and preventive medicine is urgently required, especially for those who have had no opportunity of obtaining specialised training prior to their appointment.
- (5) Supplementary courses for all public health officials, as well as for the general practitioner, should be given at sufficiently frequent intervals to ensure the maintenance of a high standard of efficiency.

The object aimed at can only be achieved by means of a special scheme of organisation, which may be planned in a variety of different ways:

- (a) In Germany, the main part of the work, so far as the medical profession is concerned, is performed under the auspices of the Reich Committee for Post-Graduate Medical Instruction (Reichsausschuss für ärztliche Fortbildung) by the joint effort of the authorities of the Reich, States, provinces and communes, the social insurance and welfare organisations and
- professional medical organisations.

 (b) In Hungary, this training is organised by the Committee for Post-Graduate Medical Training appointed by the Minister of Education.

The instruction should be entrusted to the universities or medical schools, academies of social hygiene, State institutes and schools of hygiene, the medical staff of general hospitals, health officers, etc.

In order to achieve the best results, the guiding principles should be the following—a limited number of participants and a sufficiently long course.

(6) It is desirable that, for the various classes of auxiliary and technical personnel of the public health services—e.g., factory inspectors, sanitary engineers, sanitary inspectors, health visitors, midwives—courses of supplementary training should be arranged on analogous lines. In cases where the personnel of the health services may be inadequately trained—in particular, where the rapid expansion of these services has made it impossible to appoint adequately specialised staff—it is urgently necessary to organise such supplementary training as will bring this staff up to the standard required for the work.

Attendance at courses will be made easier for participants by giving them, as the case may be, board and lodging, or an allowance, or both.

The Dresden Conference also adopted the proposal of Professor Miyajima, that the question of salaries, of the general applicability of the probationary period, and of the method of recruiting personnel for the health services should be made the object of a special enquiry.

During its sixteenth session, the Health Committee adopted the recommendations of the Dresden Conference, decided to hold periodic conferences of directors of schools of hygiene, accepted Professor Pittaluga's invitation to hold the next conference during the inauguration of the new school of hygiene at Madrid, and, finally, to give effect to Professor Miyajima's proposal, requested the Medical Director to collect information regarding the terms and conditions of the appointments held by public health workers in different countries.

The results of the Conferences at Paris and Dresden, together with a memorandum on the teaching of hygiene in various European countries, compiled by Professor Prausnitz of Breslau, and a review by Professor Léon Bernard of the work of the Commission on Education in Hygiene and Preventive Medicine, have been published by the Health Organisation in a single volume (document C.H.888).

ENQUIRY INTO INFANT MORTALITY.

The general report on the enquiry into the causes of infant mortality in Austria, France, Germany, Great Britain, Italy, Netherlands and Norway was published in June 1930 (document The memorandum contains all information concerning the organisation, object and methods of the enquiry. 1

One of the most important general results of the European enquiry was the distinction established between two big groups of facts: (I) still-birth and infant mortality during the first days of life; (2) digestive disturbances, acute infectious diseases and diseases of the respiratory system, accounting for later mortality. The deaths relate roughly to very early infancy and a

somewhat later period. Syphilis appears to belong to the first group.

The enquiries failed to reveal the causes of premature births in a large percentage of cases; in all districts without exception the figures for unknown causes of death were very high in the

case of still-births and mortality during the first days of life.

In the second group, the ætiology, prevention and treatment of diseases of the respiratory system still include problems for solution through joint work by pediatrists and health experts. Premature birth, still-birth and mortality during the first days of life all require scientific research and the assistance of obstetricians and pediatrists. Generally speaking, close liaison between the various authorities and bodies concerned is essential, with a view to the adoption of medical, hygienic and social measures for combating infant mortality.

The position as regards the extension of the enquiry to other countries in South-America is dealt with in the present report in correction with the Line Conference held in Tule 2000.

dealt with in the present report, in connection with the Lima Conference held in July 1930.

So important is the enquiry from the standpoint of social hygiene that four European Public Health Administrations—Czechoslovakia, Roumania, Spain and Yugoslavia—are preparing to extend it to their territories. The methods and technique employed in this enquiry will be the same as in the original seven European countries. In order to reduce costs as far as possible, it would be well if existing institutions could be utilised while diagnostic control would be entrusted to competent pediatrists and obstetricians.

These enquiries will take place in 1931.

¹ A special national report was or will be published separately on the enquiries in each country.

Chapter VIII.

I. WELFARE OF THE BLIND AND TRACHOMA.

The Health Committee published a report in September 1929 on the studies undertaken at Sir George Buchanan's request in regard to measures for the protection of the blind in the various

countries (see last report, page 48).

Some members of the Executive Committee of the Preliminary International Conference for the Welfare of the Blind, held in Vienna in 1929, asked the Health Organisation to draw up a programme of work for it on questions interesting the Conference. They proposed to set up an international information and study centre.

An unofficial meeting was held in Geneva on May 14th to 17th, 1930, at which the International Labour Office was represented. The Health Organisation placed its services at the disposal of the international centre with a view to supplying it with all the technical

information it might require.

Trachoma. — Dr. Jitta and Dr. Lutrario undertook to draw up a report on the basis of the replies obtained from fifty-seven countries and territories to the questionnaire sent out by the Health Organisation to the public health services of countries in which trachoma is prevalent. The report has been printed (document C.H.822(1)).

The report showed that trachoma is an extremely widespread disease. In certain countries, the proportion of trachomatous persons amounts to from 85 to 90 per cent of the population.

The Health Committee as its fifteenth session decided to lend its moral support to the International Anti-Trachoma League, the setting-up of which was decided on at the International Ophthalmological Congress organised at Amsterdam in September 1929. It recommended to the Council that the report of Dr. Jitta and Dr. Lutrario should be distributed to the members of the Anti-Trachoma League as well as to all public health administrations interested in the combating of this disease. It further recommended the Council to acquaint States Members with the fact that this League had been constituted and "to ask them to lend full moral support to this highly humanitarian undertaking, which can only be carried on effectively by close international cooperation".

The Council, at its fifty-ninth session in May 1930, approved the above recommendations. The Health Committee delegated Dr. Lutrario for the purpose of maintaining close contact with

the Anti-Trachoma League and attending its meetings as an observer.

The International Anti-Trachoma League held its first meeting at Geneva at the end of July 1930. It has two main objects: (1) to study the results obtained during the last ten years in regard to causes, prevention and diagnosis of trachoma considered as an international disease, and (2) to work in co-operation with the international health organisations.

II. ESTABLISHMENT OF A PERMANENT SECRETARIAT FOR THE UNIFICATION OF PHARMACOPŒIÆ.

The Health Committee, at its fifteenth session in March 1930, discussed the establishment

of a permanent international secretariat for the unification of pharmacopœiæ.

The question of the unification of pharmacopæiæ has already been the subject of a number of conventions and conferences. On November 29th, 1906, a Convention was signed at Brussels for the unification of the formulæ of heroic drugs. In January 1913, a conference was held at Brussels with a view to the unification of pharmacopæiæ and the systematisation of medical specialities. Eventually, the second Brussels conference of 1925 concluded an agreement which came into force on August 21st, 1929, for the unification of the formulæ of heroic drugs, and the establishment of (1) a permanent secretariat for the unification of pharmacopæiæ and (2) two international committees, one for the study and the standardisation of the methods adopted in regard to the chemical and physico-chemical doses of heroic drugs, and the other for the study of the unification of the methods adopted in the preparation of Galenic heroic drugs.

In June 1929, the Belgian Government asked the League of Nations for its views on the establishment of the permanent secretariat and of the two committees. The Council, in September

1929, referred this letter to the Health Committee for study and report.

On February 22nd, 1930, the Belgian Government further informed the Secretary-General of the coming into force of the international agreement evolved at the second conference at Brussels. Under Articles 34 and 35 of this agreement, the provisional operation of the permanent secretariat was entrusted to the Belgian Pharmacopæiæ Committee.

At the fifteenth session of the Health Committee, there was an initial exchange of views on the question. The Committee was of opinion that it was not its province to express an opinion on the legal questions arising out of the association of these international organisations with the League of Nations, and that it was only called upon to state its opinion on the question whether the health organisation was in a position to undertake the technical responsibility for the work.

The Health Committee passed the following resolution:

"The Health Committee,

"The Health Committee,
"Having studied, in conformity with the resolution of the Council, dated August 30th, 1929, the question of the establishment of an international organisation for the unification of pharmacopæiæ, composed of a permanent secretariat and of international committees:
"Is of opinion, after having discussed the question, that the study should be continued;
"Decides to place it on the agenda of the next session, and
"Requests the Medical Director to furnish supplementary information in due course."

"Requests the Medical Director to furnish supplementary information in due course."

III. STUDY OF PHYSICAL EDUCATION.

The study of physical education was entrusted to the Health Committee by the Assembly of 1926 at the proposal of the Czechoslovak Government. The Health Committee, at its tenth session, decided to make a preliminary study of the results obtained in various centres of higher education. The study covered the following points:

The choice of professors and their training; Method of teaching physical education in schools of all grades;

Views of health experts on the programme of instruction in physical training;

Work accomplished in the various countries, difficulties encountered and advantages of international collaboration.

Two experts, Professor Piasecki, Director of the Higher Institute of Physical Education in the Faculty of Medicine at Poznan, and Dr. Taku Iwahara, Inspector of Physical Education in the Section of School Hygiene in the Ministry of Public Instruction in Tokio, visited alone or together the following countries: Austria, Belgium, Czechoslovakia, Denmark, France, Germany, Great Britain, Italy, the Netherlands, Norway, Poland, Sweden, Switzerland, Union of Soviet Socialist Republics and Yugoslavia.

Professor Piasecki submitted a preliminary comparative study of the physical education movement in the light of possible co-ordination of the research on the subject. The most important

chapters deal with the following points:

The various international methods of physical education;

Centres for the training of specialists and scientific centres; Problems arising as a result of this enquiry;

Necessity and prospects of international collaboration.

The conclusion of the enquiry was that physical education, under medical supervision, should logically come before preparation for games, and that the programme of gymnastic exercises should deal chiefly with:

Condition of the nervous system;

(2) Training in respiration;
(3) Progressive graduation of the training so as to avoid biological fatigue (in connection with the irrational use of gymnastics, it would be well to give attention to the question of games tours and competitions between schools, national and international, the aim being to reduce to a minimum the practice of record-hunting, which leads to exaggeration of exercises in themselves healthy and methatic and stultifies their beneficent physical and moral effects): selves healthy and æsthetic, and stultifies their beneficent physical and moral effects);

(4) Training of the instructing staff, and the definition of fundamental principles and of a minimum standard to be applied in all schools.

II. The Health Committee decided, at its sixteenth session to appoint a group of experts to study physical education with Professor Ottolenghi, Professor of Hygiene in the University of Bologna, as Chairman.

The Health Committee took the view that it would be desirable, before appointing this group of experts, to obtain the preliminary advice of certain well-known persons, and to draw up a programme of provisional studies for submission to the group of experts. It was proposed to convoke the following experts at Copenhagen on January 22nd, 1931:

> Professor Dürig, of Vienna; Professor Knoll, of Hamburg; Professor LILJESTRAND, of Stockholm; Professor LINDHARD, of Copenhagen; Professor LOEWY, of Davos; Professor PIASECKI, of Poznan; Dr. SCHNELL, of Halle.

The agenda of the discussions was as follows:

Statement by the Chairman;

- Points suggested for consideration by the experts:
 - Scientific criticism of the various forms of exercises; Hygiene of effort and contra-indication of exercises;
 - Possible disadvantages, dangers and pathological affections as a result of sporting exercises practised to excess;

Report by Professor Piasecki and other reports;

General discussion and preparation of a draft programme for submission to the Health Committee;

(5) Miscellaneous.

Professor Ottolenghi will submit a report on the subject to the Health Committee at its seventeenth session.

IV. ALCOHOLISM.

On the proposal of the Finnish, Polish and Swedish delegates, the 1928 Assembly passed a resolution on the subject of alcoholism, the second paragraph of which was in the following terms:

"The Assembly decides to ask the Council to request the Health Organisation of the League of Nations to collect full statistical information regarding alcoholism, considered as a consequence of the abuse of alcohol, giving prominence inter alia, according to the data available, to the deleterious effects of the bad quality of the alcohols consumed . . .

"It is understood that this resolution does not refer to wine, beer or cider."

The Health Committee, on the basis of this resolution, which was communicated to it by the Council at the latter's meeting of September 26th, 1928, "for its information and for a report on the scheme suggested", decided, at its thirteenth session in October 1928, to enquire of the public health administrations of Finland, Poland and Sweden as to the points best suited for international study within the limits of the Assembly's resolution, with a view to supplying the information specially desired by them.

The Swedish administration, having undertaken special studies into the question of the quantity of alcohol in the blood or in the breath of an individual justifying the supposition of alcoholic influence, will communicate the results of its researches to the Health Committee if

The administration of the Finnish Medical Services proposes special study of the four following points:

desired.

Statistics as to the causes of mortality;

Doctors' certificates of death; Case records kept in hospitals;

The quality and quantity of alcoholic beverages consumed.

The report then recommends that, even if the whole enquiry is to be concerned specifically with the so-called "bad" alcohols, the effects of alcoholic beverages should not be neglected but should be studied simultaneously.

The public health administration of Poland associates itself with the view of the Finnish administration.

The representatives of these administrations met at Geneva on the occasion of the 1930 Assembly, and decided by common agreement to ask the Health Organisation to study the problem from the four following points of view:

- Alcohol and accidents;
- Alcohol and tuberculosis; Alcohol and venereal diseases;
- Alcohol and mental diseases.

At its sixteenth session, the Health Committee considered these suggestions. The Committee was of opinion that the question of alcoholism in connection with accidents might present a certain interest, and it requested the Medical Director to prepare, in consultation with the International Labour Office, a note on the available literature on the subject. The Committee further expressed a wish to be informed as to the studies undertaken with regard to the best method of determining the presence of alcohol in the blood.

As regards the relationship between alcoholism and tuberculosis, as the Health Organisation has undertaken a study as to the incidence of tuberculosis in the three Scandinavian countries, it was of opinion that this report, when ready, might be usefully communicated to the three administrations concerned.

Finally, the Committee agreed to communicate to the three administrations concerned detailed statistics with regard to the incidence of delirium tremens in the Scandinavian countries, and further decided to collect information with regard to the measures adopted by certain countries for the control of the consumption of liquors.

All these studies are proceeding.

V. IMPROVEMENT OF PENAL ADMINISTRATION.

The Council of the League of Nations, at its fifty-eighth session in January 1930, passed the following resolution:

"In view of the fact that the improvement of penal administration is at present occupying the attention of many of the peoples of the world and that there are certain international aspects to the question:

"The Council requests the Assembly to place the question on its agenda with the object of deciding the best way in which the League of Nations can co-operate with the International Prison Commission and other interested organisations in their efforts to assist in the development of prisons in accord with modern economic, social and health standards.

The Council proposed the following procedure for the study of this question:

- I. The International Prison Commission and the Howard League for Penal Reform 1 each to put in a memorandum stating:
 - (a) Their opinion as to the aspects of the question capable of being treated with advantage on an international basis by the League of Nations;

(b) The facts on which their opinion is based.

The International Labour Office, the Economic Committee, the Health Committee and the Commission for the Protection and Welfare of Children and Young People to be consulted on such points raised in the memorandum as may appear to fall within the competence of these organisations.

3. A report to be submitted to the Assembly on the question as a whole to enable the Govern-

ments to decide in what respects action by the League is possible and desirable.

The Health Committee, at its sixteenth session, decided to entrust the study of this memorandum, so far as it relates to questions of public health, to a Sub-Committee composed of Dr. Hamel, Dame Janet Campbell, Professor Fitzgerald and Professor Scoseria.

VI. ANTI-RABIES TREATMENT.

As stated in the last report, the Health Organisation published this year an "Analytic Review of the Reports of the Pasteur Institutes on the Results of Anti-Rabies Treatment".

It will be remembered that, following on a resolution of the International Rabies Conference in 1927 the various anti-rabies institutions were asked to submit reports on the results of anti-rabies treatment in their respective cases.

The report referred to above was drawn up by Lieutenant-Colonel E. J. McKendrick, Director of the Laboratory of the Royal College of Physicians in Edinburgh (document C.H.844).

VII. RECOMMENDATIONS OF THE SECOND CONFERENCE ON THE HEALTH AND WELFARE OF THE MERCHANT MARINE.

The second conference on the health and welfare of the merchant marine held in October 1929, the Health Committee being represented by Professor Léon Bernard, was specially concerned with the treatment of venereal diseases, tuberculosis and typhoid fever. The conference requested the Health Organisation:

"(a) In consultation with the medical officers of the Mercantile Marine, to recommend alternative systems of treatment of venereal disease, which, whilst being effective, can meet the peculiar circumstances of seamen and be pursued with the minimum of economic hardship

to the patient;

"(b) To endeavour to secure agreement by nations that the treatment of seamen suffering from venereal disease shall be pursued systematically in their different port clinics according to its (the conference's) recommendations."

The Health Committee, at its fifteenth session in May 1930, passed the following resolution on the subject:

"The Health Committee,

"Having heard its representatives at the second conference on the health and welfare

of the merchant marine:
"Decides to submit the resolution transmitted by the conference to the Committee of experts on syphilis and cognate subjects".

Colonel Harrison, one of the experts referred to above, submitted to the committee of experts on syphilis and cognate subjects a note relating to a new method of treatment specially applicable to seamen. Experiments with this method are to be made by the various members of the Committee (document C.H. 896).

The Howard League for Penal Reform is a private British society with athliated groups in the various European

and Asiatic countries.

The International Prison Commission was established by the eighth International Prison Congress, held in Washington in 1910, and is composed of representatives of twenty-seven Governments.

VIII. TUBERCULOSIS.

1. Reference has been made in preceding annual reports to the study of tuberculosis mortality in Scandinavia being carried on by the experts of the three countries under the auspices of the

Health Organisation.

Dr. Ostenfeld (Denmark) drafted a general report on the basis of the three national reports which were the subject of discussion in September 1929 at Copenhagen. In the general report, he compares the statistical material collected in the three countries in respect of the principal factors to which deaths from tuberculosis are attributable as well as the measures of prevention

The three experts met again at Oslo in connection with the Conference of the International Anti-Tuberculosis Union (August 12th to 15th, 1930) in order finally to complete the drafting of the general report, which will be published at the beginning of 1931.

2. BCG. — The studies in regard to BCG were continued in the various countries in accordance with the plans approved by the Conference of Experts held in October 1928. The Secretariat continued to follow the bibliography of the subject and, at the request of certain research workers, undertook the compilation of the statistical material collected. The BCG formed part of the agenda of the Conference of the International Anti-Tuberculosis Union referred to above, at which the Health Committee was represented by Professor Léon Bernard.

IX. DANGERS RESULTING FROM THE USE OF X-RAYS.

As stated in the last report, Professor Wintz, Chief of the University Gynæcological Clinic at Erlangen, drew up a report in which he reviewed the information sent in to the Health Organisation in reply to its questionnaire on the subject of the laws and regulations in force in various countries to guard against the dangers resulting from the use of X-rays. This report will be published in the course of 1931.

X. ENQUIRY INTO THE HEALTH CONDITIONS IN THE SOUTHERN PACIFIC ISLANDS.

One of the recommendations of the International Pacific Health Conference, held in Melbourne in 1926, was to the effect that the Health Organisation should be invited to undertake a health survey of certain islands in the Pacific. The question came before the Assembly in 1927, when a resolution was adopted in which the hope was expressed that the Health Committee would give the matter full and early consideration. The Health Committee at its eleventh session (October 1927) agreed that the preliminary arrangements should be made for carrying out the survey at an early date.

The mission, which was entrusted to Dr. Hermant, Médecin principal de l'Assistance médicale de l'Indo-Chine, and Dr. R. W. Cilento, Director of the Division of Tropical Hygiene, Commonwealth Department of Health of Australia, and commenced in October 1928 was concluded at the beginning of April 1929. During this period, a detailed survey was made of health conditions in Fiji, New Caledonia, New Guinea, the New Hebrides, Papua, and Sollomo Islands. In each territory visited, a set programme was followed which included visiting all institutions of medical and cointife interest as well as other activities corried as her lead Constitutions of the conditions. and scientific interest, as well as other activities carried on by local Government authorities. A fixed agenda paper had been drawn up which contained all the matters thought to be of importance, and formed the subject of discussion with each administration visited. In this way, it was possible to make comparisons of the conditions in each territory. The agenda included:

(1) A survey of health conditions;
(2) A study of the health problems under the following headings:

Causes of morbidity and mortality;

Question of population; Special diseases;

Extent of medical services, official and unofficial;

Additional subjects.

Conclusions of the Mission.

The report of the mission (document C.H.829) reviews in detail for each territory visited the conditions found to exist. Among these, it will be seen that, taking Melanesia as a whole, the public health picture presents several different aspects. The first, and perhaps the most important, is the distribution of malaria, which divides the groups into two fairly well-defined areas, one infected and the other non-infected. The second important aspect is the question of emigration

from Asia, which has, to a considerable extent, affected the conditions of health of the territories concerned. It would appear that the distribution of amœbic dysentery coincides almost exactly with the distribution of the Asiatic population. There are throughout the whole of the territories visited three almost uniformly prevalent diseases—filariasis, frambæsia and hookworm. There is also the economic question of the survival of or increase in the native population.

All Governments in the territories visited are actively concerned with the application of public health measures among the native population. This involves the provision of a suitable, adequately manned staff, whose attention will be devoted mainly to problems of native medicine; in addition, there is the question of the education of the native population in regard to medical

treatment along the lines of modern medicine.

Certain medical problems were regarded as valuable fields for co-ordinated research. These comprised:

(a) Disease problems which could be investigated locally on a uniform plan, with subsequent comparison of data and discussion at general conferences;

(b) Disease problems beyond the resources of local administrations;

(c) Problems in respect of native education in medicine infent.

Problems in respect of native education in medicine, infant mortality and infant welfare, population and depopulation, questions of co-operative and auxiliary medical factors

ACTION TAKEN ON THESE CONCLUSIONS.

During the 1930 Assembly, the delegate for Australia, in referring to the report of this mission. emphasised the necessity for continuation of research work in these islands and referred specifically to the desirability of carrying out a mosquito survey in Melanesia, with special reference to malaria and filariasis.

This is a matter which would come within the scope of the activities of the Malaria Commission, and the Health Committee at its sixteenth session decided to refer this question to that Commission.

Another question raised in the report of Dr. Hermant and Dr. Cilento concerns the training of medical personal, and public health officers. The Health Committee decided to place the facilities of its scholarships and study tours at the disposal of the Governments of the Pacific Islands, particularly with a view to enabling medical officers to attend the congresses of the Far Eastern Association of Tropical Medicine.

A third problem of particular interest is that of syphilis. This disease is apparently unknown in the Fiji Islands, the Solomon Islands, New Guinea, the territory of Papua and New Caledonia. This seemed very astonishing in view of the contact which had already occurred long ago with infected elements; but the Commission had noted that yaws was extremely widespread, 95 per cent of the inhabitants being infected. The question therefore arose whether yaws did not tend to confer immunity from syphilis. The Health Committee decided to refer this question to the reporting Committee on questions relating to venereal diseases.

Appendix I.

HEALTH COMMITTEE: ADVISORY COUNCIL OF THE EASTERN BUREAU AND COMMISSIONS.

THE HEALTH COMMITTEE.

Dr. Th. Madsen, Director of the State Serum Institute, Copenhagen (Danish) (Chairman).

M. O. Velghe, Honorary Secretary-General of the Ministry of the Interior and of Health,
Brussels; President of the Comité permanent de l'Office international d'Hygiène publique (Belgian) (Vice-Chairman, ex-officio).

Dame Janet Campbell, Senior Medical Officer, British Health Ministry, London (British) (Vice-Chairman in 1931).

Professor J. Cantacuzène, Professor of Bacteriology and Director of the Institute of Experimental Medicine, Bucharest (Roumanian) (Vice-Chairman in 1931).

Dr. J. Heng Liu, Chinese Health Minister (Chinese) (Vice-Chairman in 1931).

Professor Vittorio Ascoli, Professor of the Medical Clinic of Rome University, Member of the Academy, Director of the High School of Malariology at Rome (Italian) (deceased).

Professor Léon Bernard, President of the Conseil supérieur d'Hygiène de France (French).

Professor Jules Border, Director of the Pasteur Institute for Brahant, holder of the Nobel Prize

Professor Jules Border, Director of the Pasteur Institute for Brabant, holder of the Nobel Prize (Belgian).

Sir George Buchanan, Senior Medical Officer of the British Health Ministry, London (British). Dr. H. CARRIÈRE, Director of the Swiss Public Health Service at Berne (Swiss).

Professor Carlos Chagas, Director of the Oswaldo Cruz Institute at Rio de Janeiro (Brazilian). Dr. W. Chodzko, former Polish Health Minister, Director of the State School of Health, Warsaw (Polish).

Surgeon-General H. S. Cumming, Director-General of the United States Public Health Service, Washington, D.C. (American).

Professor J. G. FITZGERALD, Professor of Preventive Medicine and Director of the School of Public Health of the University of Toronto, Director of the Connaught Laboratories, Toronto (Canadian).

General J. D. GRAHAM, Indian Medical Service, Public Health Commissioner with the Government of India, New Delhi (British).

Dr. C. Hamel, President of the Reichsgesundheitsamt, Berlin (German).

Professor J. Jadassohn, Director of the Dermatological Clinic of Breslau University (German).

Dr. N. M. J. Jitta, former Chairman of the Public Health Council of the Netherlands, The Hague (Dutch).

Professor Ricardo Jorge, Technical Chairman of the Conseil supérieur d'Hygiène, Lisbon (Portuguese).

Dr. A. LUTRARIO, former Director-General of Public Health, Ministry of the Interior, Rome (Italian).

Professor Gustav Pittaluga, Professor of Parasitology at Madrid University and Director of the School of Hygiene, Madrid (Spanish).

Dr. L. RAYNAUD, Inspector-General of the Health Service of Algeria (French).

Professor José Scoseria, Chairman of the Uruguayan Health Council, Montevideo (Uruguayan). Dr. A. Stampar, Professor of Preventive Medicine at the University of Zagreb (Yugoslav). Dr. M. Tsurumi, Representative of the Central Sanitary Bureau at the Bureau du Japon, Paris

In view of the difficulty experienced by Japanese experts in coming frequently to Geneva, one of the three following experts will be invited to attend each session of the Committee:

Professor Nagayo, Director of the Government Institute for Infectious Diseases at the Imperial University, Tokio (Japanese).
Professor MIYAJIMA, Professor at the Kitasato Institute, Tokio (Japanese).

Dr. HATA, Professor at the Kitasato Institute, Tokio (Japanese).

Advisory Council of the Eastern Bureau.

(December 1930 Session.)

rrench indo-Unina	Dr. J. J. Van Lonkhuyzen (Chairman for 1930). Dr. F. H. Guérin (Vice-Chairman for 1930).
British Colonies and Dependencies .	Dr. A. L. Hoops.
British India	Major-General I. D. Graham
China	Dr. S. C. Yin.
Japan	Dr. M. Katsumata.
Japanese Colonies	Dr. K. Shimoto.
Siam	Dr. Phya Boriraksh Velkar

Sub-Commission on the Budget and Report of the Far-Eastern Bureau:

Dr. N. M. J. JITTA (Chairman). Sir George Buchanan.

Dr. HENG LIU.

Professor B. NOCHT.

Dr. L. RAYNAUD. Dr. M. TSURUMI.

M. O. VELGHE.

COMMISSIONS OF THE HEALTH COMMITTEE.

(a) Malaria Commission.

Professor Vittorio Ascoli (Chairman) (deceased).

Professor J. Cantacuzène.

Dr. C. Chagas.

General J. D. GRAHAM. Professor Ricardo Jorge.

Dr. A. Lutrario.

Professor G. PITTALUGA.

Dr. L. RAYNAUD.

Corresponding Members and Experts:

Dr. Anigstein, Technical Adviser on Malaria to the Siamese Government.

Dr. Bailey, Rockefeller Foundation.

Sir Andrew Balfour, Director of the London School of Hygiene and Tropical Medicine (deceased).

Dr. M. Balfour, Health Centre, Athens.
Dr. A. Barber, Rockefeller Foundation, Lagos (Nigeria).
Dr. C. A. Bentley, Director of Public Health, Calcutta.

M. Bonamico, Chief of the Bureau of Civil Engineers, Rome. Dr. F. Boyd, International Health Board of the Rockefeller Foundation.

Professor Brumpt, Faculty of Medicine, Paris. Dr. Sadi de Buen, Central Malaria Commission, Madrid.

Lieut.-Colonel S. R. Christophers, Central Research Institute, Kasauli (India).

Dr. R. K. Collins, Rockefeller Foundation, Ministry of Health, Sofia. Major G. Covell, Assistant Director, Malaria Survey, Kasauli (India). Mr. T. D. Evans, Assistant Director, Public Works Department, Nigeria.

Dr. Ferrel, Rockefeller Foundation.

Dr. R. Green, Medical Research Institute, Kuala Lumpur (Fed. Malay States). Dr. W. C. Hackett, Rockefeller Foundation, Experimental Station for Anti-malaria Work, Rome.

Colonel S. P. James, Ministry of Health, London.
Dr. I. J. Kligler, Health Department, Jewish University, Jerusalem.
Professor Makato Koidzumi, Faculty of Medicine of Keio University, Japan.
Dr. A. Labranca, of the Italian Public Health Service, Ministry of the Interior, Rome.
Professor Marchoux, Pasteur Institute, Paris.
Professor E. Marcinovsky, Director of the Institute of Tropical Medicine, Moscow.
Dr. K. Markoff Inspector of Malaria attached to the Bulgarian Public Health Service. S.

Dr. K. Markoff, Inspector of Malaria attached to the Bulgarian Public Health Service, Sofia.

Dr. K. F. MAXCY, United States Public Health Service. Dr. A. MISSIROLI, Director of the Experimental Station for Anti-malaria Work, Rome.

Professor Molloff, Faculty of Medicine, Sofia.

Dr. C. Moutoussis, Malaria Inspector, Athens.

Professor Muhlens, Institute for Tropical Diseases, Hamburg.

Professor B. Nocht, Institute for Tropical Diseases, Hamburg.

Professor D. Ottolenghi, Royal University of Bologna.

Dr. Peltier, Health Service of the Colonial Troops, Marseilles.

Sir Ronald Ross, Director of the Ross Institute and Hospital for Tropical Diseases, London.

Professor Claus Schilling, Robert Koch Institute, Berlin.

Professor Claus Schilling, Robert Koch Institute, Berlin.
Professor Schuffner, Director of the Tropical Section of the Royal Colonial Institute, Amsterdam.
Dr. Sfarcic, Director of the Anti-malaria Station, Trogir, Yugoslavia.
Professor E. Sergent, Pasteur Institute of Algeria.
Major J. A. Sinton, Director, Malaria Survey of India, Kasauli.
Dr. A. I. Stanton, Colonial Office, London.
Professor N. H. Swellengrebel, Institute of Tropical Hygiene, Amsterdam.
Sir Malcolm Watson, Ross Institute and Hospital for Tropical Diseases, London.
Dr. C. M. Wenyon, Director in Chief, Wellcome Bureau of Scientific Research, London.
Dr. L. L. Williams, Chief of Anti-malaria Section, U.S. Public Health Service.
Dr. Senior White, Chief Malariologist, Bengal Nagpur Railway (India).
Professor G. Zotta, Professor of Parasitology, Serological Institute, Bucharest.

Professor G. ZOTTA, Professor of Parasitology, Serological Institute, Bucharest.

(b) Joint Commission of Experts on Public Health and Health Insurance.

Members nominated by the Health Committee of the League of Nations:

Sir George Newman, Chief Medical Officer at the British Ministry of Health (British) (Chairman).

Dr. E. Bellencontre, President of the Association générale des médecins de France (French).

Dr. A. Foramitti, Deputy Director of the Federal Public Health Service of Austria (Austrian).

Dr. C. HAMEL.

Professor T. KITASHIMA, Chairman of the Council of the Japanese Medical Association (Japanese). Dr. J. Kuhn, Editor-in-Chief of the Ugeskrift for Laeger (Danish).

Members nominated by the Governing Body of the International Labour Office:

Dr. A. GRIESER, Director in the Ministry of Labour (German).

M. A. JAUNIAUX, Senator, Secretary-General of the Union nationale des Fédérations de mutualité socialistes (Belgian).

M. L. OLIVIER, Member of the Executive Committee of the Fédération nationale de la mutualité, Paris (French).

M. K. Osiowski, Director of the Central Union of Health Insurance Funds, Warsaw (Polish). Mr. E. Potts, Honorary Secretary of the National Association of Insurance Committees (British). Dr. L. WINTER, former Minister for Social Welfare; Vice-President of the Central Union of Health

Insurance Funds of Czechoslovakia (Czechoslovak).

And its Sub-Commissions:

(1) Sub-Commission for the Education of the Health Insured:

Dr. C. HAMEL.

M. L. OLIVIER.

(2) Sub-Commission on the Prevention of Venereal Disease:

Dr. E. Bellencontre.

Dr. A. GRIESER.

(3) Sub-Commission on the Protection of School-children:

Dr. J. Kuhn. Mr. E. Potts.

(4) Sub-Commission on Preventive Medicine:

Experts appointed by the Health Organisation of the League of Nations:

Dr. L. Heijermans, Director of the Medical and Sanitary Service, Amsterdam (Netherlands) (Chairman).

Professor J. Parisot, Professor of Hygiene at the Faculty of Medicine of Nancy (French). Dr. G. Seiffert, Medical Adviser to the Ministry of the Interior, Secretary of the Bavarian Federation for the Development of Public Health (German).

Dr. A. Stampar, Director of the Public Health Department of Yugoslavia (Yugoslav).

Dr. Bela Johan, Director of the State Institute of Hygiene, Budapest (Hungarian).

Experts appointed by the International Labour Office:

Dr. E. Bresky, Chief Medical Officer to the Central Institute of Social Insurance (Czechoslovak).

Dr. R. Bureau, Medical Adviser to the National Union of Federations of Social Insurance Societies of Belgium (Belgian).
Dr. W. Duncan, Divisional Medical Inspector (British).

Dr. Cesare Giannini, Chief Medical Officer to the National Social Insurance Fund (Italian).

Dr. H. Kluszynski, Medical Adviser to the Central Union of Polish Health Insurance Funds (Polish).

Dr. Walter PRYLL, Chief Medical Officer to the Berlin Central Local Fund (German).

(5) Sub-Commission on the Prevention of Tuberculosis:

Dr. C. HAMEL.

Professor T. KITASHIMA.

M. A. Jauniaux.

M. O. Osiowski.

(6) Sub-Commission on the Protection of Maternity, Infancy, and the Child of Pre-school Age:

Dr. A. Foramitti.

Dr. L. WINTER.

(c) Permanent Commission on Standardisation of Sera, Serological Reactions and Biological Products.

Dr. Th. MADSEN (Chairman).

Professor Jules Bordet (Belgian).
Professor H. H. Dale, Director of the Bio-chemical and Pharmacological Departments of the National Institute of Medical Research, London (British).

Professor W. Kolle, Director of the Institute of Experimental Therapy, Frankfort-on-Main

(German).

Professor Louis Martin, of the Pasteur Institute, Paris (French).

Dr. G. McCoy, Director of the Hygienic Laboratory of the United States Public Health Service (American).

(d) Commission of Experts for the Co-ordination of Sleeping-sickness Research.

Sir Andrew Balfour, Director of the London School of Tropical Medicine (Chairman) (deceased).

Dr. A. G. Bagshawe, Professor at the London School of Tropical Medicine. Professor E. van Campenhout, former Director of the Health Service of the Belgian Colonial

Office, Brussels.

Professor Aldo Castellani, Director of Tropical Medicine and Dermatology, Ross Institute and Hospital for Tropical Diseases, London.

Professor Gustave Martin, School of Tropical Medicine, Marseilles.

Professor Damas Mora, Director of the Health Services of Angola.

Professor G. PITTALUGA.

Professor Richard Strong, Department of Tropical Medicine, Harvard University Medical School.

Dr. Max Taute, General Medical Adviser, Ministry of the Interior, Berlin.

(e) Leprosy Commission.

Professor Carlos Chagas (Chairman). Surgeon-General H. S. Cumming.

General J. D. GRAHAM.

Professor Nagayo.

Professor B. NOCHT.

Dr. MITCHELL, Director of Public Health, Pretoria.

Professor E. Muir, School of Tropical Medicine, Calcutta.

Sir Leonard Rogers, London.
Dr. H. W. Wade, Medical Director of the L. Wood Memorial, Culion Leper Colony, Culion Palawan, Philippines.

(f) Opium Commission of the Health Organisation.

Dr. H. CARRIÈRE (Chairman).

Dr. W. CHODZKO.

Surgeon-General H. S. CUMMING.

Dr. C. HAMEL.

Dr. HENG LIU.

Professor Ricardo Jorge. Professor B. Nocht.

Dr. Tsurumi.

M. O. VELGHE.

Expert:

Professor E. von Knaffl-Lenz, Professor at the Faculty of Medicine of the University of Vienna (Austrian).

(g) Commission on Ship Fumigation.

Surgeon-General H. S. CUMMING (Chairman).

Sir George Buchanan.

General J. D. GRAHAM. Dr. N. M. J. JITTA. Professor B. NOCHT.

Dr. W. DREYER, Port Healt Officer, Bremen. M. O. VELGHE.

Dr. Monier WILLIAMS, of the British Health Ministry.

Dr. P. G. Stock, of the British Health Ministry.

(h) Sub-Commission for the Sanitary Re-organisation of Chinese Ports.

Dr. A. LUTRARIO (Chairman).

Sir George Buchanan.

Surgeon-General H. S. CUMMING.

Dr. N. M. J. JITTA. Professor MIYAJIMA.

Dr. L. RAYNAUD.

(i) Preparatory Commission on the Spanish Proposal for the Convocation of a European Conference on Rural Hygiene.

Professor G. PITTALUGA (Chairman).

Dr. H. Carrière. Dr. W. Chodzko.

Professor FITZGERALD.

Dr. C. HAMEL.

Dr. A. LUTRARIO. Dr. Th. MADSEN.

Dr. A. Stampar.

A representative of the International Institute of Agriculture, Rome.

A representative of the International Labour Office.

(j) Sub-Commission on Penal Administration.

Dr. C. HAMEL (Chairman).

Dame Janet CAMPBELL.

Professor FITZGERALD.

Professor Scoseria.

(k) Reporting Committee for Maternal Welfare and Hygiene of Infants and Children of Pre-school Age.

Dame Janet CAMPBELL (Chairman).

Professor R. Debré.

Professor Gorter.

Professor Rott.

Professor Gammeltoft.

Secretaries:

Dr. Olsen.

Professor Prausnitz.

Secretary-rapporteur for the Question of Hygiene of Children of Pre-school Age:

Dr. Woringer, Assistant at the Clinic of Pediatrics, Strasburg.

(1) Reporting Committee on Questions relating to Venereal Diseases.

Professor Jadassohn (Chairman).

Professor Gougerot, Hôpital Saint-Antoine, Paris.

Colonel L. W. HARRISON, Ministry of Health, London.

Secretary:

Professor Jessner.

(m) Reporting Committee on Questions relating to the Control of Tuberculosis.

Professor Léon BERNARD (Chairman).

Dr. C. Hamel.

Professor MacNalty, Ministry of Health, London, S.W.I.

Dr. Willard B. Soper, Medical Director, William Wirt Winchester Hospital, New Haven, Conn.

Secretary:

Dr. Etienne Burnet.

- (n) Commission on Rural Health Centres.
- Dr. A. Stampar.
- Dr. G. Seiffert, Counsellor to the Bavarian Ministry of the Interior, Munich. Dr. A. Metz, County Medical Officer, Holback, Denmark.

Dr. Béla Johan, Director of the State Institute of Hygiene, Budapest.

Dr. J. H. Tuntler, Inspector, Child Welfare, Tuberculosis and Venereal Diseases Service, Groningen, Netherlands.
Professor Parisot, Professor of Hygiene and Preventive Medicine, Nancy.
Dr. A. Labranca, General Director of Public Health, Ministry of the Interior, Rome.
Dr. W. R. Ash, County Medical Officer, Derby.
M. Vimeux, Director General of the Union mutuelle agricole, Paris.
Dr. J. Thurnher, Vienna.
M. M. Petrik, Chief of the Division of Sanitary Engineering, Institute of Hygiene, Zagreb.
Dr. Hynek Pelé, State Institute of Hygiene, Prague.

Appendix II. BUDGET OF THE HEALTH ORGANISATION FOR 1931.

(in Swiss francs)

	ESTIMATES FOR 1931			ESTIMATES FOR 1930			Expenditure for 1929			
International Health Organisation	League contribution	Grant from International Health Division of Rockefeller Foundation	Total	League contribution	Grant from International Health Division of Rockefeller Foundation	Total	League contribution	Grant from International Health Division of Rockefeller Foundation	Total	
The second was a second was										
I. Health Committee, Secretariat and General Work of the Organisation: 1. Sessions of the Health Committee 2. Salaries of the Health Section	59,000 414,376	_	59,000 414,376	60,000 370,944		60,000 370,944	26,940 319,503		26,940 319,503	÷
3. Travelling and removal expenses of the	1) .	1			1	1	_	
Secretariat	50,000 15,000		50,000 15,000	48,000 19,000	-	48,000	48,200	-	48,200	
 4. General printing and documentation 5. Cables, telegrams and telephones 6. Miscellaneous petty expenses and unfore- 	10,000	_	10,000	12,000	_ =	19,000 12,000	14,729 27,220		14,729 27,220	
seen contingencies	3,000		3,000	2,000		2,000	1,972	-	1,972	
years	_	_	_	_		_	6,911	_	6,911	
 Intelligence, Technical and Research Work of the Organisation: Technical committees and sub-committees, conferences, missions, work of experts and collective and individual studies. Salaries of the temporary staff Publications, printing and documentation 	199,000 — 74,600	143,704 361,710 20,000	342,704 361,710 94,600	240,000 — 70,000	275,305 280,109 20,000	515,305 280,109 90,000	355.922 ———————————————————————————————————	125,641 211,397 46,315	481,563 211,397 137,631	
4. Cables and telegrams	10,000		10,000	12,500	10,000	22,500	4,460	_	4,460	
5. Miscellaneous and unforeseen6. Contribution to Singapore Bureau							2,838		2,838	
7. Miscellaneous enquiries	75,000 260,000	75,000	150,000 260,000	15,000	15,000	30,000 150,000	15,000 —	=	15,000	
III. Expenses in connection with a system of liaison between the various national public health services	150,000	150,000	300,000	149,450	150,000	299,450	33,391	167,313	200,704	
] 			ļ 				-
Total	1,319,976	750,414	2,070,390	1,148,894	750,414	1,899,308	948,402	550,666	1,499,068	

Appendix III.

EASTERN BUREAU OF THE INTERNATIONAL HEALTH ORGANISATION.

Estimates for 1931 adopted by the Eleventh Assembly.

		1931 Estimates	Expenditure in 1929
т	Staff salaries, allowances and travelling expenses of the staff	Straits	dollars
	and expenses for the co-ordination of research	62,561	46,879
II.	Cables and postage; printing, stationery and equipment	28,200	24,994
III.	Rent, electricity and telephone	3,220	3,190
IV.	Travelling expenses of members of Advisory Council	5,500	4,105
V.	Miscellaneous	2,500	1,751
		101,981	80,919

Appendix IV.

LIST OF PUBLICATIONS ISSUED DURING 1930.

I. Service of Epidemiological Intelligence and Public Health Statistics.

Periodicals.

- I. Weekly Bulletins (bilingual), Nos. 201-252 inclusive (approximately 12to 16 pages each, size 22 × 33 cm.).
- 2. Monthly Epidemiological Reports (bilingual), Nos. 133-144 inclusive (approximately 40 pages each, size 24.5×32 cm.).
- 3. Annual Epidemiological Report (bilingual), E.I.13. "Statistics of Notifiable Diseases for the Year 1928". Fasciculus, 70 pages, size 24.5×32 cm.

Series.

- I. Statistical Handbooks:
 - C.H.834. "Official Vital Statistics of the Dominion of Canada": Fourteenth volume of this series of handbooks. French, 91 pages; English, 85 pages; size 18.5×24 cm.
- 2. International Health Year-Book (annual):
 - C.H.838. International Health Year-Book 1929 (Fifth year). Reports (with Health and Vital Statistics) on the Public Health Progress of Forty Countries and Colonies in 1928. I vol., French or English, 1,510 pages; size 18.5×24 cm. December 1930.

II. SPECIAL STUDIES AND INVESTIGATIONS.

- I. Infant Welfare, Health Experts on
 - (a) Enquiry in Various European Countries:
 - C.H.820. Memorandum relating to the Enquiries into the Causes and Prevention of Still-births and Mortality during the First Year of Life (Austria, France, Germany, Great Britain, Italy, Netherlands, Norway).
 - 1 vol., French, 101 pages; or English, 99 pages; size 18.5 × 24 cm. June 1930. National Reports Series (Annexes to document C.H.820):
 - C.H.820 (a). Report by Dame Janet Campbell, with Statistical Notes by Peter L. McKinlay on Infant Mortality as a Result of the International Enquiry of the Health Organisation of the League of Nations, English Section.
 - I vol., English, II8 pages, size 15.5 × 24.5 cm. September 1930.
 - C.H.820(b). Report on Infant Mortality in the Netherlands, by Professor R. Gorter: "Het Volkenbondsonderoek naar de Oorzaken der Zuigelingensterfte".
 - 1 vol., Dutch, 81 pages; size 16.5×24.5 cm. September 1930.
 - C.H.820(c). Report on Infant Mortality in Norway (Oslo and Hedmark), by Dr. Arthur Collett.
 - 1 vol., French, 68 pages; size 15×21 cm. September 1930.
 - C.H.820(d). Report on Infant Mortality in Austria, by E. Nobel and S. Rosenfeld: "Ursachen und Bekämpfung der Säuglingssterlichkeit in Osterreich".
 - 1 fasciculus, German, 46 pages; size 22×33 cm. September 1930.
 - (b) Enquiries in South America:
 - C.H.908(I). Enquiries into Infant Mortality in South America, by Robert Debré and O. E. W. Olsen. Report approved by the Health Committee at its sixteenth session (September 29th to October 7th, 1930).
 - 1 booklet, English or French, 20 pages. Size 18.5 × 24 cm. December 1930.
- 2. Interchanges of Public Health Personnel.
 - C.H./E.P.S./157 and Errata. Also Annexes C.H./E.P.S./157 (a) and C.H./E.P.S./157(b). "L'Hygiène publique en France". Published for the use of the participants to the Collective Study Tour organised in France by the Health Organisation of the League of Nations. 2 vols., French only, 446 pages; size 14.5 × 24 cm. September 1930.

- 3. Leprosy Commission.
 - C.H.887. Report of the Study Tour of the Secretary of the Leprosy Commission in Europe, South America and the Far East (January 1929 to June 1930).
 - ı booklet, French or English, 48 pages. Size 18.5 imes 24 cm. September 1930.
- 4. Malaria Commission.
 - C.H./Malaria/138. Programme of the Malaria Course organised by the Health Organisation of the League of Nations for the Year 1930.
 - 1 booklet, mixed French-German-Italian, 21 pages; size 16.5 × 24 cm. March 1930.
 - C.H./Malaria/145. "Immunité dans le paludisme expérimental", by Drs. M. Ciuca, L. Ballif and Mr. M. Vieru.
 - I fasciculus, French only, 20 pages; size 18.5 × 24 cm. May 1930.
 - C.H./Malaria/147. Report of the Malaria Commission on its Study Tour in India (August 23rd to December 28th, 1929).
 - ı vol., English or French, 87 pages; size 18.5 \times 24 cm. September 1930.
- 5. Anti-Rabies Vaccination.
 - C.H.844. Analytical Review of Reports from Pasteur Institutes on the Results of Anti-Rabies Treatment, by Lt.-Col. A. G. McKendrick, I.M.S., Director of the Laboratory of the Royal College of Physicians, Edinburgh.
- 6. Schools of Hygiene, Meeting of Directors of
 - C.H.888. Report on the Work of the Conferences of Directors of Schools of Hygiene held in Paris, May 20th-23rd., 1930, and in Dresden, July 14th-17th, 1930, with a Memorandum on the Teaching of Hygiene in Various European Countries submitted to the Dresden Conference by Professor Carl Prausnitz, and an Introduction by Professor Léon Bernard, Chairman of the Commission on Education and Preventive Medicine.
 - 1 vol., English or French, 108 pages and plans; size 18.5 × 24 cm. December 1930.
- 7. Trachoma.
 - C.H.822(I). "Rapport sur le Trachome dans différents pays, d'après les réponses à un questionnaire de l'Organisation d'hygiène de la Société des Nations", par N. M. J. Jitta et par le Dr. A. Lutrario.
 - 1 booklet, French only, 32 pages; size 18.5 × 24 cm. July 1930.
- 8. Trypanosomiasis: Human Trypanosomiasis in Mozambique.
 - C.H.890. Investigations on Human Trypanosomiasis in Mozambique by Professor A. Kopke, Professor at the Lisbon School of Tropical Medicine (Report submitted to the Second International Conference on Sleeping-Sickness; Paris, November 5th to 7th, 1928).
 - 1 booklet, English, 31 pages; size 18.5 imes 24 cm. November 1930.
 - III. SPECIAL STUDIES ON SANITARY QUESTIONS PREVALENT IN CERTAIN COUNTRIES.
- China: Collaboration with the Health Ministry of the National Government of the Republic of China.
 - C.118.M.38.1930.III (C.H.842). Proposals of the National Government of the Republic of China for Collaboration with the League of Nations on Health Matters.
 - I fasciculus, English, 51 pages; French, 53 pages; size 21 × 33 cm. March 1930.
 - C.H.906. Completion of the Survey of Chinese Ports and Report on the Reorganisation of the Port Health Services, in Conformity with the Request of the National Government of China.
 - 1 vol., English only, 70 pages; size 18.5×24 cm. December 1930.

IV. REPORTS, MINUTES OF SESSIONS OF HEALTH COMMITTEE AND CONSTITUTIONAL QUESTIONS.

A. Geneva Office.

- I. General. Work of the Health Organisation.
 - A.9.1930.III (C.H.863). Annual Report on the Work of the Health Organisation for the Year 1929.
 - I fasciculus, English or French, 62 pages. Size 21 × 33 cm. July 1930.
- 2. Sessions of the Health Committee.
 - C.190.M.90.1930.III. Minutes of the Fifteenth Session of the Health Committee, held in Geneva, from March 5th to 8th, 1930.
 I fasciculus, English or French 62 pages; size 21 × 33 cm. May 1930.
 - C.627.M.248.1930.III. Minutes of the Sixteenth Session of the Health Committee, held in Geneva, from September 29th to October 7th, 1930.
 I fasciculus, English or French, 148 pages; size 21 × 33 cm. December 1930.
 - C.158.M.75.1930.III (C.H.859). Report (Resolutions) on the Work of the Fifteenth Session of the Health Committee held in Geneva, March 5th to 8th, 1930.
 1 fasciculus, bilingual, 8 pages; size 21 × 33 cm. March 1930. Also: Annex to the Minutes of the Health Committee, document C.190.M.90.1930.III.
 - C.596.1930.III (C.H.932). Resolutions adopted at the Sixteenth Session of the Health Committee (Geneva, September 29th to October 7th, 1930).
 - I fasciculus, bilingual, 8 pages: size 21 × 33 cm. October 1930. Also: Annex to the Minutes of the Health Committee, document C.627.M.248.1930.III.

B. Far-Eastern Bureau.

- C.141.M.53.1930.III. Annual Report for 1929 and Minutes of the Fifth Session of the Advisory Council held in Bandoeng (Dutch East Indies), from February 19th-22nd, 1930.
 - I fasciculus, English or French 62 pages; size 21 × 33 cm. June 1930.

Geneva, August 1931.

LEAGUE OF NATIONS

HEALTH COMMITTEE

MINUTES

OF THE

SEVENTEENTH SESSION

Held at Geneva from May 4th to 8th, 1931.

Series of League of Nations Publications

III. HEALTH ∨ 1931. III. 5.

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1. List of Members.

The following members were present at the session:

Dr. Th. MADSEN, Director of the State Serum Institute of Denmark, President.

M. O. Velghe, President of the Comité permanent de l'Office international d'hygiène publique; Honorary Secretary-General of the Ministry of the Interior and of Health, Member-Secretary of the Conseil supérieur d'hygiène publique of Belgium, Vice-President (ex officio).

Dame Janet CAMPBELL, Senior Medical Officer at the English Ministry of Health, Vice-President.

Professor J. Cantacuzène, Professor of Bacteriology and Director of the Institute of Experimental Medicine, Bucharest, Vice-President.

Professor Léon Bernard, President of the Conseil supérieur d'Hygiène publique of France, Professor of Clinical Tuberculosis at the Faculty of Medicine of Paris.

Professor Jules Bordet, Director of the Pasteur Institute of Brabant, Brussels.

Sir George Buchanan, Senior Medical Officer, English Ministry of Health.

Dr. H. CARRIÈRE, Director of the Swiss Federal Public Health Service.

Dr. Witold Chodzko, former Polish Minister of Health; Director of the Polish State School of Hygiene.

Surgeon-General H. S. Cumming, Director-General of the United States Public Health Service.

Dr. J. C. Fitzgerald, Professor of Hygiene and Preventive Medicine. Director of the School of Hygiene and Connaught Laboratories. University of Toronto (Canada).

General John Drummond Graham, Indian Medical Service, Public Health Commissioner with the Government of India, New Delhi.

Dr. C. Hamel, President of the Reichsgesundheitsamt of Germany.

Professor J. Jadassohn, Director of the Dermatological Clinic of Breslau University.

Dr. N. M. J. JITTA, President of the Public Health Council of the Netherlands.

Professor Ricardo Jorge, Technical President of the Conseil supérieur d'Hygiène of Portugal.

Dr. A. LUTRARIO, former Director-General of Public Health at the Ministry of the Interior of Italy.

Dr. M. MIYAJIMA, Professor of Preventive Medicine at the Kitasato Institute, Tokio.

Professor G. PITTALUGA, Professor of Parasitology at the Faculty of Medicine, and Director of the School of Hygiene, University of Madrid.

Professor José Scoséria, President of the Principal Council of Health, Uruguay.

Dr. A. Stampar, Inspector-General of Public Health at the Ministry of Social Welfare and Public Health, Belgrade.

Dr. M. TSURUMI, Representative of the Central Sanitary Bureau, Ministry of the Interior, Japan. Paris Embassy.

Dr. Wu Lien-teh, Director of the Quarantine Service of China (representing Dr. J. Heng Liu).

Dr. L. RAJCHMAN, Medical Director, Secretary to the Committee.

The following members were absent:

Professor Carlos Chagas, Director of the Oswaldo Cruz Institute, Rio de Janeiro.

Dr. Lucien RAYNAUD, Inspector-General of the Health Services of Algeria.

The following also attended the sessions of the Committee:

Dr. M. G. Abt, Director of the Office international d'hygiène publique, Paris.

Dr. Barrientos, Laboratory Expert of the Health Services of Bolivia.

Dr. Bilbao, Director-General of the Health Services of Bolivia.

Professor Jessner, Chief Medical Officer at the Dermatological Clinic of Breslau University.

Professor B. Nocht, former Director of the Institute for Tropical Diseases, Hamburg.

Professor Prausnitz, of the Institute of Health of Breslau University.

Dr. G. K. Strode, Director of the Rockefeller Foundation in Europe, Paris.

Professor Tandler, Director of the Institute of Anatomy, University of Vienna.

Dr. A. F. Woker, Principal Medical Officer in the Prison Administration of Germany.

First Meeting May 4th, 1931 (morning)

2. Tribute to the Memory of Professor Ascoli.

The President spoke as follows:

Since our last session the Health Committee has learnt with sorrow of the death of Professor Ascoli.

The late Professor Ascoli devoted the whole of his life to medicine and biology and also to general preventive medicine. His prominent scientific gifts led first to his appointment as Professor of Medical Pathology at Pavia, and then at the medical clinic at Rome in connection with which Professor Ascoli organised a school of malariology in which clinical studies and laboratory methods were successfully combined with investigations on the spot, thereby achieving a complete programme of individual and collective prophylaxis.

Since 1928 Professor Ascoli has conducted a course of malariology under the auspices of the League of Nations. In conjunction with the Stazione sperimentale per la Lotta antimalarica, he has also directed the practical training course in Italy for all the students taking malariology.

After the meeting of the Malaria Commission in 1928 he brought all his knowledge to bear on the problems connected with the intensive treatment of malaria. He himself organised research work on a vast scale at Ardia for the Malaria Commission.

As Counsellor of the Italian Association for Internal Medicine, Member of the Supreme Health Council of Italy, Doctor honoris causa of the University of Edinburgh, honorary member of the Societies of Medicine of Vienna and Budapest, and President of the Royal Academy of Medicine at Rome, Professor Ascoli never spared himself in his devotion to duty. From his sick-bed he continued to direct the institutions under his charge, to give advice to his colleagues. Even last November Professor Ascoli, though bedridden, presided over the discussions on the question of quinine, placing his wide experience at the disposal of the Malaria Commission for the solution of the problems it had to consider.

We desire then to pay a tribute to the memory of Professor Ascoli and to express to his family, pupils and our Italian colleagues all our sympathy and sorrow.

Dr. Lutrario associated himself with the President's tribute to the memory of Professor Ascoli, with whom he had been in close friendly relations for many years and whose work he had followed closely. Undoubtedly, Professor Ascoli's greatest disappointment during his last days was that he would not be able to come back to Geneva to work with the other members of the Committee in the interests of health. As soon as Professor Ascoli's death was announced he (Dr. Lutrario) had hastened to convey to the family the sympathy of the Health Committee and of the Health Section of the Secretariat. The President, on behalf of the Health Committee had telegraphed for a floral tribute to be sent and the Medical Director had sent a telegram from China. The memory of Professor Ascoli would live among his pupils, his friends, his patients and his innumerable admirers by reason of his work as scientist, teacher and doctor. To him surely applied the Roman saying: Abiit, non obiit.

3. Membership of the Committee during the Session.

The President said that Professor Chagas and Dr. Raynaud would not be able to be present at the session. Dr. Carrière, Surgeon-General Cumming and Professor Léon Bernard would arrive at Geneva on Wednesday, May 6th. The President welcomed Professor Jadassohn, Professor Scoséria, Dr. Stampar, Dr. Wu Lien-teh (representing Dr. J. Heng Liu, who was unable to come but had written a letter which would be read subsequently), Professor Tandler, of Vienna Dr. Strode of the Rockefeller Foundation, Professor Morgan of the British Ministry of Health, Dr. Bilbao, Director-General of the Bolivian Health Service, accompanied by Dr. Barrientos, Dr. Abt, Professor Prausnitz and Dr. Woker, representative of the penitentiary administrations.

The President read the following letter, dated Nanking, April 12th, 1931, to Dr. Madsen from Dr. J. Heng Liu, Vice-President of the Health Committee, Director of the National Health Administration of the Republic of China:

"I regret to have to report that I am unable to attend the coming session of the Health Committee which opens on May 5th. Permission had been asked from the President of the National Government of the Republic of China and had been granted, but, in view of the importance of the coming People's Convention, which will be held in Nanking at the same time, the President felt impelled to cancel the leave.

"I realise that, as far as China is concerned, the coming session of the Health Committee will be of great importance. It was my most sincere desire to be present personally and to inform the members of the Committee of recent changes in matters of health which the Chinese Government had decided to make, of our recent achievements in this field and of our future programme. Since this is impossible, I am asking my colleague Dr. Wu Lien-teh, director of our National Quarantine Service, to be my representative.

"The plan of collaboration between the Health Organisation of the League and the National Government, as approved by the Health Committee during its last two sessions, is

being worked out to our great satisfaction. In spite of political changes all the activities enumerated in the plan are being realised or developed as rapidly as we could expect.

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"I wish to take this opportunity to thank the members of the Health Committee for their great interest in our work and to say that we are deeply grateful for the assistance rendered by the Health Organisation. The experts sent to China, particularly Dr. Borčić, Dr. Park and Dr. Faber, have rendered us invaluable service. But most of all, I wish to place on record our thanks to Dr. L. Rajchman, whose almost superhuman efforts in his endeavour to help us in creating an up-to-date national health service are known throughout the whole country and

deeply appreciated by all.

"I take the liberty to enclose, for your information, and that of the other members of the Health Committee, our 'Three-Year Plan for the Chinese National Health Service' together with our budget for each branch of the work. I have been authorised by the Minister of

Finance, Mr. T. V. Soong, to say that this budget has his wholehearted approval.

4. Adoption of the Agenda of the Session.

Dr. RAJCHMAN explained that, at the request of the Secretary-General, a new question had been added to the agenda, that of the draft Convention on the Limitation of the Manufacture of Narcotics, which the Committee would doubtless decide to refer to its Opium Commission.

The Agenda was adopted (Annex 1).

Teaching of Medicine in China: Report by Professor Knud Faber.

The President proposed that the report of Professor Knud Faber (document C.H.961) should be examined by a small Committee composed as follows:

Dr. Wu Lien-teh, . Professor Léon BERNARD, Professor Bordet, Professor Cantacuzène, Professor FITZGERALD, General Graham, Professor Jadassohn, Professor R. Jorge, Dr. Tsurumi, Professor Tandler.

The President of the Health Committee would preside and the Medical Director would act as its Secretary.

The proposals of the President were adopted.

6. Chairmanship of the Malaria Commission.

The President requested Dr. Lutrario to be good enough to retain the presidency of the Malaria Commission.

7. Form of the Minutes of the Health Committee.

Dr. RAJCHMAN read a note on the Minutes (document C.H.1004).

M. Velghe said that the new procedure would, as far as the logical and methodical presentation of the Committee's discussions was concerned, be nothing but an advantage. From the economic point of view the procedure would-even if it involved no economy in work-at least economise paper and roneographing. He felt bound, however, to make certain reservations. The Minutes in their new form ought not to be drafted in such a way that they failed to reflect the form of the discussion and the currents of opinion among the various members. The summaries should be sufficiently clear and readable to ensure that the records lost nothing by the proposed transformation. If the Committee could obtain certain guarantees on that point he was prepared wholeheartedly to support the proposal made by the competent authorities of the Secretariat.

Sir George Buchanan asked whether it would be possible to communicate to the members of the Health Committee specimens of the Minutes of the Economic Committee.

M. Velghe proposed that, instead of submitting to the Health Committee Minutes of discussions which did not concern it, the Secretariat should distribute, if possible at the same time or almost at the same time as the Minutes of the first meetings of the Health Committee prepared according to the previous method, a record drafted on the new lines in respect of one of the items on the agenda. The members of the Committee would thus be better able to compare the relative value of the two systems.

The President noted that the members of the Committee were in favour of M. Velghe's suggestions. He hoped the proposal of the competent authorities of the Secretariat would give

May 4th, 1931 (morning) (continued)

every satisfaction. The members of the Committee, while having at their disposal the printed Minutes drafted on the new lines, could also keep the roneographed copies of the Minutes drafted on traditional lines.

In reply to Sir George Buchanan, Dr. Rajchman explained that the members of the Committee would be provided: (a) with the records of the Economic Committee, and (b) with a provisional summary of a given subject which the Committee had finished discussing, in addition to the usual Minutes, as an experiment.

8. Examination of the Report of the Medical Director. (Annex 2.)

CHAPTER I.—Decisions of the Council on the Work of the Health Organisation.

- A. Report on the Work of the Sixteenth Session of the Health Committee. No observations.
- B. Report on the Work of the Paris Session of the Preparatory Committee for the European Conference on Rural Hygiene.

Professor PITTALUGA said that, at the end of the last session of the Health Committee, the Preparatory Committee, over which he had presided, had held a first session during which it had established the main lines of the Conference's agenda, which would cover the three following points:

Medical assistance in rural areas;

Organisation of the public health services in rural areas;

Sanitation in rural areas.

At a second session held at Paris on December 8th and 9th, 1930, the Preparatory Commission examined these three aspects of the question in greater detail on the basis of a report submitted by the Health Section. It had first seemed that one report would be sufficient for each of these three items, but after further discussion at a third session, which had just been held, the Preparatory Committee had come to the conclusion that some of these questions, particularly that of sanitation, called for special preparation and a subdivision of the various problems (particularly, the problems of rural housing and land improvements or bonifications on a large scale), and that these various points ought to be entrusted to Rapporteurs who were experts in each domain. If the Health Committee approved, the Preparatory Committee would take a final decision on those lines regarding the number of Rapporteurs to the Conference.

During its session held in Paris, the Preparatory Committee had considered the question of the composition of the national delegations. It felt that there should be a certain unity in the composition of the delegations both from a psychological and technical point of view, and suggested that the delegations should include not only medical specialists in rural hygiene who had already helped in their own countries to solve the problem of medical assistance (including possibly the question of assistance from insurance funds), but also engineering experts from the point of view of agriculture and rural housing and agriculturists, or experts in the matter of agricultural

organisations, co-operative societies and agricultural guilds.

The question of the rules of the Conference was examined by a small Committee consisting of Dr. Hamel, Dr. Lutrario and M. Tixier of the International Labour Office.

At its second session the Preparatory Committee had decided to request the Health Organisation to convene Sub-Committees of Experts to submit reports on each of the three items on the agenda.

In view of the meetings of these Sub-Committees, the secretariat of the Preparatory Committee had, on the basis of documents previously obtained and the discussions which had taken place in Paris, prepared memoranda which had been distributed simultaneously to the members of the Health Committee and to the various health administrations. They represented the almost unanimous opinion of the Preparatory Committee with regard to the three aspects of the question.

As a matter of fact one of these Sub-Committees of Experts, acting independently of the Preparatory Committee (since it had been appointed by the Health Committee before the Rural Hygiene Conference was proposed), had met at Budapest to study the question of rural health centres in the light of the examples already furnished by several European countries. The Budapest Conference had been presided over by Dr. Chodzko. This Sub-Committee of Experts had held a second session at Geneva eight days previously to prepare a further report on the most

effective organisation of the rural health services.

On May 1st and 2nd, 1931, the Preparatory Committee had examined the report of this Sub-Committee together with the report (document C.H.996) of the Sub-Committee of Experts on Medical Assistance. The latter had reached very interesting conclusions, since, with the help of doctors from the medical associations of several European countries, it had examined the possibility of agreements with insurance funds for the provision of medical assistance in rural areas. In spite of the clearness of the discussions, there might be a very animated debate on this subject in the Conference. Nevertheless, the professional medical associations of the various European countries, which were formerly opposed to any action on the part of insurance funds in connection with rural medical assistance, had now, through their representatives on the Sub-Committee of Experts, agreed that the question should be discussed, had admitted that insurance funds might assist in the organisation of rural medical relief, and had defined the principles of such assistance.

The third Sub-Committee of Experts appointed to consider the sanitation of rural districts

would meet at Geneva on May 12th.

At its session on May 1st and 2nd, 1931, the Preparatory Committee, after examining carefully the reports of the two Sub-Committees of Experts which had already met, discussed several practical questions connected with the technical organisation of the Conference.

May 4th, 1931 (morning) (continued)

In conformity with the conclusions of a Sub-Committee on the Rules for the Conference, presided over by Dr. Lutrario, the Preparatory Committee decided to adopt for the Conference the rules of procedure of the Assembly with certain modifications necessary to meet the special circumstances. The President of the Conference, who would be designated by the Council, would at the opening meeting make a statement regarding the application to the Conference of the rules of the Assembly and regarding the majority necessary for the various decisions to be reached. The Preparatory Committee had provided that a majority of two-thirds of the members present at the voting would be necessary—each delegation having one vote. The President of the Conference would also propose that the Conference should appoint three Vice-Presidents and one President for each of the three Committees corresponding to the three main subdivisions of the agenda. The President and the three Vice-Presidents with the Presidents of the Committees would constitute the Bureau of the Conference. The Bureau might, if necessary, appoint other Committees. The Preparatory Committee would act provisionally as the Bureau of the Conference until the latter had definitely constituted its own Bureau. It would seem to be highly desirable that the various members of the Preparatory Committee should have the privilege of being heard, during the Conference, and should maintain a certain unity of action.

Finally, it might be said that, with the help of the Health Section, the Preparatory Committee had so prepared the way that there was every chance of the Conference obtaining satisfactory results.

Sir George Buchanan hoped that Professor Pittaluga's statement would be reproduced in full in the Minutes and would be communicated to the members as soon as possible, because it would be of very great use to all those who would, in their own countries, have to deal with the organisation of the Conference. He wondered whether provision had been made for the possibility of co-operation with the League of Red Cross Societies or other similar voluntary organisations. Such co-operation in other domains, apart from the present question, might also be desirable for example, in the development of nursing and health-visitor services in countries which are reorganising their health administrations.

Finally, he trusted that the conclusions of the Conference would only be drawn up in one or other of the official languages of the League.

Dr. Tsurum hoped that the Conference would produce valuable suggestions for the improvement of rural sanitation, not only in Europe, but in various countries in other continents. In Japan, for instance, mortality was as a rule higher in rural areas than in the towns. Although the customs and mode of life were not the same in Japan as in Western countries, there were, nevertheless, many points of similarity.

The Japanese Government had already endeavoured to improve the rural health situation. One of the main points to which it was devoting attention was the reconstruction of privies. That was a very important problem, particularly with regard to the prevention of infectious and parasitic diseases.

After careful enquiry and numerous experiments, the health authorities had discovered a new system for the construction of privies, which had proved satisfactory. Scientific and practical reports had been published by the authorities on the following subjects: experiments concerning the life history of parasites and their eggs and of the microbes of typhoid fever, dysentery and cholera; chemical analyses of fæces to determine their value as fertilisers. These studies showed that, as the parasites and microbes in question disappeared, after a certain time, from the fæcal matter in the closets, there was no reason to fear the outbreak of infectious diseases when that matter was used as manure. These results had been verified, not merely by laboratory experiments but also by the practical employment in several localities of the model privy to which he had referred. Consequently, an increasing number of installations based on the new system was being installed throughout Japan.

A draft law concerning the prevention of parasitic diseases, had been submitted by the Japanese Government to the Diet, and had been adopted. Under that law, the Japanese Government was prepared, not only to recommend the reconstruction of privies, above all in rural areas, but also to grant, if necessary, facilities to those wishing to adopt the new installation. The sanitary authorities were also devoting attention to the destruction of parasites and their eggs in the human body by administering certain medicines indicated as particularly appropriate for preventing parasitic diseases. Dr. Tsurumi requested the Medical Director to submit the above-mentioned reports to the European Conference on Rural Hygiene for its information.

Dr. Wu Lien-teh said that, as China was a country in the economic life of which agriculture played a very important part, rural hygiene was obviously a question of the highest importance to her. As in Japan, considerable attention was being devoted to the problem of the disposal of human fæces. The problem which arose in the south was somewhat different from that which arose in the north. In the south, the question was, how to rid the fæces of hookworm before utilising them for agricultural purposes. In view of the complexity of the problem, he did not propose to enter into details. He wished, however, to assure the Committee that the Central Experimental Station at Nanking intended to take up this question as one of the main branches of its work. China, therefore, proposed to send observers to participate in the work of the Conference, from the results of which she would derive all possible advantage.

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Professor PITTALUGA replied to the various observations which had been made.

He assured Sir George Buchanan that the Preparatory Committee had only intended to submit general suggestions regarding the best possible composition of the national delegations, and that each Government would of course be entirely free to make such arrangements as it thought fit. A confidential note might be prepared by the Secretariat of the Preparatory Committee on the lines suggested.

With regard to the proposal that the Conference might have the co-operation of certain important institutions or associations engaged in health work, such as the League of Red Cross Societies, the Preparatory Committee had provided, in Article 6 of the draft rules of the Conference, that the Bureau of the Conference on their request might admit to the meetings of the various Committees representatives of private or public international associations interested in the problem. The Preparatory Committee already included representatives of two institutions whose co-operation was indispensable—the International Labour Office and the Rome International Institute of Agriculture. Other institutions or organisations, such as those referred to by Sir George Buchanan, might usefully assist the Conference in its work.

Obviously, all the documents of the Conference would be published in the two official languages of the League of Nations.

He noted Dr. Tsurumi's very important statement; the documents in question would be attached to the technical documentation which the Secretariat was collecting to be used as a basis for the work of the Conference. Although the latter was officially a European Conference, important technical or legislative experiments conducted in other continents would be given due consideration by the Conference, so that its conclusions might be utilised by overseas countries.

Finally, he thanked Dr. Wu Lien-teh for his statement, which he noted on behalf of the Preparatory Committee.

Professor Cantacuzène stated that the problem of rural hygiene was of great interest to Roumania, which was an almost exclusively agricultural country. The Roumanian sanitary authorities had been studying this question for several years. Roumania already possessed a sanitary organisation, certain special aspects of which might lead to suggestions that would be useful to the Conference, at which Roumania would be represented by a number of specialists.

C. Request of the Liberian Government for Assistance in Administration, Finance and Public Health.

Dr. RAJCHMAN read the first chapter (Liberia) of the note prepared by the President with regard to the meeting of the Bureau of the Health Committee held on March 26th, 1931, at Berlin (document C.H.1000).—He asked whether Dr. Mackenzie would be good enough to give a few explanations.

Dr. Mackenzie (Health Section) said that Dr. Howells had already arrived at Monrovia and had sent a preliminary report to Geneva. The Liberian Government had placed £300 at his disposal for the preliminary Sanitary work and was prepared to grant later a further sum of £400. On the day following the present meeting (May 5th) the experts would meet at Geneva and would leave Geneva on June 3rd to proceed to Liberia, where they would remain for about six weeks. The study would be carried out in the town of Monrovia, in the main towns of the coast and in the interior.

Second Meeting Nay 5th, 1931 (morning) Chapter II.—A. Service of Epidemiological Intelligence and Public Health Statistics.

(I) Geneva.

Sir George Buchanan said he would like to discuss with the Health Section certain questions relating to enteric fever which were dealth with in the Monthly Epidemiological Reports. The reference to the effect of anti-typhoid inoculation in Great Britain was not altogether satisfactory.

With regard to influenza he had, with the help of the Health Department of all three portions of the United Kingdom, been able to supply the Health Section with weekly statements for its bulletins over a considerable number of weeks in this year. Influenza is not notifiable in England, Scotland or Northern Ireland, and the preparation of weekly appreciations involved a great deal of extra work not only in the central departments but also in the local government areas. Seeing that nothing results from these appreciations, in the way of action, he considered that a single carefully prepared review at the end of an epidemic period might in future be found more useful and less troublesome than weekly statements. In point of fact, the epidemic influenza of the present year in the United Kingdom was not of first importance, and less than that of 1929.

The President observed that the weekly returns had been of particular value to Denmark, at any rate, in connection with epidemics of influenza in the Faröe Islands, which had frequent communications with towns in the north of England and Scotland. A previous epidemic had been stopped by the introduction of strict quarantine measures.

Dr. RAJCHMAN thanked Sir George Buchanan for his observations on enteric fever. Dr. Boudreau would hold himself at Sir George Buchanan's disposal.

As the President had suggested, the question of influenza was rather one of expediency. When alarming rumours were broadcast in the Press, requests for information poured in on the Health Section, and the latter would find it difficult to reply that the returns would be supplied in a month. It would be better to issue them week by week.

May 5th, 1931 (morning) (continued)

(2) Eastern Bureau at Singapore.

Dr. Lutrario drew attention to paragraph 5 of the chapter in the medical Director's report concerning reports made by the Bureau on ships having on board cases of infectious diseases. This was one of the Bureau's most important activities. The reduction in the number of cases reported proved that the authorities in the ports of origin were endeavouring as far as possible to prevent the embarkation of infectious patients. From the preventive point of view, the important point was to enable the authorities in the ports of call to take the necessary precautionary measures and, further, to verify the statements returned by port medical officers.

There was reason to hope that the marvellous wireless telephony experiments made by Professor Marconi between Genoa and Sydney would be very widely used in this connection. Two years previously, wireless telephony at sea had been difficult, uncertain and limited in range. Since Marconi's discoveries, a ship could be in continuous communication over considerable distances with a station on land. He might mention that the new apparatus had been most successfully installed in the *Homeric* (White Star Line).

By means of this method a considerable extension of international prophylaxis might be anticipated in the near future, since, in the place of simple wireless messages, it would offer all the facilities of continuous telephonic communication with land.

The President thought that the Health Committee would approve the suggestion at the end of Section II that the annual report and budget of the Eastern Bureau should be referred to the Sub-Commission under the chairmanship of Dr. Jitta.

Sir George Buchanan, referring to Dr. Lutrario's observations, insisted on the importance of the infected ship notifying its condition to its next port of call. In practice this was the essential requirement. If it were convenient to send the information by wireless to a principal centre like Singapore, to be transmitted again by wireless to the port to which the ship was going, there was naturally no objection to this procedure. But this method was not necessarily the best; direct wireless messages from ship to port might be better, and possibly in the future, wireless telephony, to which Dr. Lutrario had drawn attention, might be specially useful for this purpose.

Professor Miyajima thought the Health Section was to be congratulated on the work of the Eastern Bureau at Singapore. The Epidemiological Intelligence Service of the Bureau covered vast territories, and the Bureau received regular reports from all the important ports (about 150) east of the Suez Canal and west of the Panama Canal, including Vladivostok and the South Australian ports. The number of infected ships in that region had been reduced from 102 in 1929 to 63 in 1930. Twenty-eight ships had been reported by the Bureau to the authorities of the next port of call in order that special measures might be taken.

With regard to the transmission of epidemiological intelligence, Professor Miyajima hoped that, so far as the Far East was concerned, the method of sending messages en clair would be adopted. Though they might cost a little more than messages in code, they had greater advantages, as regards their reception, and were therefore more useful to the ships and port authorities.

The results obtained in the anti-cholera campaign started in Shanghai under the direction of Dr. Wu Lien-teh were very satisfactory. During the past year only 127 cases had been reported. It was perhaps premature to draw definite conclusions, but it was interesting to note that no case had been reported among those who had been vaccinated.

It was hardly necessary to emphasise the importance of bacteriological and epidemiological investigation in connection with the prevention of epidemics. During the past year the Singapore Bureau had taken an active part in co-ordinating a number of such researches, especially on bacteriophage, oral vaccination and smallpox dry vaccine. Very interesting reports had been received, and it was to be hoped that this important work would be continued and extended.

Professor Miyajima was in agreement with the resolution on yellow fever adopted by the Advisory Council. Fortunately, this disease had not yet found its way to the Orient, but in view of the rapid development of communications, it would be prudent, as a precautionary, measure to take drastic action.

It had been decided in principle to include the budget of the Bureau in the general budget of the League of Nations, and he hoped this would soon be possible. The Japanese Government was prepared, however, to continue to support the Bureau financially, as it considered such initial support necessary for the development of the work of the League in the Far East. Interest in that work was increasing, and the Bureau was attracting the attention, not only of the authorities, but also of the people.

Dr. Gautier's work as Director of the Bureau for the past four years would long be remembered. He was in a large measure responsible for making the Far East familiar with the work of the League-

Professor Fitzgerald expressed the appreciation of the Dominion of Canada, and especially of the Department of Pensions and National Health, for the very courteous and satisfactory

May 5th, 1931 (morning) (continued)

consideration given to the Department's request that the Health Organisation should ask the Bureau to send epidemiological intelligence direct to the Canadian National Quarantine Station at William Haven, Victoria.

Dr. Wu LIEN-TEH thanked Dr. Tsurumi for his statement and said that the success of the anti-cholera work already accomplished in China was largely due to the fact that the health authorities interested had put aside their private interests and co-operated in the international interest.

General Graham, speaking as a former President of the Advisory Council, said he was gratified to hear how much the Bureau's work was appreciated. The members of the Advisory Council had been extremely sorry to lose the services of Dr. Gautier. As Director he had done admirable work, particularly in the co-ordination of research. The result of his visit to Shanghai had been most satisfactory. General Graham drew particular attention to Dr. Gautier's Note on bacteriophage and to his valuable monograph on the documentation on pneumonia as it occurred in the Far East.

He hoped the Bureau would be able later to deal with this subject.

The purpose of the resolution on yellow fever was to draw attention to the attitude of the Advisory Council towards this problem. Some dissatisfaction had been expressed at the last meeting of the Council that the European authorities did not show more interest in yellow fever. It was somewhat difficult to decide whether this was a matter for the Office international d'Hygiène publique or the League of Nations. Personally, he felt that the League was doing very creditable work in giving publicity, through the Singapore report and the proceedings of the Health Committee to the attitude of scientists in the East. The President of the Advisory Council, Dr. van Lonkhuyzen was of opinion, however, that more definite action was required. Perhaps Dr. Jitta would give some attention to this aspect of the matter.

Sir George Buchanan said he was glad to note many references in the report to the working of the quarantine system established under the International Sanitary Convention of 1926. observance of the requirements of this Convention was important. What was still more important, however, was that the Far East was taking a definite part in the application of the international system provided by the Convention. The Bureau was doing important work in strengthening and developing that system.

Dr. Rajchman thanked Professor Miyajima and General Graham for the way in which they had referred to Dr. Gautier, whom the Health Section warmly welcomed back after his four years in the Singapore Bureau. Very important duties were awaiting Dr. Gautier at Geneva, and it would be an enormous advantage for the Health Section to have on the spot someone acquainted with the details of the working of the Singapore Bureau. The fact that, before returning to Geneva, Dr. Gautier was at the moment the official guest of the Japanese Government showed the high esteem in which his work was held in the Far East. His successor, Dr. Park, took with him the good wishes of all for the work he was now undertaking. The Medical Director hoped that next year when the Singapore Bureau's report came before the Health Committee, the latter would see that Dr. Park had imprinted his strong personality on the direction of the Bureau, with a consequent renewal of its activity.

The Chairman of the Singapore Advisory Council had just resigned and would be returning to Europe in the course of the summer. He had proposed that he should be succeeded by a Japanese subject and had been in touch with Tokio on the matter. An appointment had been made and would no doubt shortly be approved by all his colleagues.

Dr. JITTA agreed with Sir George Buchanan that the interchange of information had been extremely useful and that it would be desirable to have a discussion on the Far-Eastern Commission. The question raised by General Graham would be given all due consideration as well as that raised by Sir George Buchanan.

The President said the Committee was grateful for the satisfaction expressed as regards the work done by the Singapore Bureau and by Dr. Gautier as Director.

On the proposal of the President, the Committee decided that the Sub-Committee to examine the report from the Bureau would consist of the following members:

Dr. JITTA (Chairman), Dr. MIYAJIMA, Dr. Wu Lien-teh, General GRAHAM, Sir George Buchanan, M. VELGHE, Dr. Lutrario.

Fourth Meeting Nay 7th, 1931 (morring) CHAPTER II.—B. SYSTEM OF LIAISON WITH THE HEALTH ADMINISTRATIONS OF THE DIFFERENT COUNTRIES.

(1) Collective Study Tours.

In reply to a question by Sir George Buchanan, Dr. BOUDREAU said that dates had not yet been fixed for the study tours in connection with the milk supply. It was hoped, however, that the experts would visit America in July, possibly individually and not as a collective study tour.

May 7th, 1931 (morning) (continued)

Sir George Buchanan, Surgeon-General Cumming and Dr. Carrière asked that as long notice as possible should be given of study tours in their respective countries in order that adequate preparations might be made.

Surgeon-General CUMMING added that the new developments in the pasteurisation and transport of milk would be of the greatest interest to the participants in the United States tour.

CHAPTER III.—COLLABORATION WITH GOVERNMENTS AND PUBLIC HEALTH ADMINISTRATIONS.

Third
Meeting
Way 6th, 1931
(morning)

A. National Government of the Republic of China.

The President asked the members for the moment not to deal, in connection with this matter, with the report from Professor Knud Faber.

Dr. RAJCHMAN said that five documents on China had been distributed to the Committee: (documents C.H.982 (Annex 3), 1005, 1006 (Annex 4), 1007 (Annex 5) and 1008. Before starting to comment on his own report, he would ask for the report by Dr. J. Heng Liu (Annex 5) to be read.

Dr. J. Heng Liu's note on the three-year plan of the Chinese National Health Service was read.

Dr. RAJCHMAN pointed out that the statement submitted by Dr. J. Heng Liu gave no idea of the immense difficulties with which the Chinese authorities had been faced in carrying out the programme of collaboration agreed upon at the Committee's last session.

That programme had comprised:

- 1. The establishment in Nanking of a Central Field Health Station;
- 2. The erection of the first National Hospital in Nanking and the study of the possibility of opening similar hospitals at Hangchow, capital of the Province of Chekiang;
- 3. The elaboration of a scheme of public health organisation for Chekiang based on the above hospitals;
- 4. The establishment in two ports of national quarantine stations and the gradual manning by Chinese staff of the quarantine services in a number of other ports;
- 5. Concerted action, with a view to stamping out cholera in Shanghai, between the authorities of the Chinese city and the two International Concessions;
 - 6. The framing of a scheme for reforming the system of medical education in China.

Progress was being made in all of the above directions.

Dr. Park had completed his survey of Chinese ports with the result that the Chinese Government had drawn up a scheme for a national quarantine service which had been communicated to the Health Committee and was now being put into force.

The programme of work of the Central Field Health Station at Nanking after being fully elaborated and discussed at Paris and Dresden by the Direction of Schools of Health, was being initiated with the help of Dr. Borčić.

Professor Faber had spent three months in China, and the Committee would find in his report particulars of the proposed reorganisation of medical education.

Six Chinese officials had been afforded opportunities of studying quarantine service organisation in Great Britain, the United States of America, Germany and the Netherlands with a view to benefiting their national service on the experience they had acquired. Several health officers had also been enabled to make study tours of three, six and nine months abroad to equip them for holding responsible positions at home.

The Health Committee should not forget that its Chinese colleagues had had to start putting the plan into operation, while their country was still in the throes of civil war and their services had necessarily to be diverted to meet army requirements. In spite of these disturbances, he could point to progress in all the departments indicated.

The Central Field Health Station, at present in temporary quarters, had secured a staff of which any European School of Health might be proud, and would shortly start work on a modest scale on the lines laid down in Paris and Dresden. The plans for a permanent building were completed and work would start this summer, so that the building should be ready for occupation twenty months hence. The first National Hospital had been opened in Nanking and had proved invaluable to the population. It was a striking example of the organising talent of Dr. J. Heng Liu and was classified by Professor Faber as one of the best in China.

In Shanghai the anti-cholera campaign revealed a real desire on the part of the Concession authorities to collaborate, not only with one another, but with the Health Service of the Chinese city also. As a result, 300,000 inoculations were effected in the Chinese city and 50,000 in each of the two Concessions, and this year the number would probably attain one million. For the first time, a methodical and systematic study was being made of all the forms of cholera prevalent in the Shanghai epidemiological area.

May 6th, 1931 (morning) (continued) A change of Government in Chekiang, added to a shortage of medical officers, had made it impossible to proceed with the application of the programme in that province.

Dr. Rajchman was only giving Dr. Wu Lien-teh his due in describing as really remarkable, the progress made under his direction by the Quarantine Service. The initial difficulties with the diplomatic representatives and with the shipping firms had all been surmounted, and, when Dr. Park had revisited Shanghai, he had found that shipowners were disposed to regard the situation very favourably and that real technical progress had been achieved. A good deal had still to be done, but Dr. Wu Lien-teh was hopeful of securing the necessary funds, and expected that in about two years his staff would be able to take over the services in the other harbours mentioned in the report.

The programme for this year would be as follows:

- I. Dr. Borčić would continue his work;
- 2. It was hoped to supply Dr. J. Heng Liu with a competent malariologist to take charge of the Malariological Division in the Central Field Health Station;
- 3. The International Health Division of the Rockefeller Foundation had agreed to send Mr. Dyer, sanitary engineer, to act as a member of the Station staff for the time being;
- 4. For public health propaganda the services of Dr. Peter, whose work had a worldwide reputation, had been secured for six months.

Furthermore, arrangements had been made for granting scholarships:

- 1. To quarantine officers for continuing their technical training;
- 2. To officers of certain faculties at the Central Field Health Station;
- 3. To three or four officers for the application of the immediate programme in the field.

Dr. Rajchman would reserve discussion of the details of these scholarships for a later occasion.

In conclusion, he would like to draw attention to the fact that the Government had decided to set up a new body—the National Economic Council—which would be responsible for carrying out the programme of economic reconstruction and development. This new body would work out a three-year programme of development of the country to include the elaboration of a programme for a further period, and would have resources placed at its disposal by the Ministry of Finance. The Committee would find in his memorandum full details of this three-year programme. It would find in his memorandum full details of this three-year programme. It would also be seen from document C.H.1006 (Annex 4) that the financial commitments had been approved by the Minister for Finance.

He drew attention to the statement in Dr. J. Heng Liu's report that the Central Field Health Station would be one of the technical services now under the National Economic Council. That showed that the Government considered the programme of public health and medical education an essential element in reconstruction and that financial resources would be available for the programme elaborated. He could not, in fact, sufficiently emphasise the determination of the Chinese Government to finance from national resources the schemes Dr. J. Heng Liu had outlined.

It would also be recollected that the plan of collaboration with the Chinese Government laid stress on the fundamental necessity of establishing medical institutions which were national in their technical programme and in their responsibility for administration and financial stability. From all these three standpoints, he thought the first three months showed that the Chinese Government had dealt successfully with the new work it had set on foot. He had been invited to go to China to examine the situation created by the abolition of the Ministry of Health—a situation which had given rise to some misgivings. It was reassuring to find that these misgivings were unjustified and that the Government was firmly determined to carry out the programme. The effects of the world crisis had necessitated the adoption of a policy of retrenchment and the simplification of the Central Administration by a grouping of State Departments hitherto autonomous such as the Ministries of Health, Agriculture or Labour, which were merely decorative superstructures with no active provincial organs. That, however, had not affected their determination to carry the 1929 programme into effect without delay or modification.

Dr. Wu Lien-teh regretted that Dr. J. Heng Liu was not present to explain the working of the national health authorities as organised with the co-operation of the Health Committee during the last two years. All sections of the Chinese nation—Government officials, doctors and population—appreciated the great help which the League had given from the very beginning, and he could assure the Committee it would never be forgotten.

Speaking with twenty-three years' experience of health work in China, he was astonished at the unexpected success recently achieved, thanks largely to the magnetic personality of Dr. Rajchman. The extent of the present programme might be judged from the fact that whereas Dr. J. Heng Liu could now report that nearly \$3,000,000 would be available for public health work from the National Treasury alone, he himself had in the past to be satisfied with only \$100,000 annually for antiplague work during the whole of his twenty years' work in Manchuria. In China

\$3,000,000 would go a very long way and make it possible to perform much in various health activities.

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(continued)

He would like to make one or two observations to supplement Dr. Rajchman's statement. China was a country which had a long tradition of culture, but he wondered whether that was not sometimes a disadvantage as it tended to lend to undervaluation of the efforts of the younger generation. It was encouraging, therefore, to know that most of the members of the new National Government were people of from 30 to 45 years of age who fully realised the necessity of moving with the times. The quarantine service organisations was a case in point. Benefiting by the experience of older countries, the Chinese Government had tried, he hoped successfully, to simplify procedure and dispense with unnecessary formalities. He would ask for kindly judgment of its initial efforts to organise national services. It had been greatly privileged in having the practical sympathy and the impartial advice of the League of Nations. The international experience offered through the League to Chinese officials was an invaluable initiation in all that was best in Western and Japanese practice. He wished, in conclusion, to reiterate his appreciation of the encouragement and inspiration received from the Health Committee.

Dr. Tsurumi noted that according to the Medical Director's statement the reorganisation of the health and medical services in China was progressing satisfactorily, thanks to the efforts of the Nanking Government and the assistance given by the Medical Director and the experts sent by the Health Organisation of the League of Nations.

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He was glad to learn that the Chinese Government realised that the Health Committee, with the collaboration of the experts from the Transit Organisation who had been associated in the study of the quarantine scheme, had obtained for it, not only the best advice on this matter, but also the collaboration of everyone, including the authorities of the International Shipping Conference.

The Government of Nanking was improving the sanitary situation in the country. Dr. Tsurumi was particularly glad that Dr. Wu Lien-teh was at the head of the quarantine service. He had already been very successful in the campaign against cholera, as was shown by the considerable decrease in mortality from that disease during the past year. Nevertheless, much time and sustained effort were necessary before satisfactory and conclusive results could be obtained in China.

Proposal for the Creation of a Commission for the Study of Chinese Drugs.

Professor Miyajima read his proposal (Document C. H. 1008).

General Graham said that many years experience of investigating indigenous drugs in India had convinced workers there that overlapping was best avoided by concentrating research in a few special centres—in the case of India, the Pharmacological Institute, Bombay, and the School of Tropical Medicine, Calcutta. It might, therefore, be more practical if the Chinese Medical Services would first continue their own investigations, with the assistance, if necessary, of foreign experts, before the proposed international commission was set up.

Dr. Wu Lien-teh read the letter from Dr. J. Heng Liu reproduced in document C.H.1005.

Dr. RAJCHMAN, in recommending the adoption of the proposals made by Professor Miyajima and Dr. J. Heng Liu, explained that he had investigated the question personally when in the Far East.

As regards General Graham's observations, he thought the Chinese authorities had already found it advisable to concentrate the research work in a few centres. He could not, of course, speak with authority on the situation in India, but Dr. Boudreau and he himself had been impressed, during their tour in China, by the large amount of pharmacological and pharmaceutical research into the effect of native drugs on the human system and the limited knowledge possessed by workers in the Far East of what had been done on the same subject in other centres. That was really what had led to the proposals, now before the Committee, being made. Both the Chinese and Japanese Governments would set up national committee, being made. Both the Chinese and widen its scope, they wanted an international commission to be appointed by the League to which the Health Committee would nominate three or four leading European and United States pharmacologists. Ample justification for the appointment of such a Commission was afforded by the case, reported to the Health Committee, of three different laboratories in China and Japan which had successively discovered "Ephedrine".

In his view, the Committee might in principle approve the proposal to set up a special group of experts to study the questions involved. These experts would comprise delegates of the Chinese and Japanese health authorities, together with three or four European and United States experts nominated by the Bureau of the Health Committee, and would confine their research to Chinese drugs only. The Commission thus constituted should collaborate with other centres of research, such as those in India and elsewhere.

The President recalled that, when in India, he had been informed by research workers there that the research work done on indigenous drugs gave mostly negative results. Nevertheless, a Committee such as that proposed would be useful for pooling the information obtained at various

May 7th, 1931 (morning) (continued) stations and eliminating superflous research. It was also possible that new drugs of value in the treatment of disease might be discovered and the real worth of indigenous drugs established.

On a point of procedure he suggested that this question should be settled before reverting to that of health work in China generally.

General Graham had no objection in principle to the appointment of an international commission but merely wondered whether the moment was not a little premature. His experience in India suggested that there was still a certain amount of preliminary spade work to be done before international collaboration needed to be invoked. It should be realised that an exhaustive study of Chinese drugs implied the existence of hospitals in which the medical and clinical effects of administering such drugs could be exactly ascertained. In India it had so far been possible to investigate only a quarter of the total number of indigenous drugs. He differed from the Medical Director as regards the dissemination of research data; published reports of the work done in India, for example, were always available. He felt, therefore, that the question had not yet reached the stage where the proposals made would give the maximum results.

Dr. RAJCHMAN very much hoped that General Graham would not insist on his objections, in the first place, because, according to what General Graham himself had said, there was great ignorance as to what was being done in other countries in regard to pharmacology. In the second place, contrary to what General Graham appeared to believe, there were now excellent clinical facilities in Japan for pharmacological research, and it was possible to make careful studies. If it were necessary to experiment with drugs on cases of tropical diseases, it should not be forgotten that drugs discovered by the Chinese were used in northern countries, and that China was even larger than India.

Investigations had been carried out in China for centuries. The question of drugs was one with which Chinese doctors were very familiar. While the question had been studied in India for ten years, it had been studied for decades in Japan in accordance with modern methods and for at least ten years in China. In addition to these arguments there was one which was conclusive: the Japanese and Chinese health departments had made a request to the Health Organisation, which was strongly supported by their Governments. There could be no objection to the proposal of those Governments to create national commissions provided with sufficient means, and to which the Health Committee was asked for two or three specially qualified experts for the purpose of drawing up a programme of study. There were precedents for such requests, which had always been accepted almost without discussion.

Sir George Buchanan hesitated, on principle, to agree that the Committee should necessarily consider as decisive the fact that applications had been received from two Governments. If the Health Committee could not settle such questions on their merits, it need not meet at all. On the particular question, could not an intermediate solution be found? The Health Committee might send out not a whole Commission, but one or two experts to confer with the Chinese, Japanese and Indian Departments concerned, in order to establish the particular groups of drugs to be investigated and to draw up a limited programme of investigation. That method would make it possible to judge of the scope of the work involved.

Dr. Chodzko supported the proposal of the Chinese and Japanese Governments and the observations of the Medical Director. As an example of the value of pharmacological investigations in Far-Eastern countries, Dr. Chodzko drew attention to an article published a year or two previously in a German paper, in regard to a drug from the Dutch East Indies which had been used in Europe for chronic nephritis (which was not a tropical disease) and had given very interesting results, even in the most hopeless cases. Europe was at present passing through a crisis in regard to therapeutical methods and was to some extent returning to the use of medicinal plants. The study contemplated would therefore be most important, even for the future of European medicine.

General Graham would not press his original objections if the Health Committee wished to set up the proposed Commission, but he was in duty bound to insist that India should be included in the projected programme of study. That did not mean that the Commission should merely consult a bibliography of Indian research work but that India generally should also benefit by the work of the experts. It should be remembered that the Indian, as distinct from the British medical profession, demanded the expenditure of considerable sums of money on the enquiry into indigenous drugs.

Professor Léon Bernard did not think the proposal should be accepted as an act of conciliation: everyone should be convinced that it was of the greatest importance to respond to the invitation sent to the Health Organisation. He did not wish to revert to the arguments put forward by the Medical Director, but considered that the Health Organisation was to be congratulated that one of the oldest empires of the world, to which civilisation owed so much in the moral and artistic spheres, was again contributing to the progress of civilisation, in a sphere which was proper to the Health Committee. China alone was not interested in this collaboration: the western countries would gain by working with Chinese investigators. General Graham's suggestion that Indian

pharmacologists should participate in the study was quite in conformity with Professor Léon Bernard's point of view, and he supported that suggestion.

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Professor Pittaluga supported Dr. Chodzko and Professor Léon Bernard. The Health Committee could not possibly refuse the invitation. Science and therapeutics would probably be greatly enriched by such collaboration in the work undertaken by the Chinese and Japanese Governments.

Dr. JITTA said he very cordially supported the proposal under discussion and considered, after the suggestion made by General Graham, that the enquiry should be extended to other areas, for example, South America, and eventually to the whole world.

The President thought the discussion might now be terminated and that the Committee would agree to set up the international Commission requested by the Chinese and Japanese representatives. He would deprecate any extension of the enquiry at present to indigenous drugs other than those of China and India. He asked the Committee to signify its assent to the proposal.

Dr. Lutrario drew special attention to two passages in the Medical Director's memorandum on his second mission to China (Annex 3). The first related to collaboration between the new Army Medical Service in China and the National Health and Medical Service. China was to be congratulated on introducing a practice in use in European countries—that was to say, collaboration between the army and civil medical corps. It would be profitable both to the population and the medical corps itself. The knowledge of the latter would be increased by contact with the population.

In the second place, the letter from the Medical Director to the Chinese Health Minister contained a suggestion relating to the ratification by China of the International Sanitary Convention of 1926. By ratifying that Convention the Chinese Government would give one more proof of its desire to collaborate in health matters.

Dr. Wu Lien-teh highly appreciated the kind remarks made by Dr. Lutrario. His Government was extremely anxious to ratify the International Sanitary Convention at the earliest possible moment. It felt, however, that the Quarantine Station Service should first be able to comply with the requirements of the Convention, not merely in the spirit, but also in the letter. When that was satisfactorily accomplished, ratification would follow immediately.

The President thought the Committee would wish to congratulate the Chinese Government and health authorities on what they had accomplished with virtually no resources and in extremely unfavourable circumstances. There had been much scepticism as to the prospects for health work in China, but experience showed how unjustified such doubts were. He thought a special tribute was due to Dr. Wu Lien-teh for the striking success he had achieved in organising the quarantine service, and he would also congratulate Dr. Rajchman on the effective way in which he had collaborated, on the Committee's behalf, with the Chinese authorities.

Medical Education in China.

The President would now open the discussion on the report of Professor Knud Faber (document C.H.961). The Special Committee to which it had been referred had just submitted a draft report circulated as document C.H.1021.

The draft report of the Special Committee was read.

The President pointed out that the question of medical education in China was dealt with in a report by Professor Faber (document C.H.96r) and a note by the Medical Director (Annex 7). There had been an animated discussion on Professor Faber's report in the Sub-Committee. It had not been possible to reach unanimous conclusions owing to the complexity of the problem of medical education, and the Sub-Committee had wisely confined itself to submitting the report to the Health Committee on Professor Faber's own responsibility. There would be another opportunity, moreover, of discussing the report after the other experts had expressed their views.

The draft report was approved with certain slight amendments.

B. Liaison with Latin-American Countries.

(1) Bolivia.

At the invitation of the President, Dr. Bilbao, Director-General of Public Health in Bolivia, came to the table of the Committee.

The following documents were read: the chapter on Bolivia in the Medical Director's report, the President's note concerning the meeting of the Bureau of the Health Committee in Berlin on March 26th, 1931 (document C.H.1000), and the letter annexed thereto from Dr. Bilbao to the Medical Director, dated April 30th, 1931.

The President proposed that the suggestions put before the Committee be adopted.

Professor Pittaluga felt sure that he was speaking on behalf of all his colleagues in congratulating the experts sent by the Health Organisation to Bolivia, in particular, Dr. Mackenzie

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and Dr. Pascua, now Director-General of the Health Service in the new Spanish Republican Government. The documents placed before the Committee marked a stage in the indispensable preliminary work for the organisation of the Bolivian Health Service. The proposals submitted testified to Bolivia's determination radically to reform her public health system. Professor Pittaluga felt certain that the draft resolution proposed to the Committee would be unanimously endeated and accommend by the supposed to the committee would be unanimously adopted, and accompanied by the warmest hopes for the success of the work which Dr. Bilbao was about to undertake.

M. Velghe agreed. The annual report received from Bolivia would be of great value to the Health Committee and enable it to follow the progress made.

The Committee unanimously adopted the following resolution:

"The Health Committee;

"Having considered the report of the representatives of the Health Organisation sent to Bolivia and the enclosed letters from the Bolivian Government, together with the proposals of the Bolivian delegate, requesting the continued collaboration of the Health Organisation:

"Decides to extend to the Government of Bolivia the services of the Health Organisation

along the lines indicated in the letter of the Bolivian delegate.

Assistance in the training abroad of a certain number of public health officers, who would constitute the cadre of the new public health service of Bolivia;

- "(2) The collaboration of the Health Organisation in studies regarding the distribution of diseases in the tropical and sub-tropical regions of Bolivia;
- "(3) Consultative assistance in the development of the plan of re-organisation proposed;
- "(4) In the event of the Bolivian Government deciding on the study of local resources in respect of cinchona bark, the assistance of the Health Committee, through its Malaria Commission, in the carrying out of the necessary studies."

Dr. Bilbao made the following statement:

"The entire work of health re-organisation in Bolivia is sufficiently clearly set forth in the letter I sent the Medical Director to make it unnecessary for me to remind you of the present

and future needs of my country in this field.

"I merely wish to say that the younger generations of medical men in Bolivia are working enthusiastically and energetically for the development of their country on the basis of the up-to-date knowledge they have acquired of health and social welfare questions. They are imbued with the conviction that health is the summun bonum of human life, whether of the individual or of the community.

"Using as our basis the advice of the Health Committee and its experts, and relying on the resolute and patriotic support of our Government, we hope that our work will be beneficial

and profitable to Bolivia.
"I have only to tender once again my Governments' and my own thanks to the Health Committee for their co-operation and support in the work of health organisation, which is the basis of all progress. The Health Organisation, whose aim is the well being and health of all nations, is thereby carrying out in all parts of the world a noble social mission that makes for the unity of man, and is thus constantly adding to the prestige of the League.

"I should like too to thank the Governments of Austria, Czechoslovakia, France, Germany, Greece, Hungary, Poland, Roumania, and Yugoslavia, who, through their health authorities, have given me every facility for studying the corresponding organisations in their countries, and I wish to associate with myself in this expression of gratitude Dr. Prado Barrientos, who

assisted me.

"Finally, I wish to say that Bolivia will, in her health policy, loyally comply with the conclusions which you have just approved. She will devote her utmost attention to the public health service, her ultimate object being to attract immigrants to a fertile and generous land containing riches such as can be found in few other countries.

"To achieve this lofty aim the guidance of scientists and statesmen will be combined with the creative action of those engaged in the daily task. These are the lines on which Bolivia will respond to the disinterested and humanitarian assistance afforded by your

Committee."

Dr. RAJCHMAN drew attention to the paragraph of Dr. Bilbao's letter proposing the participation by the Malaria Commission in the enquiry into the supply of cinchona bark in Bolivia. The Malaria Commission might perhaps wish to ask Dr. Bilbao to acquaint it with the details of this subject. In another paragraph it was proposed that the Health Organisation should co-operate in the study of the distribution of diseases in the tropical and sub-tropical regions of Bolivia. This, after all, was only a continuation of the studies begun by Dr. Mackenzie and Dr. Pascua. The Health Section would be able to comply with this request from the Bolivian Government, and at the end of the year would place an expert at its disposal.

(3) Serological Conference at Montevideo.

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(morning)

Professor Jadassohn reminded the Committee that he had been appointed to preside over the Serological Conference held at Montevideo in September 1930. The Committee had received the very accurate and lucid report compiled by the Secretariat (document C.H.968). Professor Jadassohn would accordingly confine himself to a few short remarks.

The success of the Copenhagen Conferences had removed any doubt as to the value of such meetings and there had been complete justification for organising the work at Montevideo on the basis of the experience acquired at Copenhagen. The object had been to compare the methods found most accurate at Copenhagen with those employed in South America, and with this aim in view it had been thought desirable to entrust the application of the best methods to the most experienced serologists. It had therefore rightly been decided to invite to Montevideo Dr. Wyler, who had obtained the best results with the complement fixation test, and likewise Professor Kahn and Professor R. Müller, whose flocculation tests had been a great success in Copenhagen. The tables placed before the members of the Committee showed that the flocculation tests mentioned had given the best results at Montevideo as well, because they were both very sensitive and very specific. There had been absolute specificity with the Kahn standard reaction, slightly less with the Müller reaction; the complement fixation reactions employed by Dr. Wyler, Dr. Sordelli, Dr. Scaltritti, Dr. Cassiniga and Dr. Miravent gave fewer positive results in the case of syphilitic patients. They were commonly less sensitive, but nevertheless entirely specific.

An attempt had been made on this occasion to compare the doubtful reactions (±) obtained with the different methods. The comparison was of considerable interest, but Professor Jadassohn would not discuss it for the moment. It should, however, be noted that the doubtful reactions were almost all specific with the Kahn standard methods and with the Sordelli and Scaltritti

methods.

The test cases (Table 1) could most probably be regarded as being in fact non-syphilitic, since they had given negative results (\pm) with four methods, Kahn Standard, Wyler, Sordelli and Scaltritti (0.7 per cent positive results with the Müller method and 1 per cent with the Kahn Presumptive method). The results proved once again the very careful way in which the cases had been chosen and examined beforehand in Montevideo. Again, very interesting results had been obtained with the group of prostitutes (Table 4) who had not been found syphilitic. There would have been no call for surprise had a more or less large number of cases given positive reactions, but the thing that was difficult to explain was the very different results obtained in a fairly large number of cases with the best methods (for example, out of fourteen cases, nil with Wyler, 1 with Scaltritti, and Kahn Standard, as against 7 with Müller and 9 with Kahn Presumptive). Professor Jadassohn had already had similar tests carried out in his institute, but nothing similar had been observed hitherto.

Not many tests had been made with cerebro-spinal fluids, but it should, however, be noted that the Kahn Standard and the Wyler reactions had been the most specific, the Wyler reaction being less sensitive. There had been a greater degree of sensitivity with the Müller test and a still greater one with the Scaltritti and Torazza tests, but the methods of the three last serologists had shown a little less specificity.

Even after the last Copenhagen Conference, it had been quite clear that the simultaneous employment of several methods was to be very strongly recommended. That finding had been confirmed by the Montevideo Conference. Professor Jadassohn believed that this had been the

practice for a long time past in many Institutes.

At Montevideo there had been an opportunity of testing a considerable number of leprosy cases by a fairly large number of serological methods. It had been found that the results in the case of lepers who could not be regarded as syphilitic were fairly frequently positive, as indeed was already known, but it was interesting to see that the figures were practically the same when the best methods were used.

Professor Jadassohn thought that the foregoing remarks would suffice to convince the Committee of the enormous importance of the results obtained by the Montevideo Conference. Other points of interest would perhaps emerge when there had been time to go through the records. The Medical Director's report reproduced the resolution which the Conference had adopted and

which Professor Jadassohn then read.

In conclusion, he would very sincerely thank the Uruguayan Government and the Organising Committee for the way in which the Conference had been prepared and for the warm welcome extended to those taking part. He was particularly grateful to Professor Scoséria, to whom the Conference was indebted for much of its success. Those attending it had received lavish hospitality in the new Prophylactic Institute.

The President was anxious to offer the Health Organisation's thanks to the Uruguayan Government and Professor Scoséria and also to Professor Jadassohn, who had presided over the Conference with such success. The results were of great importance because they were in accordance with those obtained two years previously at Copenhagen. It was now a certainty that the basis for future researches and for the methods to be applied was sound. Without going into details the President would emphasise the fact that the simultaneous use of two methods, one, a flocculation test, and one, a Bordet-Wassermann, had been recommended at Copenhagen, not only because it was always useful to have two methods as a control, but also because it had been felt that the two methods had not entirely covered the same cases. The situation, apparently, had been different at Montevideo, where all cases included in the flocculation test had also been included in the B.W. methods, and vice versa. The deduction was that, at the moment, the flocculation methods sufficed to obtain the best results.

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Professor Scoséria thanked the President and Professor Jadassohn. He was bound, however, to point out that, without the great authority of Professor Jadassohn, the help of the members of the Secretariat and the patronage of the Health Committee, the experiments made would have been far less successful.

Fourth Meeting May 7th, 1931 (morning) C. Request of the Bulgarian Government regarding the Campaign against Syphilis in Certain Regions of Bulgaria.

On the invitation of the President, Professor Jessner came to the table of the Committee.

Dr. RAJCHMAN said that, owing to the Cabinet crisis in Bulgaria, Dr. Kessiakoff, Director-General of Public Health in Bulgaria, had been unable to accept the invitation to attend the meeting.

Professor Jessner reminded the Committee that, at its last session, he had summarised the work achieved up to that date in the campaign against syphilis organised in the Department of Burgas, on the request of the Bulgarian Government, in co-operation with the Director-General of Public Health, the Director-General for the Settlement of Refugees, and the League's High Commissioner in Sofia.

Since the previous October, Professor Jessner had gone to Burgas twice to ascertain what progress had been made. The dispensary at Burgas had been attended by an ever-growing number of patients since it first started operations in mid-September. In October there had been 52 new patients against 87 in March; in October also 384 cases had been examined clinically and treated against 828 in March. Of the 487 new patients, 150 had syphilis in one stage or another, while the others had contracted gonorrhœa, soft chancre, or skin affections. Most of the dispensary's patients so far had been inhabitants of Burgas; only a few of the cases sent to the dispensary by rural doctors for diagnosis came from the remainder of the Department. The dispensary's staff were employed, so far as the time available allowed, in discovering the sources of infection, and had already succeeded in bringing in a certain number of cases for treatment.

The anti-venereal service in the hospital at Burgas had been opened in the middle of February. As only 24 patients could be received in the hospital, the service was used chiefly for the reception of cases of contagious syphilis until the florid symptoms had been cured clinically and doubtful

cases thoroughly tested.

The departmental syphilologist, Dr. Schouloff, had been particularly busy throughout this period. He had toured the Department-often with much difficulty-and had attained very appreciable success in securing the co-operation of rural doctors in the anti-syphilis campaign. The number of doctors co-operating was constantly growing, although, notwithstanding the great efforts made, there was no improvement in their material circumstances. The doctors attached to the dispensary and the rural doctors had first had to re-examine, clinically and serologically, all inhabitants who had been reported as syphilitic by the mobile brigades, so as to obviate erroneous diagnoses before treatment. Out of 1,103 cases diagnosed as syphilitic by the brigades and reexamined to date, only 481 had been found to be syphilitic. During the second examinations 119 new cases had been discovered, so that the total number of cases now under treatment in the rural part of the Department was 600, to whom must be added 150 cases under the supervision of the Burgas dispensary. In addition, the doctors attached to the dispensary and the rural doctors had examined practically the entire population in a certain number of villages, and had taken blood samples when possible, the first people to be examined in this way being the fathers of families.

The new laboratory of sero-diagnosis at Burgas had again done a considerable amount of work: 8,394 sera had been tested by the Kahn method between September and the end of March. The

daily average for April was 55 sera.

The equipment of the serological laboratory had been completed, and thus a serious drawback mentioned by Professor Jessner in his report at the last session had been remedied.

To sum up, the organisation of the anti-syphilis campaign in the Department of Burgas was working satisfactorily, if account were taken of very great difficulties with which doctors had to cope in their work.

Professor Jessner urged the need for the regular remuneration of doctors by the Communes or the Departmental Council. Measures to this effect had been taken by a Ministerial ordinance of February 9th last.

It should be mentioned that the Director of Public Health had found it possible to budgetthough to a somewhat limited extent—for the necessary funds for the continuance of the antisyphilitic organisation as from April 1st, on which date this undertaking had ceased to be financed by the Director-General for Refugees.

Finally, in January, the Director-General of Public Health had held a meeting of all competent officials to consider the ways and means of extending to the entire country the campaign against venereal diseases, in particular against syphilis. By an ordinance dated March 10th it had been decreed that in consequence of the satisfactory results obtained in the Department of Burgas, the measures applied there were to be adopted for Bulgaria as a whole.

Dr. RAJCHMAN thought that Professor Jessner had accomplished the first and more difficult half of his task. On his arrival in Bulgaria, he had met with severe criticism, which might have endangered his chances of success. His personal ability and diplomatic skill had enabled him to convert his most determined opponents into partisans of the work undertaken against syphilis in Bulgaria.

Professor Jessner withdrew.

D. Collaboration with the Greek Government in Health Matters.

Dr. RAJCHMAN said that Dr. Norman White was unable to attend the meeting, as he could not leave Athens, where he was detained by the work of the School of Hygiene which had opened on

March 15th and was already working to its full extent.

Dr. Norman White would certainly be present, together with M. Pallis, at the October session of the Committee. Professor Léon Bernard had received from those of his pupils who formed part of the teaching staff in Athens, very encouraging information concerning the way in which the work was progressing in Greece.

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E. Collaboration with the Health Administration of Czechoslovakia.

Dr. RAJCHMAN said that Dr. Spina, Czechoslovak Minister of Health, would attend the October session and would make a statement on the investigations carried out by his Ministry in Sub-Carpathian Russia and Slovakia.

CHAPTER IV.—TECHNICAL SECRETARIAT OF COMMISSIONS.

Second Meeting May 5th, 1931 (morning)

A. Leprosy Commission.

The President requested Professor Nocht and Dr. Burnet to come to the table of the Committee.

Dr. Burnet said that the Secretariat had just received notes from Professor Miyajima

(Annex 8), Dr. Tsurumi (Annex 9) and Professor Nocht (document C.H.1002).

The programme assigned to the Health Committee's representatives had been outlined in the memorandum approved by the Committee at its last session. There had been no question of formulating a purely scientific doctrine as to leprosy. The principal and almost only aspect of

the problem considered had been that of prophylaxis.

The report of the Commission (document C.H.970) was divided into two parts, the more important dealing with prophylaxis, and the second with the best conditions for the application of prophylaxis. As soon as the experts had met, first at Bangkok, and later at Manila, they had realised the difficulty of coming to any conclusions as to leprosy, owing to the numerous gaps in the knowledge of this disease. The experts had found themselves faced with two factors which the knowledge of this disease. The experts had found themselves faced with two factors which appeared to be contradictory—treatment and isolation. Some leprologists put their faith in treatment and believed that its value greatly diminished the need for segregation, even when effected on more humane lines in accordance with modern methods. The others did not consider treatment adequate and insisted on compulsory segregation. The Commission had agreed that neither element could be sacrificed to the other and that reliance must be placed on treatment without its being possible to abandon segregation entirely.

From the moment that this point of view had been adopted, the Commission had been led to conceive of a system of complex prophylaxis, based on epidemiological control, comprising different organisations-dispensaries, centres for treatment, colonies-and conceived in the spirit of

preventive medicine and social hygiene.

In the second part of its report the Commission had considered the problem from the international point of view, which was essentially that with which the Health Organisation was concerned,

uniformity of method, interchanges between institutions and personnel.

All the members of the Commission present at the Bangkok Conference had been invited to attend that held in Manila. Although co-operation had not been as close as had been hoped for, as a result of the exchanges of view which had taken place two years ago between the Secretary of the Leprosy Commission and the representative of the Leonard Wood Memorial, now the Medical Director, the participation of the Commission in the work of the Conference had been marked by a keen spirit of collaboration.

The Bangkok Conference having formulated the basic principles of prophylaxis, the Manila Conference had quite naturally completed the work done at Bangkok, developing it further on the technical side. The Conference's report was at the disposal of any doctors and hygienists who

applied for it at the Science Bureau at Manila.

As a result of the two Conferences, the Health Committee was faced with a new situation. The time had arrived for putting the plan into execution: to examine methods of encouraging interchanges, to ensure greater uniformity in the work done in the various countries and, perhaps,

to consider working out later methods of standardisation.

As regards interchanges and combining the ideas and work of leprologists, who were the most isolated of specialists, the two Conferences had thought that their relations would be improved by publishing a year-book or digest containing useful information concerning the distribution of leprosy throughout the world, the institutions dealing with leprosy and the persons working in All that would be required would be to send a questionnaire through the Governments to the health administrations, to the associations dealing with leprosy and to the missions. In order to facilitate the preparation of statistics which would make it possible to estimate the movement of the disease and the results obtained by prophylactic methods and treatment, it would be desirable for clinical, epidemiological and statistical information to be prepared on a uniform basis. Absolute uniformity in matters of smallest detail were not necessary, but only in respect of the most important documents, above all, the epidemiological reports and reports concerning treatment. For this purpose, the administrations and leper colonies should be asked to forward

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their model tables and, after comparison, these should be used in the preparation of forms which

could be submitted to experts and then recommended for universal use.

It would be extremely useful to obtain a certain standardisation in the treatment of leprosy, both as regards the preparation and the application of the remedies which were generally recognised to be the most effective. Dr. Burnet could not help hoping that, in three or four years, it would be possible to carry out, in connection with a certain number of data regarding leprosy, work similar to that which was on the point of being so successfully concluded by the Commission on Venereal Diseases. The information collected later by means of the model forms would provide, in a few years, excellent material for an analysis of the conditions and results of the treatment of leprosy.

The Leprosy Commission had outlined a programme of study. The questions which it was

thought might most usefully be recommended were those connected with treatment and serodiagnosis. As regards treatment, it had been suggested long ago that an experiment—which was regarded as fundamental—should be carried out which consisted in comparing two equivalent groups of patients living in the same circumstances, one receiving special treatment with chaulmoogra, and the other not receiving such treatment. When the Conference had examined the scheme for this experiment, many difficulties, which Professor Nocht would probably wish to explain himself, had arisen. One difficulty was that it was hardly possible to deprive a certain number of lepers of treatment in order that they might be compared with patients undergoing This was an encouraging objection in one sense since it showed that the great majority of leprologists considered it impossible to deprive lepers of treatment.

The clinical and bacteriological diagnosis of leprosy was still under investigation, but there was another aspect of this question which was being studied, above all in Japan; Dr. Burnet referred to serological diagnosis, and in regard to which the researches now being carried out in

that country should be continued.

The Committee had already contemplated setting up international centres to carry out these It was highly desirable that the very abundant resources offered by Brazil for this

purpose should be used to the full.

The situation in Japan was of particular interest, in the first place, because Japan was still generally faithful to the method of segregation, in which she was introducing several very successful modifications, and, secondly, because leprosy seemed already to be declining in that country, and, lastly, because there was a strongly marked preponderance of the nervous and much less contagious form of the disease. If Japan continued to follow the same policy in regard to leprosy, a comparison between Japan and other countries like British India and the Philippines, would, after a certain number of years, be one of the most interesting epidemiological subjects for study. The Leprosy Commission, therefore, hoped that the investigations on leprosy in Japan would be actively pursued in the same direction and in collaboration with the Commission.

Professor Nocht presented a report of his study tour on leprosy in the Far East (document C.H.1002). He thanked the President, the Health Committee and Dr. Rajchman for having made this study tour possible.

Dr. Tsurumi had read with great interest the accounts of the Leprosy Sub-Commission's work in Bangkok and of the Leprosy Conference in Manila. He warmly associated himself with the sincere congratulations that have been addressed to Dr. Burnet, who had discharged his important mission with no less ability than success.

He wished, however, to make a few comments on certain points in the two reports, and to give the Committee a few further particulars of the work being done by his Government and the

Japanese people to prevent and abolish the scourge of leprosy.

At the Committee's last session he had informed his colleagues that, with reference to the proposal to set up an international leprosy centre in Japan, the Japanese Government had gladly agreed, in principle, to establish the centre in Tokio and was prepared to co-operate closely with the League Health Organisation, on the understanding that all existing institutions might also be asked to help.

This question had been raised when the Medical Director had visited Tokio in February 1931. In October 1930 a scheme for the international leprosy centre had been drawn up by the Medical Director, based on the idea underlying the Statute of the Ecole internationale des hautes études d'hygiène in Paris. This plan had been sent to the Japanese Government so that it might examine it so far as Japan was concerned. The competent health authorities in Japan, however, had made certain criticisms of the plan due to the special circumstances in that country. therefore still a few points to be settled, so that it would be necessary to wait a short time before it would be possible to arrive at a successful result.

Meanwhile, Dr. Tsurumi would be very glad if, as the Medical Director had just suggested, the Health Committee would agree to allow a Japanese leprologist to take part in the study tour proposed in the international research programme, a foreign expert going meanwhile to Japan to

work in the institutions dealing with leprosy in that country.

A measure of that sort would, he thought, be a step towards the establishment of the international leprosy centre in Japan.

2. During the discussion on the prophylaxis of leprosy, the Sub-Commission had apparently been divided into two groups, as Dr. Burnet had pointed out in his report on leprosy submitted at the last session of the Committee. Some continued to insist on the need for isolation, whereas others recommended the adoption of a combined system. Personally, Dr. Tsurumi agreed that isolation must be supplemented by epidemiological control and the treatment and education of patients and the public.

At the Committee's last session in October, he had informed his colleagues that almost all Japanese leprologists adhered in principle to their opinion as to the necessity for isolation. Facts, moreover, had proved that the number of lepers in Japan showed a fairly marked tendency to decline. For this reason, the Japanese Government was inclined to continue the policy of isolation, combined with treatment, but to develop it still further. Thus, the number of leprosaria had been increased in the last few years, while the law on leprosy had recently been revised.

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In the present circumstances it would, he thought, be preferable for the various countries to be left to continue their own methods of prevention, in accordance with the different administrative and social conditions in each. After a few years' experience it would probably be possible to make very helpful comparisons between the incidence in leprosy in certain countries which had decided in favour of keeping fundamentally to the principle of isolation and the incidence in the other countries applying more complex mixed systems.

Dr. Burnet had referred previously to the practice of isolation in Japan; he had perhaps gone a little too far, since, as Dr. Tsurumi had said, and as was clear from the Japanese leprosy law, isolation was required only in respect of patients who were liable to propagate the leprosy microbe.

- 3. The treatment of leprosy likewise was a matter of very great importance. Dr. Tsurumi agreed with the Sub-Commission, which had unanimously recognised the need for a general and dietetic treatment. Opinion was still divided as to the absolute efficacy of special treatment with chaulmoogra. The discussion on this point would, therefore, inevitably have to be re-opened when the Sub-Commission met. Notwithstanding many practical difficulties, it would be helpful to make an experiment in the treatment of leprosy by comparing two equivalent groups of patients living in the same circumstances—one receiving and the other not receiving special treatment with chaulmoogra. He wished, however, to call attention to the fact that treatment with chaulmoogra would not be the only special method, since there would be other methods as well which would be at least as effective, and in some cases even more so, than chaulmoogra. For instance, in Japan, Dr. Hashimoto, Professor of Dermatology in the Niigata School of Medicine, claimed that he had obtained quite remarkable results after treating a certain number of lepers with a preparation of gold and with "lipoide-protein". There were, in addition, other publications on this subject in Japan, and he believed that in other countries also similar valuable works on the treatment of leprosy existed. He therefore hoped that the Sub-Commission would at once begin to study this important and fundamental problem.
- 4. As regards the question of early diagnosis, Dr. Tsurumi considered this to be as fundamental a problem as that of special treatment, from the point of view of prophylaxis, the object being not only to organise an effective system of isolation, but to introduce complex combined methods as well. On this subject the Sub-Commission's intentions were unfortunately difficult to gauge.

At the Committee's last session he had ventured to give his opinion on this point. He had contemplated the possibility of discovering a method of serological reaction which would make diagnosis possible. A study of a reaction of this type had been published in the previous year by Dr. Murata, Director of the Osaka leprosarium. Different methods were recommended by other writers in Japan. He accordingly ventured to hope that the Leprosy Sub-Commission would pay due regard to the development of research work in the various countries.

5. Certain very important questions connected with scientific researches into leprosy had come to his notice—for instance, the pure culture of the leprosy bacillus, the transplantation of the bacillus in animals, the constitution and blood groups in lepers, etc. Information on these subjects had already been published in Japan, and they should, he thought, be studied by the Leprosy Sub-Commission.

As regards epidemiological research a comparative study, from the standpoint of preventive measures, should be made of the causes of the disappearance of leprosy in various countries where this disease had existed previously.

6. Dr. Tsurumi was fully prepared to approve the Manila Conference's recommendation concerning the preparation of a handbook, the standardisation of administrative and statistical records and the co-ordination of scientific researches. Enquiries and researches into leprosy on these lines were necessary and very important. He believed that, from the administrative and scientific points of view, certain data had already been collected by the Health Section of the Secretariat.

Dr. Tsurumi would give the Committee a few particulars concerning the work being done by the Japanese Government and the Japanese people as a whole for the prevention and suppression of leprosy. He would also submit a note concerning the reasons for the proposal contained in the Bill for revising the Leprosy Law tabled at the Imperial Diet's last session (Annex 9). He would add in passing that the reform had been passed by the Diet in March 1931. The note was accompanied by a memorandum concerning the movement of lepers in Japan proper.

Under the revised law only those who were liable to spread contagion would be isolated as lepers.

Dr. Chodzko wished to make a few observations, since the question had passed that year from the general sphere to the sphere of practical measures. It was regrettable that the report of the Leprosy Commission was a kind of compromise between two theories—segregation and treatment—which were difficult to reconcile. It was stated in the report that the prophylaxis of leprosy should be conceived in the spirit of preventive medicine and social hygiene. These two principles, to which the Health Committee attached fundamental importance, did not seem to have been fully applied in the conclusions submitted to the Committee. They were observed in a general way throughout the report, but it departed from them at certain points.

May, 5th, 1931 (morning) (continued) In the first place it was somewhat disturbing that the word "isolation" had been used. Doubtless it had not the same meaning as "segregation" although in practice there was scarcely any difference between the two. It was well known that isolation was a method which had been applied a few decades ago in the case of chronic social diseases, particularly tuberculosis. That method had been unsuccessful. It was true to say that public opinion was at present adopting the same attitude in regard to leprosy as it had adopted fifty years ago in respect of tuberculosis. The Leprosy Commission had established an analogy between tuberculosis and leprosy, and Dr. Chodzko considered—particularly on the basis of Professor Miyajima's report—that leprosy was far less contagious and less dangerous socially than tuberculosis. In those circumstances, was it really necessary to make use of isolation pure and simple in cases of leprosy?

circumstances, was it really necessary to make use of isolation pure and simple in cases of leprosy?

It would be better to replace the word "isolation" by the word "hospitalisation".

Hospitalisation could be applied to very recent cases, and even to very advanced cases, possibly

in combination with other methods.

Social hygiene was based on the idea of dispensaries and visiting nurses. The report referred to dispensaries without bringing them sufficiently to the fore, and did not mention visiting nurses,

who should be included among the most important aids in the campaign against leprosy.

In the paragraph relating to epidemiological control, reference was made to the utilisation of "special survey parties" or the "existing health staff". Dr. Chodzko did not know what would be their connection with the dispensaries. If they were to act independently, they might degenerate into a kind of special police for pursuing lepers. It would be advisable to emphasise the special part played by the dispensaries and visiting nurses and to deal with the question in a manner similar to that applied in connection with tuberculosis—that was to say, to contemplate centres of treatment, and to provide special institutions attached to the centres for incurable or very advanced cases.

Professor Miyajima's report showed that the disease was sometimes arrested. It would therefore be more in conformity with the modern conditions of social hygiene to consider the question

as a whole from the point of view of modern prophylaxis and treatment.

With regard to propaganda, Dr. Chodzko did not deny its value, but wondered whether it would not lead to greater persecution of lepers. Dr. Tsurumi had said that Japan did not adopt a policy of isolation to the exclusion of other methods of treatment, and Professor Miyajima had stated that it was not yet known in Japan whether the decrease in cases of leprosy was due to segregation or to the improvement in social conditions since the end of the nineteenth century. Dr. Burnet himself had said in the past year that isolation, though desirable in certain places, was not always to be recommended. Consequently, it was not advisable to recommend it in all countries as a method favoured by the Health Committee. Dr. Raynaud had said that in Algeria notification was compulsory, not in order that the lepers might be isolated, but in order to ensure supervision in their homes. In a report from Japan, it had been explained that the methods of the dispensaries had not given good results because, once the disease had been diagnosed, the sufferer did not return. Might that not be owing to his fear of the consequences of the diagnosis?

To sum up Dr. Chodzko considered that the modern methods of social hygiene should be most strictly applied to leprosy. He was convinced that appreciable results would then be attained,

as in the case of other social diseases. .

Sir George Buchanan pointed out that it was usual for reports, such as the report of the Leprosy Commission, to be submitted to the Committee on the authority of the Committee of Experts, the names of its members generally being given in the report. It would add to the authority of the report if this were done in the present instance. The position of those members who did not hold the views expressed by the Commission would then be clear.

Dr. Burnet stated, in the first place, that the report now before the Health Committee was not a personal contribution by any one individual; it was a text which had been discussed at length and approved by the Leprosy Commission. It constituted the first general report of that Commission.

In reply to Dr. Chodzko's observations, Dr. Burnet thought it could not be denied that the whole report was animated by the spirit of social hygiene. The greater part of it dealt with a complex system of prophylaxis, of which all the organs and activities were imbued with that spirit.

The term "isolation" had been discussed at length. It had not seemed possible to continue the use of the word "segregation", which implied the old enforced imprisonment in leper colonies guarded by sentinels. In this connection, Dr. Burnet explained to Dr. Tsurumi that there was no question of isolating any but contagious lepers. It would be inconvenient to use the term "hospitalisation" which gave an inaccurate idea of the various modern institutions planned for lepers.

Dr. Burnet drew special attention to the treatment centres in the Philippines, referred to in the paragraph relating to isolation, which showed that it was advisable not to put together in the same institutions early and advanced cases.

Dr. Burnet stated that he personally thought it necessary to insist on the analogy between tuberculosis and leprosy, from the point of view of prophylaxis, but the specialists who were more conscious of the differences than the analogies had not considered it advisable to establish formally this assimilation. From the point of view of health, and particularly of social hygiene, Dr. Burnet was entirely in agreement with Dr. Chodzko on this point.

Prophylaxis was based on a census of the lepers and on epidemiological enquiries. It was only just to quote, as remarkable examples, the surveys made in British India. The Leprosy Commission, however, could not enter into details of the measures which, in accordance with the

conditions in the various countries, might be suggested to the Governments concerned. The report of the Manila Conference contained very useful recommendations on this subject, from the technical

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In connection with visiting nurses, Dr. Burnet drew attention to the very considerable results obtained in the Philippines by a new institution whose business it was to track down cases in the early stages and to readapt to a normal life the lepers who had been liberated as practically cured. The social activity of this institution (Philippine Society for the Campaign against Leprosy) might well be quoted as an example to all countries.

The conclusions of the report in regard to treatment and isolation were not a timid compromise between these two theories. The present state of knowledge on this subject had rendered this eclecticism necessary. The Leprosy Commission, on the contrary, had given proof of its courage by taking a definite stand, and by adopting, in the interests of the diseased, as well as of the populations which must be protected, a practical system of prophylaxis which, from the theoretical point of view, ran the risk of not giving complete satisfaction to anyone.

Dr. JITTA referred to Dr. Nocht's observations on the Dutch East Indies. The competent Netherlands authorities shared Dr. Nocht's doubts as to Dr. Moser's theories on treatment by ultra-violet rays and the results Dr. Mulder claimed to have obtained from that treatment.

In the second place, Dr. Jitta asked the Leprosy Commission, the Health Committee and the Medical Director whether it would not be advisable to add a Dutch member to the Commission in view of the importance of leprosy in the Dutch East Indies.

Dr. Burnet replied that it had always been obvious that a representative of the Dutch Indies should serve on the Commission. Measures had not been taken owing to certain temporary circumstances, but the appointment suggested by Dr. Jitta would certainly be considered by the Leprosy Commission.

Dr. Nocht said, in reply to Dr. Jitta, that he had been favourably impressed by the photographs of Dr. Mulder's methods of treatment, but they did not of course show whether the improvement in the patients was due to the treatment or to other conditions.

With regard to methods of treatment, Dr. Nocht stated that during his study tour he had become more and more sceptical as to the possibility of discovering any efficacious chemotherapy or metallotherapy for directly killing the leprosy bacilli in the body. There were, indeed, very few bacteriological diseases against which reliable chemotherapy was available.

Undoubtedly striking results had been obtained by the administration of chaulmoogra oil and its derivatives, but this method could probably be usefully supplemented by the administration of a stimulant, appropriate to the special conditions of the disease, for the purpose of increasing bodily resistance. The difficulty consisted in finding the right stimulant and the right dose in each individual case.

Dr. Nocht pointed out that slight attacks of fever often proved helpful in the treatment of leprosy, and suggested that, after the necessary experience of the general methods and special treatment recommended in the report of the Leprosy Commission had been gained, efforts might be made to obtain better results by combining that treatment with cautious attempts to produce slight and short attacks of fever at not too short intervals by protein shock and other methods. It would also be useful to obtain experience of treatment with carbon-dioxide snow, which had given good results, and of other methods of treatment. He knew that certain doctors working in Japan had obtained excellent results from the use of iodine and thymol.

Professor Jadassohn considered the term "hospitalisation" too narrow. The expression "supervision" or "strict supervision" would probably suffice. Needless to say, supervision was in many cases impracticable if unaccompanied by isolation. The Leprosy Commission recommended in its report that the use of the term "mixed leprosy" be discontinued. Forty years ago, Leloir had been opposed to the division of leprosy into two forms only (maculo-anæsthetic and nodular or tubercular), his reason being the large number of mixed cases. In view of the presence of maculæ in nervous forms Professor Jadassohn thought it difficult to maintain the two divisions. In 1913 and 1927, in Kolle's Handbuch, he had attempted to show that the form largely depended on differences of allergia or allergisation. That view had been adopted in many quarters.

The number of bacilli was the most important factor both theoretically and practically. Any case, even one where there were only a few foci, might be contagious or become so at any moment if the bacilli were abundant. A division might therefore be suggested into open cases, or rather cases where there was an abundance of bacilli, nodular or tubercular cases, nervous and nodular cases—that was to say, mixed cases, and closed cases where the bacilli were few (nervous cases or those which, after being nodular, became nervous, and so-called extinct cases).

In the matter of diagnosis certain very interesting information had been obtained as to cutireaction. This method, as well as sero-reactions, might perhaps yield practical results. In addition, puncture of the glands and testicles and excisions in the nasal mucus should be practised very frequently.

Treatment was undoubtedly the most difficult question. Although he had no wide personal experience, Professor Jadassohn had treated one case with admirable results, and the literature on the subject made him think that preparations of chaulmoogra were of real value. He did not, however, consider it possible to make the experiment proposed by the Commission. He agreed with Professor Nocht, that such an experiment would border on cruelty. A conclusion would probably be reached by a very exact comparison of cases kept under favourable conditions, on the

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lines, for instance, of Professor Muir's principles, with cases treated with chaulmoogra and given at the same time general treatment. The observations made for this purpose would have to be very precise. The point that had struck Professor Jadassohn most in the literature on the subject and in his own personal observations was the tendency of many doctors to change their methods far too quickly in a chronic disease such as leprosy, with the consequence that it was impossible to obtain results.

As to chemotherapy, Professor Jadassohn could only share Professor Nocht's opinion. Potassii iodidum was apparently dangerous owing to the local reactions it was liable to produce. He had thought that it might possibly be feasible to begin with minimum doses which would be systematically increased. Local reactions could probably be interpreted as implying a certain

The results obtained in a certain number of cases of tuberculosis of the skin with the Hermannsdörfer-Sauerbrück system gave ground for hoping that good results might perhaps be

obtained in many cases with this method.

Thirty years ago, Professor Jadassohn had discovered a limited focus of tubercular leprosy in a small Swiss mountain village. It had apparently been in existence since the beginning of the nineteenth century. Notwithstanding very unfavourable conditions, it seemed to have died out spontaneously. It would be desirable for the Commission to examine these small European foci as well, and follow up their development. An enquiry of that sort might perhaps yield suggestions as to the causes of their disappearance. Studies of this kind had been made in France for a long time past.

Professor RICARDO JORGE approved Dr. Burnet's plea for a judicious eclecticism in the policy to be followed. The opinion had been put forward, not only that lepers should be treated, but also that the system of isolation was indispensable. The value of that method had been demonstrated

in Norway and Japan.

Professor Ricardo Jorge gave a short historical survey of the methods used to combat leprosy. In the thirteenth and fourteenth centuries, at the cost of superhuman, and perhaps inhuman, efforts, innumerable leprosaria had been established in all countries, and the result had been the stamping out of leprosy, although a few traces still remained. There had therefore been what could only be termed a standardisation of leprosy prophylaxis throughout Europe, and the success of this method had been proved. Leprosy, of course, still existed, but in Europe, above all, it was no longer the terrible scourge of former days. Pathologically, the disease was in no way mitigated, the various types were the same and the extraordinarily meticulous observations made by old clinicians proved this. Epidemiologically, the position was entirely different. The disease had become hardly contagious; it might be asked—Professor Miyajima had put the question once again—why it had formerly been so easy to spread the infection and so much less easy now. As in the case of all new diseases, there might have been greater susceptibility to it. Previously, the blame had been laid on mediæval uncleanliness, but there was just as much uncleanliness in certain small villages in his country, where leprosy had not developed. The truth would appear to be that there were favourable periods for each major epidemic disease. In the Middle Ages these had been plague and leprosy, diseases from which Europe was at present free. While he would not dwell on this point, Professor Ricardo Jorge observed that what had occurred in the case of leprosy was occurring in the case of other diseases. In a big leprosarium in Colombia—a veritable town with more than three thousand lepers and five hundred healthy persons, not a single case of contagion had been recorded for a number of years. Those on the spot affirmed that this was due to the constantly closer application of precautionary measures. One local doctor even went so far as to say that, the more soap was used, the more remote the danger of leprosy became. This would be a very simple measure of social hygiene which might give satisfaction to Dr. Chodzko.

Dr. Lutrario thought that the Leprosy Commission's report, although somewhat synthetic, contained certain important data concerning the principles on which the prophylaxis of leprosy should be based. He had been much interested by Dr. Tsurumi's note, which contained, so to speak, a review of the methods used in Japan, and discussed the desirability of reforming the Japanese law with the object of rendering the campaign against the disease more effective. A similar enquiry would be very useful in many other countries. There was a serious absence of uniformity in the prophylactic methods employed in the various countries. The Commission's report recommending the standardisation of the methods for combating leprosy would probably help to remove the striking divergencies existing at present.

The need for compulsory notification had been widely emphasised. From time to time it

would be useful to take a census so as to discover cases which might have escaped notice.

Isolation should be restricted to positive and contagious bacteriological cases. As a system of isolation, however, the segregation formerly practised, must be universally condemned. Dr. Lutrario would hesitate to accept isolation at home, except in cases where lepers had received a good education in matters of health, as was the practice in the Scandinavian countries. cases lepers should be hospitalised, but not in the ordinary hospitals. In many countries the value of placing lepers in agricultural colonies had been recognised. Isolation should, in Dr. Lutrario's opinion, be conceived on these lines.

Professor Miyajima said that, as his report (document C.H.1013) had been circulated, he would refrain from discussing it in detail. He wished merely to emphasise the importance of investigating the problems of hereditary predisposition and the social effects of leprosy in Europe and in other countries.

Dr. Tsurum thought that a certain amount of misunderstanding still existed as to the policy followed in Japan in regard to preventive measures. Hitherto Japan had practised a policy of complete isolation. As he had stated on the previous day, only patients who were liable

to propagate the bacillus would in future be admitted to a leprosarium.

Professor Jadassohn had taken the view that chemotherapy might be applied. Professor Nocht had pointed out the difficulties of this treatment. Time perhaps might make it possible to decide between the two theories. Dr. Tsurumi asked that the Leprosy Commission should immediately begin to study other methods of treatment than that with chaulmoogra. On the previous day he had given his opinion on the question of early diagnosis, which was of the utmost importance from the standpoint of preventive measures, and he would merely ask that the Leprosy Commission should investigate this subject also.

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Professor Pittaluga said that, in consequence of Dr. Chodzko's observations on the previous day, he had carefully reread the wording used by the Leprosy Commission to enunciate the principle laid down as to prophylaxis, and he would find it difficult to make any change, even of a few words. It was clear that the large leprosy foci existing outside Europe could not be compared in importance with those surviving in Europe: there was manifestly a difference between the social environment in which leprosy was found in Europe and outside Europe, and it was perhaps this difference of social environment which made some people, Dr. Chodzko for instance, think that methods approximating to those used in social hygiene might be applied in the prophylactic treatment of

leprosy.

If, however, the problem were examined more closely it would become clear, more particularly to anyone with experience of the European foci, like those in Spain, that isolation—and this was the only term that corresponded to the facts—offered more advantages even in an environment where home treatment was practicable under appropriate conditions; this was true both as regards the need for following cases and for determining the clinical history of the disease with sufficient exactitude to make it possible to draw conclusions with regard to epidemiology and prophylaxis. The first advantage was that isolation, even in a social environment of the kind existing in Europe, was the only method which would make it possible to adopt and follow exact treatment for a sufficient length of time to allow of deductions being drawn. Secondly, it was the only method by which, as Professor Ricardo Jorge had pointed out, the exceptional character of the contagion in certain health conditions could be demonstrated. These two results alone sufficed to show that the principles which the Leprosy Commission had laid down and which were based mainly on the investigation of leprosy outside Europe, were equally applicable to the foci in Europe.

investigation of leprosy outside Europe, were equally applicable to the foci in Europe.

In Spain there were four small centres of leprosy, the most important being in East Andalusia.

In one of the leprosaria not a single case of contagion had been observed among the staff attending the contagious cases, and the same was true of Colombia, to which Professor Ricardo Jorge had referred. Hence the idea of isolation, which was repugnant to the European mind and which everyone would like to see promptly superseded by other methods, such as treatment at home, etc., must apparently be regarded as retaining its full force pending the discovery of an effective

treatment giving positive results.

General Graham wished to mention some features of the proceedings of the Far-Eastern Conferences. The Leprosy Commission was composed of members drawn from the United States of America, Japan, India and South America, so that full attendance at the meetings had been very difficult to secure. Criticisms had also been made regarding the small number of members and experts, which had made it necessary for him personally to defend the Health Committee's policy of appointing new men, particularly representatives of clinical research and, in his own person, administrative workers. He wondered whether, after the experience in Bangkok, it was really desirable to hold meetings of the Leprosy Commission and the Far-Eastern Association of Tropical Medicine simultaneously, as members were frequently convened to several meetings at the same time.

The joint Conference on Plague at Calcutta constituted a precedent which seemed to show that the presence of experts at such a Conference could be utilised to promote the work of such Commissions of the League of Nations as those of Leprosy and Plague. The work on plague at Calcutta, however, was precise and occupied only a very short time, while that at Bangkok was different and had led General Graham to alter his opinion as regards the desirability of holding

such joint meetings in future.

As regards the report he had certainly felt it was open to criticism in some respects and had consequently conferred in Singapore with Dr. van Lonkhuyzen regarding the Dutch objections and used the five day's journey between Singapore and Manila to redraft, jointly with Professor Nocht, Dr. Burnet, Dr. Muir, Dr. Lowe and Dr. Gautier, the whole report. The result was that, on reaching Manila, they had been able to secure Dr. Wade's approval of the report and the Manila Conference had agreed to its incorporation as a separate chapter in the Leonard Wood Memorial report. It should be noted that the Manila Conference had the right to reopen the discussion on prophylaxis.

In his opinion that Commission had done its work well and collaborated very successfully; it was only a pity it had so little time in Bangkok for mature consideration. In conclusion, he was convinced that the Conferences held had greatly stimulated anti-leprosy work and the report produced undoubtedly represented a consensus of opinion among their Eastern colleagues which should not be lightly disregarded. It was very important that the League report should be read together with the report of the Manila Conference which would be available in the April number of

the Philippine Journal of Science.

Professor Cantacuzène drew attention to the desirability of investigating the epidemiology of leprosy in countries where it was limited to a very small number of circumscribed foci; in

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Roumania, for instance, there were 600 lepers divided between two foci, one in the district of the Olt and the other in the delta of the Danube. The rest of the country was completely free. Danube population were mostly of Russian origin and consisted of fishers. They had their own measures for isolating their lepers in special houses. In this district, apparently, the conditions were quite peculiar and their examination would be most helpful in connection with the study of the epidemiology of leprosy. Prophylactic treatment was confined to partial isolation; there was one leprosarium with 100 patients (serious forms of the disease only.) In point of fact the population isolated the lepers and the result was a marked decline in the disease. The appearent conclusion to be drawn was that, apart from general causes, the decrease in leprosy was largely due to the steady application of official and unofficial measures of prophylaxis. As it was plain that isolation must be supplemented by treatment with medicines, home treatment of that sort would probably be perfectly practicable.

Dr. Chodzko adhered to his view that the term "hospitalisation" should be used instead of "isolation". Isolation was extremely difficult to carry out in countries like British India, where there were 300,000 lepers, and it would probably be very hard to apply in their entirety the prin-

ciples laid down by the Leprosy Commission.

Moreover, the Commission's report stressed the almost complete similarity between tuberculosis and leprosy. The only difference, if any, was that leprosy was far less contagious than tuberculosis. Only one hundred of the six hundred lepers in Roumania were isolated, but the disease was not spreading. The actual idea of isolation, even for certain acute infectious diseases, would probably have to be revised. For instance, there were in England some who considered that isolation had not given the results that had been anticipated in connection with scarlet fever, and a form of treatment had been recommended which could be carried out at home. If it were still necessary to isolate certain cases of leprosy, Dr. Chodzko would continue to recommend treatment centres where patients would be isolated, but he would insist that this should not be advocated as a general measure.

In conclusion, he would repeat what he had said on the previous day concerning the utilisation of "special survey parties" and "existing health staff", which, he feared, would probably degenerate into a special notice for lepers, if the system were not incorporated as part of the dispensary system.

In consequence, he had nothing to alter in the statement made on the previous day.

Professor Nocht felt that sufficient stress had not been laid on the need for co-operation on the part of the population in the campaign against leprosy. Not only the healthy elements in the population but the sick as well should join in this work of co-operation. In the Middle Ages leprosy had been regarded as a scourge sent by God and as an incurable disease. At the present time the sick demanded treatment. It was for this reason, in Professor Nocht's opinion, that the Leprosy Commission had rightly attached paramount importance to treatment. Isolation would continue in all countries as far as possible, but it should never be applied without treatment, since otherwise undetected lepers would conceal themselves.

With regard to the general treatment of non-isolated cases, it should be pointed out that Professor Marchoux had called attention to the fact that over-strict isolation made it impossible to develop the medical man's knowledge of diagnosis and practical treatment. The main thing, especially in leprosy countries, was that all doctors should be conversant with the disease and with

its diagnosis at the outset.

Dr. Burnet thought that the observations which had been offered might be taken to signify approval of the report before the Committee. He was much gratified by Professor Pittaluga's observation that it would be difficult to alter the report. He would assure the Committee that all the suggestions put forward had been noted and would be put to practical use. He thanked, in particular, Professor Jadassohn, Professor Pittaluga and Professor Cantacuzene for drawing attention to leprosy in Europe. The world centre of gravity of the disease had probably moved attention to leprosy in Europe. The world centre of gravity of the disease had probably moved towards the Far East, and the Leprosy Commission, whose action must be international, was obliged to give greater attention to the countries most affected by the disease. The Commission, however, never had lost sight and never would lose sight, of the European countries.

In connection with isolation, he would recall several cases reported two years previously by Professor Jeanselme, in which leprosy had been contracted in France by persons who had never left the country, but who had been in touch with others returning from the colonies who

had contracted the disease.

A fact of enormous importance had occurred since the disappearance, though still incomplete, of leprosy in Europe. He referred to the movement of the European nations towards the tropical countries in search of raw materials, the steady development and increase of relations between these countries and Europe and the possibility of new infection in Europe.

From the epidemiological point of view, he could only draw attention, in passing, to the

importance of atypical cases of leprosy and the carriers of the leprosy bacillus.

As Professor Cantacuzène had said, home treatment was feasible, though its application depended on social conditions. It might be successful for highly civilised people. Where conditions were more primitive, it might create centres of contagion, due to ignorance and carelessness. Dr. Mitchell had given examples in the Union of South Africa.

Referring to the organisation of special survey parties, trained staff or existing health staff, and to the question of the work of visiting nurses, Dr. Burnet observed that the responsible chief officers of health should decide upon the means to be adopted. In the countries in the Union of South Africa good results had been obtained by means of groups of two native surveyors who had been specially trained. The duty of the Commission was to give general indications and not to suggest detailed measures applicable to each individual country.

Sir George Buchanan asked whether the Committee could have some statement as to the prospective programme of work to be done by the Leprosy Commission.

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Dr. Burnet replied that at the end of the chapter on leprosy in the Medical Director's report the general programme for the future work of the Leprosy Commission was given. The principal questions were: a leprosy catalogue or year-book; the standardisation of records used in leprosaria for the preparation of statistics; the enquiries to be continued in research centres on the lines either of previous decisions or of the suggestions made at the present meeting by the members of the Health Committee; and, finally, an attempt, at a later stage, to standardise the manufacture and application of the means of treatment, amongst others the chaulmoogra oils and their derivatives.

The Committee approved the Leprosy Commission's report.

Malaria Commission.

Sixth Meeting May 8th. 1931 (afternoon)

Dr. Lutrario, Chairman of the Malaria Commission, made the following report:

"I. Special interest attaches to the meetings of the Malaria Commission on account of the communications made by Colonel James concerning artificial malarial infection with mosquito bites, by Professor Marchoux regarding the effects of acidity on the fecundation of the parasite, and by Professor Schüffner on the comparative efficacy of quinine and plasmoquine-quinine in the

case of a relapse.

"Points of detail were postponed to a later meeting of the Research Sub-Committee, when the

different problems connected with these matters will be considered.

"2. The Malaria Commission, assisted by the members of the Sub-Committee on Alkaloids, had been instructed to deal first and foremost with the standardisation of quinetum, on which

the Health Committee took a decision mentioned in the Medical Director's report.

The Sub-Committee of Pharmacological, Chemical and Medical Experts met on May 5th and 6th and formulated the resolutions given in document C.H./Malaria/167 (Annex 10) which we are submitting to the Health Committee for approval. These resolutions, if passed, will complete the report on total alkaloids which the Malaria Commission had requested should be prepared for the use of health administrations.

"A preliminary protocol concerning the methods for analysing the new standard product has already been drawn up by Professor Giemsa, Dr. Henry and Dr. Groothoff. The protocol will be annexed to the report and will be followed later by additional protocols, based on the new knowledge acquired.

"3. The Malaria Commission next heard with great interest a communication from Dr. Bilbao, Director-General of Public Health in Bolivia, on malaria in his country. This disease is a very serious problem at the present time. The situation is aggravated owing to the absence of malaria. investigations, though these would be justified by the dangerous forms encountered. The Commission was keenly interested by the information supplied by Dr. Bilbao concerning the wild cinchona forests and by his suggestions for the preparation of anti-malaria remedies on the spot.

"We feel sure that we are speaking for all members of the Health Committee in assuring the Director-General of Public Health in Bolivia that the Malaria Commission and its competent Sub-

Committees are anxious to co-operate in technical matters.

"4. The Secretary of the Commission summarised the report (document C.H./Malaria/154) concerning his visit to Greece, the object of which was to study the question of the re-organisation of anti-malaria measures in that country. The Secretary emphasised the importance of the malaria problem in Greece, of medical assistance in rural districts and the need for a permanent anti-malaria organisation. The information he had collected concerning the extent of the disease and its varying clinical forms gave rise to a discussion on the frequent cases of blackwater fever.

"A short statement was made regarding the anti-malaria organisation in the strict sense of the term, and the Commission was very glad to learn that very close co-operation already existed between the malaria division in the School of Health and the technical organisations themselves, that a course of malariology had been organised for May and June 1931 and that a uniform

programme of work had been adopted.

"The Malaria Commission proposed that as close co-operation as that existing so far should be maintained between its technical Committees and the anti-malaria organisation in Greece, and would be glad if the department of malariology would collaborate in the study of numerous problems for which solutions might be found in connection with local epidemiological conditions.

'5. The Malaria Commission next took note of the information collected by the Secretariat as to the present stage of the various researches entrusted by the Commission to the experts belonging to the various countries. Professor Pittaluga had handed in his documentation concerning the researches carried out in the delta of the Ebro. The reports concerning the Ebro and Danube deltas will be printed separately as soon as ready. The complete body of information concerning the problem in the deltas of the Ebro, Danube and Po, as well as of the Ganges and Rhine, will then be submitted to the Malaria Commission, which will use it to draw certain general conclusions after examining the comparative studies connected with the observation of all the very special epidemiological factors existing in deltas.

"The experts present expressed a desire that the Health Organisation should give then the means to continue their studies, if need be. The Commission endorsed this request and warmly

commended it to the Health Organisation's consideration.

"6. Statements were likewise made on the present stage of the problems of housing and malaria, intensive treatment with quinine, and treatment with plasmoquine and quiniostovarsol.

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Of these problems, only that connected with the comparative study of Anopheles maculipennis and Anopheles quadrimaculatus has not yet been taken up. Information has already been collected on the other subjects, but it is not yet sufficiently complete to be discussed by the Malaria Commission's Research Sub-Committee. As soon as sufficient data have been collected regarding any one of these questions, they will be forwarded to the Sub-Committee.

"7. The Commission then took note of the progress of the enquiry into the extent of malaria and the requirements of malarial countries as regards quinine. According to the information supplied by the Secretariat, the replies reproduced in document C.H./Malaria/153 Addendum are not yet complete enough to enable us to compute these needs even approximately. The Commission hopes that all the countries to which it has applied will send it the information requested, in good

"As a corollary to the question of the quinine supply, the Commission discussed document C.H./Malaria/153 containing a summary of the information furnished by the Kina-bureau at the

meeting in Rome.

"As soon as the Health Organisation has received the data collected during the quinine enquiry, it will be able to lend its own co-operation, and that of its experts as well, in the preparatory work for a possible conference on quinine. The Kina-bureau's information as to the conditions for a 'possible plan of action' cannot be considered except by the representatives of the malarial countries taking part in the Conference.'

Dr. Lutrario then submitted the following draft resolution and the conclusions of the Sub-

Committee of Experts in regard to quinetum:

"The Health Committee,

"Notes the conclusions of the Sub-Committee of pharmacological and chemical experts on the new preparation 'totaquina' (document C.H./Malaria/167);

"Requests the Medical Director to arrange, with the Permanent Standards Commission, for the study of the chemical and biological methods of control of this preparation to be

"These conclusions will be included in the report to be forwarded to the sanitary administrations concerned, which will deal with the researches carried out under the auspices of the Malaria Commission in regard to the secondary alkaloids and mixtures of the alkaloids

"B.

"Expresses the hope that the technical collaboration of the Malaria Commission and of its Sub-Committees may be made available to the Government of Bolivia in view of the organisation of the anti-malaria campaign contemplated in that country.

"The Health Committee is gratified to learn that the first malaria course has now been organised at the new School of Hygiene in Athens and will begin in May 1931.

"The Committee has followed with much interest the development of the anti-malaria campaign in Greece which followed the principles and methods set out by the Malaria

Commission of the League of Nations.

"The Health Committee, noting that the malaria division of the Athens Centre has adopted the programme of work and of practical research elaborated by the Malaria Commission, would welcome the collaboration of this division in the study of the problems suggested at the Conference of June 1928, the solution of these problems being related to local epidemiological conditions.

"The Health Committee is of the opinion that the researches into problems of international interest should be continued according to the programme adopted.'

Professor PITTALUGA said that the Malaria Commission was most grateful for the constant support it had received from the Health Committee. The close of the present session offered a suitable opportunity for drawing attention to the importance of the work done by the Sub-Committee on alkaloids, and, more especially, to the masterly report by Dr. Henry on the total alkaloids of quinine. Elementary justice demanded that the Committee should pay a warm tribute to Dr. Ciuca whose ability and devotion had made it possible for the Malaria Commission, which was split up into a very large number of Sub-Committees, to carry out its manifold tasks successfully. Professor Pittaluga was sure that the Health Committee would join in the Malaria Commission's expression of gratitude to its secretary, Dr. Ciuca.

Of all the work done by the Malaria Commission and its Sub-Committees, that dealing with alkaloids clearly aroused the keenest public interest. From the scientific standpoint, however, due recognition must be given to the significance of certain communications, those, for instance, made by Colonel James, and to the researches carried out by Dr. Zotta and Professor Ottolenghi into malariology in river deltas. It might with truth be said that a cycle of work had been completed and that the Malaria Commission was ready, as in 1925, to formulate certain conclusions. The elucidation of two or three of the major questions connected with malaria would not be the

least of the successes standing to the Health Committee's credit.

Dr. Jitta warmly congratulated the Malaria Commission on its magnificent work. He had no objection to the conclusion concerning totaquina, and he noted with satisfaction that endeavours were being made to standardise preparations with a quinine basis. It must, however, be realised that totaquina would not be accepted immediately by everybody, seeing that quinine was always useful. The Kina-bureau at Amsterdam had decided to reduce its prices by 50 per cent in certain circumstances. It should be observed that the price of preparations with a quinine basis could be appreciably lowered but for the divergencies between the various pharmacopæias in regard to products with a quinine basis. To mention sulphate of quinine alone, the pharmacopæias prescribed at least twenty-five different methods of preparation. Would it not be possible to standardise this substance on the lines, for instance, of the American or British pharmacopæias in which the requirements as regards the purity of the drug were not exaggerated? To do so would undoubtedly effect a saving, and Dr. Jitta greatly hoped that the Health Committee would examine the question of the standardisation of preparations with a quinine basis.

Way 8th, 1931 (afternoon) (continued)

Sir George Buchanan had noted with special appreciation Professor Pittaluga's observations on the value of the contributions made by Dr. Henry to the work of the Sub-Committee on alkaloids of cinchona. The latter had done very important work for the Health Organisation of the League of Nations which, if it were remembered for nothing else, would probably go down in history as the inventor of the word "totaquina".

Dr. Lutrario thanked the members of the Health Committee for the kind way in which they had referred to the conclusions of the Malaria Commission. He had special pleasure in joining in

the tribute paid to Dr. Ciuca.

The information received by Dr. Jitta from the Kina-bureau regarding the price of preparations with a quinine basis was as yet only semi-official, and Dr. Lutrario thought that it would be best to examine it when the results of the enquiry into the world requirements of quinine were known. Dealing with the standardisation of substances with a quinine basis, Dr. Lutrario observed that some years previously Italian pharmacologists had held the view that these products should be extremely pure; but they had since changed their opinion and now held that the presence of a small quantity of secondary alkaloid did not detract from the value of the preparation.

Dr. Lutrario then gave explanations of the reasons for which the Sub-Committee of Experts on quinetum had adopted the term "totaquina" to denote the preparation mentioned in Point 2 of document C.H./Malaria/167. Unlike the various other expressions considered, this term was

not purely symbolic, but at once suggested the composition of the product in question.

The Committee approved the decisions of the Sub-Committee of Experts with regard to quinetum (Annex 10) and the report by the Chairman of the Malaria Commission. It also adopted the draft resolutions submitted by Dr. Lutrario.

E. Work of the Reporting Committees.

Sixth Meeting May 8th, 1931 (afternoon)

2. Hygiene of Children of School Age.

Dr. Tsurum reminded his colleagues of the proposal he had made at the Committee's fifth session concerning school hygiene which the Committee had adopted. He hoped that Dr. Tandler would take the proposal into account in his report.

3. Questions relating to the Control of Tuberculosis.

Dr. Tsurum approved the suggestions which Professor Léon Bernard had urged should form the basis for preparing the report. He was anxious, however, to submit certain comments. While the death rate from tuberculosis was declining in certain places, in others the campaign against this evil was still an urgent matter of fundamental importance, both socially and administratively. Japan was one of the latter countries, although a slow decrease in the tuberculosis mortality rate had been recorded in recent years. It had accordingly been necessary to redouble the efforts made in Japan to stamp out the disease and it would be very helpful if information on the following points could be sent, not only to Japan, but to other countries in the same position:

- I. The causes of the fall in the death rate from tuberculosis;
- 2. The minimum programme for administrative preventive measures;
- 3. The financing, in recent years, of the anti-tuberculosis campaign, whether by the State or by local authorities in the countries where the tuberculosis death rate was steadily falling.

If Dr. Tsurumi had correctly understood the Minutes of the last session of the Committee, it was proposed to continue the investigation into the causes of the decline of the death rate in the Scandinavian countries. He had, further, heard it said that certain data on the same subject, but relating to other countries, had already been published. He would consequently request the Chairman of the Reporting Committee to fall in with his suggestions and to take them into consideration in preparing the reports on tuberculosis.

Professor Léon Bernard thanked Dr. Tsurumi for his suggestions. He hoped that Dr. Tsurumi would forward to the Reporting Committee any information he could collect regarding

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(continued)

Japan. No one could forget the very important part played by Dr. Tsurumi in the work of the Tuberculosis Commission.

Numerous publications had appeared on the causes of the reduction in mortality from tuberculosis, the standard work on the subject still being that of Professor Robert Philip of Edinburgh. Owing, however, to the divergencies of opinion on this point, it was improbable that the Committee would succeed in coming to any definite conclusions within a comparatively short space of time. Nevertheless, Professor Léon Bernard hoped to be able to place the Health Committee in possession of a first report in October.

4. Questions relating to Venereal Diseases.

Second Meeting Way 5th, 1931 (morning) Professor Jadassohn read the following statement on the progress of the work done by the Reporting Committee on Venereal Diseases:

"You are all acquainted with the plan drawn up in October 1928 by the Commission of Experts on syphilis and cognate questions. The purpose of this plan was to bring together a large number of case record cards, in order that an opinion might be formed on the course taken by the disease under various methods of treatment, and based on particulars supplied on the most uniform possible lines.

"Professor Martenstein, who has been going through the material under my direction, has handed me a preliminary report on the progress of his work. I am not submitting this report to you, since it is too essentially statistical and since the figures it contains have first to be examined by the Commission of Experts. At the moment, therefore, I propose merely to outline its most

salient features.

"As you are already aware it has proved far more difficult to obtain information than was anticipated; thus, as regards certain countries, we are still awaiting essential supplementary data. It is obvious that we cannot find the answer to the problems we set ourselves to solve, unless we possess absolutely complete information, failing which we should be involved in endless revisions of our highly intricate statistics. Moreover, a great deal of time and work has had to be expended on a large number of cards that were either inadequately filled in or bore incomprehensible entries. Had we not strongly insisted at the outset that the clinics and institutions co-operating with us should correct or complete such cards, a fairly considerable proportion of this valuable material would have been lost for the purposes of our enquiry.

"During the meeting of the Commission of Experts held at Copenhagen in August 1930, it was decided that when the cards of the "Syphilis No. 1" Group (primary syphilis with negative serological reaction at the time of first injection) were examined, all cases in which the modern methods of diagnosis, whether microscopical or serological (during or after treatment) had not been used should be classified apart. Unfortunately, we have found that, in nearly one-quarter of the

cases, the presence of Spirochæta pallida had not been demonstrated.

"Before proceeding any further, I should like to draw attention to a point which relates in a general way to the examination and utilisation of the material: in going through the cards we realised that it would be useful to investigate forthwith a certain number of questions not directly related to the essential purpose of the enquiry, for the reason that any subsequent and separate study of these highly interesting questions would have been far more arduous. We have thus been able to derive, as a by-product of our work some highly interesting conclusions which I will briefly review: 9.6 per cent of the 1,496 cases of Syphilis No. 1, for instance, were found in women and this, in the light of our present knowledge, is a very considerable proportion. It is of striking interest that, in Denmark and Germany, the percentage is 15 for each country, and that for the United States of America, France and Great Britain it is about 5 in each case.

"Another curious fact—so far unexplained—is the difference, in various countries, of the age at which the infection is contracted. In Denmark and in Germany, for instance, the number of infections contracted between 16 and 20 years of age is three or four times as high as in other

"Particulars of the age of the infection also show great variations. In Germany, for instance, they were unobtainable in about 25 per cent of the cases; in other countries in from 3.8. to 8.2 per cent of the cases. Such unexpected differences raise a number of further questions on which I do not propose to dwell at present.

"It has not been possible, for the reasons already stated, to effect a final classification of the results of the various methods of treatment. Moreover, such a classification is rendered particularly difficult by the multiplicity of the methods used. Finally, the utmost caution is obviously

essential in the publication of such results, in view of their possible influence in practice.

"We are, however, already in a position to state the number of serological and clinical relapses which occurred in the various countries in cases of Syphilis No. 1: the summary of statistics shows that in 85.6 per cent of the total number of cases there was no relapse: the proportion was 97.4 per cent in Denmark, 75.4 per cent in France and in other countries approximatively 83 per cent. Nevertheless, a fair number of cards were still awaited.

"Of the cases that were followed by relapses it had been possible to follow up a large number at the end of treatment; 67,3 per cent and 69.6 per cent of serological and clinical relapses, respectively, subsequently became and remained negative. If these favourable figures are combined with those of cases in which no relapse occurred, there remains an average of 3.9 per cent of cases insufficiently treated (in Denmark o.6 per cent, in other countries between 4 and 5.9 per cent). This represents a highly satisfactory result, if allowance is made for the variety in the treatment applied in different countries. It should, however, be borne in mind in this connection that in many cases the duration of observation was comparatively short.

"In any appraisal of the results obtained by various methods of treatment, the questions of accidents and complications of treatment obviously play a particularly important part. I should like, in particular, to point out that, among the total number of cases of Syphilis No. 1, only one death was recorded. As regards the most important complications in recent times (icterus and dermatitis) the figures of the various countries differ considerably (icterus from 2.3 to 11.2 per cent, dermatitis, from 0 to 2.2 per cent). These have been the major complications in recent times. The causes of these divergencies will require closer investigation.

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"I should also like to draw your attention to the limited number of lumbar punctures performed in those cases of Syphilis No. 1 (20.3 per cent) to which our enquiry relates. The positive serological reactions thus obtained (10 per cent of 20.3 per cent) do not essentially affect the aggregate results.

"I do not propose to dwell here on the very difficult question of reinfection, of which there were forty-one cases. The uncertainty and the differences of judgment involved in the diagnosis make it difficult to use these cases for statistical purposes.

"It is not uninteresting to note that 2.2 per cent of the cases had to be eliminated for lack of any proper serological follow-up. If these cases are added to the primary affections in which the diagnosis was not made on any adequate basis, it will be found that for every 100 cases properly diagnosed and followed up, there are 25.4 in which the methods employed in this connection did not satisfy modern requirements. It is regrettable that this proportion should be so high, especially if it is remembered that the material is supplied by clinics and hospitals.

"By these few remarks and this summary of the results obtained, I have endeavoured to give you an idea of the methods of work adopted by the investigators. The time and work involved in carrying the enquiry through to a successful conclusion are much greater than were originally thought. New difficulties are constantly being encountered, new questions are constantly arising.

"If, therefore, this enquiry demands patience, we can, nevertheless, and despite all scepticism, expect to achieve results as interesting as they are important, from a practical standpoint. We are unable to say at the moment whether we shall succeed—on the basis of this material, unique both in scope and in uniformity of preparation—in devising a standard method of treatment. We shall, however, be able to determine what should be the minimum treatment below which we ought not to go if we are to limit as far as possible the number of premature relapses. We shall also be able to throw further light on the question of the relationship between the accidents and the intensity and method of treatment, on the importance of the various specific remedies, and, finally, the differences between the results of treatment during the primary and secondary stages of the disease."

Professor Jadassohn added that the Reporting Committee had met on one occasion, when Dr. Harrison had been unable to attend to examine its methods of work. It had drafted a questionnaire covering a large number of points and intended mainly for Dr. Jessner's personal use. Dr. Jessner had already visited London and Copenhagen and had collected considerable information. When all the data awaited had been received, the Reporting Committee would meet again to examine the methods of utilising the material collected, with the object of replying to any questions the Health Committee might wish to ask.

Much of the work connected with methods of treatment and sero-diagnosis had already been carried out, first by the Commission of Syphilis Experts, to whom Professor Jadassohn had just referred, and, secondly, by the various Serological Conferences. There would not, accordingly, be much work to do on these two points. It would suffice if the manner in which the different countries utilised the methods of treatment and sero-diagnosis were ascertained.

The main work would deal with the question of administrative measures for the prevention of venereal diseases (among them the question of statistics). The way in which the existing mass of literature on the subject, and the material which Dr. Jessner would bring back from his travels were to be used, would have to be examined.

The President knew from his own experience the great difficulty of the work done by the Reporting Committee, which was all the more deserving of the Health Committee's gratitude. In Denmark an attempt was being made at the moment to conduct an enquiry into congenital syphilis. Such an enquiry would be very difficult in other countries but was quite feasible in Denmark owing to the special conditions there.

Sir George Buchanan said that, as regards the administrative measures, he was satisfied that Dr. Jadassohn was right in entrusting the enquiry in the first instance to a single expert, who would visit the countries concerned and form his own impressions. All the assistance his colleagues could give, through Colonel Harrison and others, would be at his disposal.

Participation in the international comparison of serum tests had been extraordinarily valuable in connection with national work on venereal diseases. In England serum reactions for syphilis were tested at a large number of local laboratories. The Ministry of Health did not enforce the use of particular methods by the pathologists of their laboratories, but confined itself to giving advice. It encouraged pathologists working at the various centres throughout the country to compare specimens with the central authority, in the same way as the various national representatives compared methods at international conferences. The fact that the pathologists of the central department had taken part in the international conferences gave them, when advising the local laboratories, great moral support and an authority, which they could not otherwise possess.

Fourth Meeting Nay 7th, 1931 (morning)

7. Active Immunisation against Diphtheria, Scarlet Fever and Whooping-Cough.

Dr. Ciuca made a statement on the progress of the researches undertaken. It should first be observed that Poland and Roumania had been omitted from the list of countries which had carried out researches into the results of active immunisation. This was the more regrettable because these two countries had made very valuable contributions. The researches had been started in 1929 and had already given important results. Notwithstanding the difficulties with which the experts had had to cope, they had collected a valuable body of information. The Secretariat had already received two-thirds of the reports, but was waiting until it had received them all before forwarding them to the Rapporteurs who would prepare a general report for the meeting in London. Without anticipating the Rapporteurs' conclusions, Dr. Ciuca thought he could say, judging from the reports already received, that there were now available, in regard at any rate to diphtheria, results which would certainly lead to sufficiently definite conclusions to convince doctors and those members of the public who still resisted vaccination.

The PRESIDENT considered that, as the question was to be discussed at the London meeting, the Health Committee need not consider the matter at length.

Sir George Buchanan agreed that the Committee must wait for the results of the London Conference, which, he imagined, would report on the different aspects of immunisation against scarlet fever and diphtheria. He wished to repeat what he had said on previous occasions regarding the importance, from the administrative point of view, of any report on this subject. Any such report, before its consideration and ultimate approval by the Health Committee, should be entirely provisional in character. National health administrations should have the opportunity of commenting on it before it was published. He assumed that at the October session the actual terms of the report would be available for discussion.

The President replied that the report would be submitted to the Health Committee before publication.

Surgeon-General CUMMING said that considerable data on this matter were available in the United States of America.

Dr. Tsurumi hoped that the meeting in London would take into account the results of the work done in Japan. With this object he was intending to forward the necessary data to the Secretariat.

Dr. Ciuca, in reply to General Cumming, said that the Secretariat had not omitted to get into touch with specialists in a number of cities in the United States of America. Part of the statistics in question had already been received at Geneva, and this information, too, would be placed before the London meeting.

The President understood that at the moment the discussion bore on Question C. as well—namely, the "Permanent Commission on the Standardisation of Serums, Serological Reactions and Biological Products", since all these questions would be examined in London.

Sir George Buchanan said he and his colleagues at the Ministry of Health and at the Medical Research Council were looking forward to the visit to London of the Commission on Standardisation of Sera. The time had now arrived when a number of further points could be considered from an international aspect.

Fitth Meeting Kay 8th, 1931 (morning)

F. Opium Commission.

M. Velghe stated that, as Dr. Carrière, the Chairman of the Opium Commission, had only been able to draw up his report the previous evening, the members of the Commission had not had time to examine it, as was usual, before it was submitted to the Health Committee.

Dr. Rajchman suggested that the Health Committee should follow the British Parliamentary procedure and form itself at once into the Opium Commission. When the examination of the report and draft resolutions was completed, the plenary meeting could be resumed.

This suggestion was adopted.

The President adjourned the meeting of the Health Committee in order to permit of the examination of the report and draft resolutions in the Opium Commission, under the chairmanship of Dr. Carrière.

The report of the Opium Commission (Annex II) was read and the draft resolutions included therein were discussed,

Resolution I.

"The Health Committee;

"In view of the opinion of the legal adviser of the Secretariat that the observations of the British Government calling into question the conditional exemption of certain preparations under Article 8 of the Geneva Opium Convention are well founded and stating that the exemptions under this article, being based solely on the actual composition of a preparation, should not be made the subject of conditions;

"Decides that the preparations referred to—namely, anti-opium tablets and sterilised solutions of morphine, eucodal and atropine — should be withdrawn from the provisions of the Convention by reason of their composition as indicated by the German and Siamese

(morning) (continued)

'Considers, however, that the attention of Governments should be drawn to the danger of the market being flooded with unlimited quantities of narcotics in the form of solutions—dry or liquid—a danger which will continue as long as these solutions are regarded as preparations falling within the exemption-limit defined by paragraph (d) of Article 4 of the Geneva Convention."

M. ABT pointed out that the test of whether a given preparation should be exempted from the Convention was whether the drug contained in that preparation could or could not be recovered in practice. The Permanent Committee of the Office international d'Hygiène publique was of opinion that the recovery of the drug contained in sterilised solutions of morphine, eucodal and atropine would be rendered impossible in practice if those solutions were supplied to the trade exclusively in the form of ampoules. If this condition were suppressed, the recovery of the drug would perhaps be possible in practice and in that case the Committee of the Office international world be the original that the practice of the trade would perhaps be possible in practice. might think it necessary to come to a different decision. He thought, therefore, that the question should be referred for a fresh opinion and report to the Permanent Committee of the Office 'international d'Hygiène publique.

The Committee adopted this proposal, and the text of the resolution was modified as follows:

"The Health Committee;

"Decides to communicate to the Office international d'Hygiène publique, for opinion and report, the observations of the British Government concerning anti-opium tablets given in the Siamese list and the sterilised solutions of morphine, eucodal and atropine on the German list, such preparations having been conditionally exempted by a decision of the Health Committee dated October 7th, 1930."

Resolution II.

"The Health Committee:

"Decides to communicate to the Office international d'Hygiène publique, for opinion and report, the French Government's proposal that, on the basis of preparations individually exempted hitherto owing to their containing a substance which precludes abuse, it should be agreed that all new preparations containing the same substance in proportions at least as great relatively to their narcotic content should without further formality be considered exempted."

This resolution was adopted without discussion.

Resolution III.

"The Health Committee:

"Considers that preparations containing acedicone (acetylodemethylodihydrothebaine) should be brought under the provisions of the Convention whatever their acedicone content. "It also considers that the salts of acedicone should be brought under the Convention in pursuance of the provisions of Article 10 of that Convention.

This resolution was adopted without discussion.

Resolution IV.

(Acceleration of the procedure laid down in Article 10 of the Geneva Opium Convention).

"The Health Committee:

"Having noted the opinion of the legal adviser of the Secretariat, according to which the Health Committee has no authority to delegate a part of its powers to a Commission;

"Retracts the decision taken on October 31st, 1928, and decides that the preliminary opinion of the Opium Commission, instead of being transmitted direct to the Council after receiving the approval of the President of the Health Committee shall, in future, be circulated first for submission to all the members of the Committee. Should one of these members raise objections to this preliminary opinion of the Opium Commission, a discussion would be held by the Committee on the subject." by the Committee on the subject."

Dr. Hamel proposed that, should a member of the Health Committee who was not a member of the Opium Commission object to a decision taken by the latter, the question should be referred to the next session of the Health Committee.

Professor Bordet suggested that the objections raised by any member of the Committee against a preliminary opinion of the Opium Commission should be forwarded in the first place to the Chairman of that Commission, who should bring persuasion to bear on the member in question. This procedure would save time, for such objections were often due simply to a misunderstanding. If the member who had raised the objection insisted on a discussion in place. If the member who had raised the objection insisted on a discussion in plenary meeting, the Chairman of the Commission would of course acquiesce.

May 8th, 1931 (morning) (continued)

Dr. RAJCHMAN said that, according to the legal adviser of the Secretariat, if the member who had raised the objection insisted on a discussion in plenary meeting, his request would have to be

After some discussion and on the proposal of M. Velghe, the last sentence of the draft resolution was modified as follows:

"Should one of these members raise any objections to this preliminary opinion of the Opium Commission and maintain such objections after explanations furnished by the Chairman of the Commission, the preliminary opinion will be brought up before the Health Committee."

Resolution V.

"The Health Committee:

"Accepts the programme of research (document C.H.975) drawn up by the Commission of Experts set up to devise a standard method of ascertaining the morphine content of raw opium."

This resolution was adopted without discussion.

Resolution VI.

"The Health Committee:

"Considers that it should be represented on the competent body provided for by Article 3 (paragraph 2) of the draft Convention on the Limitation of the Manufacture of Narcotic Drugs, this body having the task of examining the estimates supplied by the various Governments of their requirements in the matter of narcotic drugs, and of establishing such estimates, where necessary, for countries which have not furnished an estimate. The representation of the Committee on that body should, moreover, be adequate to enable it to contribute usefully to its work."

This resolution was adopted.

Resolution VII.

"The Health Committee:

"Considers, as regards the products the manufacture of which should be limited, that the Convention ought to include a provision whereby any products, which may subsequently be pronounced habit-forming by application of Article 10 of the Geneva Convention, may be subjected to limitation."

This resolution was adopted.

Resolution VIII.

"The Health Committee:

"Considers, in agreement with the Advisory Committee, that all derivatives of morphine not coming under the Geneva Convention should be subject to control.

"In the case of peronine and codeine, the Health Committee considers that this control is particularly justifiable in view of the fact that these two substances can or might be utilised as raw material for the manufacture of narcotic drugs already under the Geneva Convention."

The President observed that a distinction must be drawn between limitation and control, as the latter might be applied to non-narcotic products from which, neverthless, morphine might be recovered, or which might be used indirectly for the illicit traffic.

Among the morphine derivatives to be considered might be mentioned codeine and peronine. It was now recognised that codeine could be used (industrially or otherwise) for the preparation of dicodide, which drug had been made subject to control in consequence of a resolution passed by the Health Committee.

Practically nothing was known of peronine, except that, according to certain information received by the Advisory Committee, it might possibly be converted into heroin. The Advisory Committee had accordingly considered that the full measure of control prescribed by the Convention should be applied to peronine.

Any suggestion to limit the manufacture of codeine would certainly arouse resistance from the medical profession. Dr. Hamel had submitted a number of arguments in the Opium Commission, among them the contention that it was perhaps inadvisable to recommend that codeine should be subject to full control and that, in particular, the import certificate system on which the supervision of the traffic in drugs was at present based should not be enforced.

The question, then, was whether codeine should or should not be made subject to control and, if the appropriate what should he the limits of that control.

if the answer were in the affirmative, what should be the limits of that control. Speaking personally the President thought that codeine should be subjected to the full measure of control laid down in Articles 6, 12, 13 and 18 of the Geneva Convention. Manufacturer's imports and exports should be controlled and only the internal trade, in particular that of pharmacies, should be exempted.

Dr. RAJCHMAN pointed out that, in the form in which it had emerged from the Advisory Committee's discussion, the draft Limitation Convention already contained the principle that codeine should be controlled. The Health Committee, accordingly, was not asked to consider the question whether codeine should be controlled or not, but simply to what extent it should be controlled

May 8th, 1931 (morning) (continued)

The Medical Director drew attention to the wording of Articles 6, 12 and 13 of the Geneva Convention and Article 22 of the draft Limitation Convention. The measure of control to which the President had referred did not in any way affect internal consumption: it concerned solely the consuming countries, which were anxious for protection against the importation of drugs which might reach the illicit traffic.

Sir George Buchanan stated that, in his view, the question of the control of codeine concerned the Advisory Committee and did not seem to be within the competence of the Health Committee.

The President observed that the question referred to the Health Committee was perfectly definite.

The Committee was asked what, in its opinion, were the drugs not covered by the Convention which should be brought under control. The Committee must at least say which products should be included in the Convention and it might perhaps add that it regarded itself as having no competence in matters of detail, which it left to the determination of the Conference.

Dr. Hamel approved the principle but not the wording of the eighth resolution. The manufacturing processes involved in the conversion of codeine into dicodide were so difficult and so expensive that there was, as a matter of fact, no real danger. In view of the dangers of the process used in the manufacture of eucodal, the manufacturers were so strictly controlled that they would hardly find it possible to make any clandestine use of codeine. Nevertheless, Dr. Hamel agreed that imports and exports of codeine should be controlled, but thought it unnecessary to apply the certificate system to that product.

There would be adequate security against fraudulent manufacture if imports were controlled

and manufacturers were required to send in their returns.

Dr. Chodzko pointed out that under a German Ordinance of 1925 concerning the importation of goods, the imports of codeine were forbidden unless a permit was previously obtained. It was only necessary to strengthen that Ordinance. Other countries were concerned in the matter; whereas Germany must control its imports of codeine, the question for these other countries was that of exports of foreign codeine. The Polish Director of Public Health had submitted to the competent Minister a draft Ordinance extending the certificate system to codeine.

The first paragraph of the eighth resolution might perhaps be amended as follows:

"The Health Committee considers, in agreement with the Advisory Committee, that all derivatives of morphine not coming under the Geneva Convention should be subject to full control, including the import and export certificate system."

Dr. Rajchman, in reply to Sir George Buchanan, observed that for the past six years it was the Health Committee, and not the Advisory Committee, which had been entrusted with the duties mentioned in Articles 8 and 10 of the Geneva Convention. Even before the Convention came into force, the Council had requested the Health Committee to act as if the Convention were already being applied, and the Committee had at every session considered the problem of narcotic drugs. That being so, it was for the Health Committee and not for the Advisory Committee to say whether the instrument placed in its hands was the best possible one and whether it did not need to be improved. The Medical Director hoped that Resolution VIII, as amended by Dr. Chodzko, would be adopted. He found it rather difficult to understand Dr. Hamel's insistence that codeine should be exempt from the import certificate system, while in Germany itself prior authorisation was made a condition for the importation of this substance. Why should not the other countries be given the power to safeguard themselves in the matter of imports of codeine?

Dr. Hamel explained that he considered the certificate system useless for codeine, because it was extremely complicated work to fill up certificates and because codeine represented an appreciable advance in therapeutics. It should not therefore be linked up in the same paragraph of the resolution with other substances such as peronine. To sum up, Dr. Hamel was in favour of full control for peronine and a certain measure of control for codeine, and urged that the two substances be treated separately in the resolution.

The President said that the system of prior authorisation, as distinct from the certificate system, which existed in Germany, was not in force in Switzerland, where the certificate acted as a permit as well. The question to be settled was whether the Commission thought that the full control prescribed by the 1925 Convention should be extended to all morphine derivatives, including codeine, or whether certain of these substances, and in particular codeine, should only be subjected to a certain measure of control.

The President, in reply to M. Velghe and Professor Léon Bernard, who had asked what was meant by the term "a certain measure of control", explained that full control implied all the measures laid down in Articles 6, 12, 13 and 18 of the Geneva Convention, including the import certificate, whereas the limited control which the term "a certain measure of control" signified would consist of the same measures, with the exception of the import certificate.

Dr. Rajchman proposed that the text suggested by Dr. Chodzko should be amended as follows:

"The Health Committee:

"Considers that all derivatives of morphine, not coming under the Geneva Convention, should be subject to control, such control to include the import certificate system."

May 8th, 1931 (morning) (continued)

The President thought that the terms of this resolution should be made still clearer and proposed the following text:

"The Health Committee:

"Considers that all derivatives of morphine not coming under the Geneva Convention should be subject to the measures of control provided in Article 6 of that Convention regarding their manufacture, import, export and wholesale distribution, and in Articles 12, 13 and 18, which regulate the application of the system of certificates."

The President suggested that in order to save time, as all the members of the Health Committee were present, the vote on this resolution should be taken by that Committee and not simply by the Opium Commission.

This suggestion was approved, and the resolution was adopted by the Health Committee by fourteen

votes to four and one abstention.

Resolution IX.

"The Health Committee:

"In view of the report by Dr. P. Wolff, which suggests the constitution of a Commission for the study of the treatment of drug-addicts;

" And considering that the work of that Commission would aim at bringing to light the satisfactory results of modern methods of treating drug-addicts, thus favouring the popularisation of these methods in all the countries concerned;

" Decides:

- "(I) To set up that Commission, entrusting to its Chairman the nomination of the members;
- "(2) To request the Commission, as its first task, to draw up a programme of work to be submitted to the Health Committee at an early session."

The President drew attention to Dr. Wolff's report (document C.H.1018) on drug-addiction and the methods of treatment. The Commission had not had time to go into details. The writer of the report asked that the questions raised in it should be investigated. The President would suggest that the report be sent to the Health Section, which would submit proposals if necessary.

M. Velghe urged that the question of principle involved be examined first.

Professor Léon Bernard doubted the advisability of entering into questions of pure therapeutics.

Dr. RAJCHMAN explained that, while drug addiction was a "luxury" disease in Western countries, it was an actual social scourge in the Far East, and the methods of treatment were of great importance for the health administrations of those countries. Japanese medical men took a very great interest in the subject, which was also of vital importance for China. The Medical Director would be glad if the arguments in favour of this thesis could be worked out by a small committee of experts, whose report would certainly be warmly welcomed by the medical profession in the Far East.

Dr. Miyajima said that Dr. Wolff's proposal for a commission to investigate the treatment of drug-addicts was of great value, particularly to the Far-Eastern countries, and he warmly

M. Velghe stated that he would have had to oppose, in principle, the appointment of a committee to study the treatment of drug-addicts, but that, if the intention were to instruct a sub-committee to collect information as to the outcome of researches made in Europe and elsewhere in the treatment of drug-addiction, he had no objection.

The resolution was adopted.

Declaration by Dr. Wu Lien-teh concerning the Limitation of the Manufacture of Derivatives of Opium and Coca Leaves and Mr. May's Proposal.

Dr. Wu Lien-teh said that he wished to make the following declaration:

- The draft Convention to be submitted to the Conference should have made provision for the limitation of opium and the coca leaf and not merely of the substances covered by Article 4, paragraphs (b), (c) and (g) of the 1925 Geneva Convention.
- "(2) The Opium Commission should support the procedure proposed by Mr. H. L. May in amendment of that prescribed, in Article 10 of the Geneva Convention (cf. document C.168.M.62.1931.XI. Annex 2)."

He would point out that the existing machinery had been found too complicated and too slow to make it possible to cope with the situation resulting from the invasion of the market by new substances not mentioned in the 1925 Convention. The time had come when the procedure should be radically modified and that suggested by Mr. May would, he thought, meet the present situation

May 8th, 1931 (morning) (continued)

The President explained that the modification proposed by Mr. May, who was the United States member on the Permanent Central Opium Board, consisted, briefly, in reversing the provisions of Article 10 of the Geneva Convention-that was to say, all products would be brought under control, those which were proved to be harmless being exempted. He thought it would perhaps be better not to mention this proposal in a resolution, but merely to draw the Advisory Committee's attention to the desirability of examining it.

Dr. Hamel did not consider the question at all urgent. Hitherto, the procedure embodied in Article 10 had worked so well in practice, that it had been possible to bring one product—acedicone—under the terms of the article even before it had been placed on the market. Furthermore, the new method proposed would certainly not make things easier for the Committee. Hitherto, the Committee had been in possession of all the facts of the case when giving an opinion as to the application of Article 10, to the various products.

With the new system the Committee would encounter the same difficulties if called upon to exempt a substance from the effects of the Convention, since it might be that the harmlessness of the substance in question was only temporary. In his opinion the Committee would have a still

heavier responsibility under the new procedure than under the old.

The President's suggestion to draw the Advisory Committee's attention to the desirability of examining Mr. May's proposal was adopted by eighteen votes to one.

* *

The Opium Commission's report and its resolutions were adopted by the Health Committee at its sixth meeting, held May 8th at 3.15 p.m.

H. Physical Education.

Sixth
Meeting
May 8th, 1931
(afternoon)

The PRESIDENT thought that, in the absence of Professor Ottolenghi, Chairman of the meeting of Experts on Physical Training, it would be preferable not to discuss the report on that meeting. He would, however, make a short statement on the results obtained.

The Committee would remember that the meeting of experts had been convened at Copenhagen on January 22nd, 1931, to study more particularly the theoretical aspects of the subject. What was mainly lacking was scientific data. There were all kinds of empirical and more or less unfounded opinions abroad with regard to physical training. It was claimed, for instance, that the human body gained by muscular development, than which nothing was more open to question, that such and such exercises were necessary to strengthen the vertebral column, to correct certain defects, etc. None of these assertions could be affirmed scientifically. The experts had agreed to recommend that there should be set up at Geneva, under the Health Section, an international physical training centre to carry out the duties mentioned in document C.H.956. The experts had also considered the possibility of the publication by the League of an international review of physical training, but the President doubted whether this would be within the League's competence.

In the next place, a number of very interesting statements had been made at that meeting concerning the effects of intensive and very intensive muscular work on the essential organic functions—in other terms, concerning the consequences of fatigue. Hitherto, the researches conducted in this matter had been of no great value, because the subjects had never been studied during the actual effort, and observations had been confined to the periods before and after. What was desired now was to organise these researches on uniform lines in all countries and to aim at a certain standardisation in this field as in certain others. A similar measure of standardisation would be desirable, for instance, for the various methods of measuring the human body. In nearly all countries, enormous numbers of records had been compiled, but no steps had been taken to make them comparable with one another, since it had been thought that certain main principles would, in the end, emerge from the documentation so accumulated. That, however, was a mistake. This method was anti-scientific in the highest degree.

Professor Léon Bernard thought that there were few more serious questions than those connected with physical training. He described the changes brought about in the national life by the new conceptions that in recent years had come to light on this subject in France. Physical training, if badly organised or pushed to excess, might have the most pernicious consequences. Hitherto, the question had been dealt with only by physiologists and sportsmen, and it was high time for medical men to intervene for the purpose of obviating certain mistakes which might have disastrous results and to which they alone were competent to draw attention.

Professor Léon Bernard did not wish to forestall the enquiry which the Medical Director was intending to make with regard to the establishment of a centre. He would, however, mention that there existed in Paris an institute of physical training with a Chair at the Paris University. He did not think he would be anticipating unduly if he stated that the Institute was at the disposal of the Health Organisation for any information it might need.

Professor Bordet feared that in this subject the Health Organisation might find itself involved in studies which lay outside its competence. He thought that the excesses observed in those who practised physical exercises would, in the long run, correct themselves automatically.

M. Velghe likewise urged that the enquiries should be limited, for example, to the excesses of physical training.

May 8th, 1931 (afternoon) (continued)

Dr. RAJCHMAN stated that the Health Section had for eight years been studying the question of physical training. It fully appreciated the practical importance of the subject and felt certain that this was a matter in which the Health Organisation could acquire some popularity. The Section, however, considered that it should carry out no enquiries unless they could be limited to the strictly technical standpoint and were thought likely to yield immediate results. It was not easy, however, to find a subject of study connected with physical training, which would satisfy these conditions. The value of an information centre depended entirely on the man who directed it, and, so far, no highly competent person, such as was needed for this work, had been discovered. There were, of course, a number of Chairs of physical training, but from the conversations he had had with the holders, the Medical Director had gained the impression that they were somewhat vague as to the extent of their teaching curriculum.

As Professor Bordet had said, physical training was at the moment passing through a stage of adaptation, and its defects were gradually being eliminated. At Copenhagen the question of muscular fatigue had been chosen as a first subject for study; the enquiries might perhaps, for the time being, be limited to this interesting point. In this connection, the Medical Director observed that the International Labour Office too was dealing with the matter. In the interval between the present and the October session, the Secretariat would, if the Committee so desired, endeavour to collect further particulars on the question of muscular fatigue, and study the possibility of setting

up an information centre.

Professor Bordet explained that he had proposed the limitation of the enquiries into physical training, because, in his opinion, there were other more important health questions which should come first. There was, for instance, the subject of overwork in schools.

The President said that the Sub-Committee of Experts had discussed the pathology of physical training as well. Personally, he shared Professor Bordet's view. He did not think that the Health Committee should undertake researches which might lead it too far afield. Nevertheless, an information centre on physical training would be of some value, since physiologists had great need of a centre where they could meet and confer as to the best means of combating the pseudo-science which was growing in strength and becoming more and more dangerous in the matter of physical education.

The suggestions of the Medical Director were adopted.

Fourth Meeting May 7th, 1931 (morning) CHAPTER V. - Position of Studies and Enquiries.

A. The Problems of Cancer, Rheumatism and Heart Disease.

Sir George Buchanan presented a report on the progress of enquiries as to cancer (document

He pointed out that the reference in Part I (The Special Investigation of the Results of Radiological Treatment of Cancer of the Uterus) to other European countries did not mean that the enquiry was limited to Europe. Information had also been received from the United States of America, Canada and Australia.

With regard to Part 3 (Statement of the manner in which Public Health Administrations can act, or can aid, in the Control and Treatment of Cancer), he had not found it easy to make rapid progress along the lines which he had been requested to follow as Rapporteur. He proposed to submit a skeleton plan and a general statement to appropriate experts in certain countries, and only to convene a committee of experts when this preliminary work had been completed.

The object of the last two paragraphs of the annex was to meet the reproaches which were sometimes made that enquiries as to what a central administrative department could do to prevent cancer or to deal with its control and treatment gave very little result. Evidence of what could be done by international co-ordination had already been given, and, though progress must necessarily be slow, he felt sure it would be continuous.

Dr. Carrière, dealing with the treatment of cancer of the uterus by radium, said that the Medical Director had sent him copies of the international form prepared by the Radiological Sub-Commission; he hoped he could rely on the co-operation of the clinics in Zurich and Basle.

Dr. Hamel said that the problem of cancer of the lung in the mines of Joachimsthal in Czechoslovakia was of interest to research workers in Germany. A monograph on the subject had been published by Professors Rostoski, Saupe and Schmorl; during their investigations carried out over a period of three years in the district of the Schneeberg mines in Saxony, they had noted fifteen cases of cancer of the lung, of which thirteen had been revealed by postmortem examinations, among the twenty-one workers in the mines (including invalids) who had died during the period in question. This represented 71 or 62 per cent. Among the general population in the same district, on the other hand, only two cases had been noted during the same period. Very interesting researches therefore might be made on the effect on the development of the disease of the dust produced from radio-active minerals.

Sir George Buchanan reminded the Committee that he had also been asked to act as Rapporteur for rheumatism and heart disease. He regretted, however, that he had been unable to carry out any enquiry in this connection. A proposal to set up a special interdepartmental Committee on rheumatism in London, similar to that set up for cancer, had not materialised, and,

without some such organisation behind him, he hardly felt able personally to do what he had been asked. He suggested that another member of the Committee, possibly Dr. Jitta, might be invited to undertake this duty in regard to rheumatism.

May 7th, 1931 (morning) (continued)

- Dr. Lutrario, referring to rheumatism, said that an Italian section of the International Association for the Prevention of Rheumatism had been set up under the auspices of the Italian National Research Council. A resolution had been adopted dealing with the following points:
 - I. Organisation of an" anti-rheumatism day" with the object of extending the campaign against chronic rheumatism in Italy;
 - 2. Organisation of a series of studies and reports on the most characteristic aspects of acute and chronic rheumatism, to be submitted to a national or international congress on the subject;
 - 3. Initiation of propaganda with a view to interesting relief and insurance institutions, mutual insurance societies and public bodies, doctors, private persons and, particularly, training schools and similar institutions in the campaign against this disease.

The Italian Committee's first anti-rheumatism day had been held at Spezia on October 3rd, 1929. Although Italy had come into this important movement somewhat late, there existed in the country a fairly considerable body of literature on the subject. Nevertheless, it had been the wish of the Italian section of the Council that the country should take a more active part in this matter and it had suggested the study of a whole series of social, clinical and anatomopathological, biochemical, curative and other subjects. The reports on these questions would be discussed at a congress which, it was hoped, would be convened shortly. Meanwhile, a medical card framed on the English pattern had been distributed to clinics and hospitals; to the card had been added a few questions dealing with the internal genital organs of women, the assumption being that the latent infection of these organs might be the cause of the predominance of deforming rheumatism in women. The card was to be filled in for each case of rheumatism. It was hoped that this scheme would contribute to the study of the actual part in rheumatism ascribed to dental, amygdaline, enteric and kidney affections, which, according to English and American research workers, were alleged to be of great importance in the pathogenesis of the disease.

Dr. JITTA thought that rheumatism was one of the most difficult questions. It was, however, of considerable importance, and it was desirable that it should be studied in many countries. Rheumatism was an evil no less redoubtable than the other major diseases, such as cancer, although it was not directly fatal. Statistics in many countries proved that people who had been disabled in consequence of a bodily affection frequently suffered from rheumatism. The first thing to do was to establish an international definition of rheumatism, difficult as that might be.

Dr. Jitta could accept Sir George Buchanan's suggestion and would endeavour to submit a report, in co-operation with the International Association for the Prevention of Rheumatism at its next Congress, which apparently would be held in Paris and at which he hoped the Health Committee would be represented.

Surgeon-General CUMMING said the Congress of the United States of America, having been much impressed by the number of deaths from heart disease, had made a large appropriation for investigations. For that reason he regretted that Sir George Buchanan had been unable to present a report on the matter.

Research on the rheumatism group of diseases was being carried out by a number of workers in the United States, but it could scarcely be said that any definitely hopeful, or helpful, advance had been recorded. Present-day research in the United States appeared to be carried out particularly from the point of view of infection by means of a member, or members, of the streptococcus group of micro-organisms. One research worker and his associates were so convinced of the rôle of an organism belonging to this group that, on the basis of culture, serological, and inoculation tests, they had produced vaccine and serum preparations for the treatment of rheumatic fever.

Another research worker had comparatively recently associated a streptococcus with the disease commonly known as rheumatoid arthritis. This worker had presented an imposing array of cases, apparently well controlled, from which he had isolated the organism which he considered to be etiologically related. A disease which was similar, clinically and pathologically, to the condition in man was said to have been produced in rabbits. The use of an agglutination test with the special streptococcus was said to give results in practice comparable to those obtained in the use of the Widal test in typhoid fever.

He would be glad later to make a further report.

Dr. CARRIÈRE stated that a Commission for the Prevention of Rheumatism had just been setup in Switzerland and would probably begin work by an enquiry. It would no doubt take steps at an early stage to join the International Association for the Prevention of Rheumatism.

Dr. Hamel said that the German Association for the Prevention of Rheumatism had informed him that in the following year it would consider the definition of rheumatism and, after this work has been concluded, would get into touch with the International Association.

Professor Léon Bernard said that there was in France a Committee affiliated to the International Association for the Prevention of Rheumatism. While it was true that cancer of the lungs was found chiefly in certain occupations, more particularly among miners, this disease had, generally speaking, been growing for some years past in all countries and in all environments. Personally, Professor Léon Bernard now came across a yearly average of from five to six cases, whereas formerly such cases had been rare.

May 7th, 1931 (morning) (continued)

B. Alcoholism.

Sir George Buchanan asked whether statistics were still being compiled.

The President replied in the affirmative.

C. Dangers resulting from the Use of X-Rays.

Dr. RAJCHMAN said that Professor Wintz's report (document C.H.1054) was now being printed.

Dr. JITTA drew attention to a passage in the report pointing out the possible dangers of collections of nitro-cellulose films in hospitals. These films had been the cause of a catastrophe in the Cleveland hospital in 1929. The difficulty was due to the fact that they were technically the best films, while others, for instance acetyl films, which presented no danger, were less efficient for technical use. Dr. Jitta asked whether the Health Section could find a laboratory which would undertake to try and discover a film, which, while technically efficient, would present no danger.

Dr. RAJCHMAN said that, after examining Professor Wintz's report, the Health Section would study the matter and submit proposals to the Committee.

Dr. JITTA feared that this would take some time.

Dr. RAJCHMAN replied that unfortunately he could not promise to submit a proposal before the October session.

D. Proposed Meeting of the Medical Directors of the Health Services of Colonial Ministries (Africa).

Dr. RAJCHMAN hoped that a meeting would be held in October or November, and in any case before the end of the year.

E. Entomological Studies in Melanesia.

Dr. RAJCHMAN said that the Health Section was examining this question. For financial reasons, however, it would be difficult to begin work this year. The studies would certainly be started in 1932.

Third Meeting Nay 6th, 1931 (morning) 9. Appointment of a Member of the Health Committee to replace the late Professor Ascoli.

On the proposal of Dr. Lutrario, supported by Professor Léon Bernard, Professor Bastianelli, Professor of Pathology at Rome University, was appointed a member of the Health Committee in the place of the late Professor Ascoli.

Fourth Meeting May 7th, 1931 (morning)

10. Budget Estimates for 1932.

M. Velghe regretted to have to point out that reductions had been made in three items in the budget for 1932. There was, first, a reduction of 5,000 francs in the general printing and documentation expenses and, secondly, one of 10,000 francs in the item "Various enquiries, printing, publications, etc." He hoped that the Secretariat with its habitual skill would see these reductions were not followed by a reduction in the publication of documents. The third these reductions were not followed by a reduction in the publication of documents. The third and most important reduction was that made in respect of the sessions of the Health Committee for which the credit had been cut down from 50,000 francs to 25,000 francs. In answer to the protests of the Bureau it had been explained that next year the Disarmament Conference would absorb practically the entire activities of the League and would make other meetings very difficult, so that it had been necessary to ask all Sections to refrain from holding meetings during the Conference.

M. Velghe regretted that so powerful an organisation as the League should be under the necessity, even for so vital a reason as that of finance, to suspend the work of a service which was of fundamental importance to all nations. The Bureau had been obliged to resign itself to accepting the 50 per cent reduction proposed for the sessions of the Health Committee. M. Velghe then read the following draft resolution:

"The Committee,

"Having taken note of the budget estimates of the Health Section for the year 1932 and heard the explanations of its Bureau and its Medical Director as to responsibilities incurred by the execution of decisions previously taken with the Assembly's approval;

"In order to comply with the recommendations made, accepts the proposed reductions

for 1932 in regard to:

General printing and documentation;

"Item I.—4.
"Item II.—6. Miscellaneous enquiries, printing, publications and documentation, cables and telegrams for the enquiries.

"Accepts also the proposed reduction in the credit provided for the Committee's sessions (Article I, I), since special circumstances relating to the work of the League of Nations will not permit in 1932 of the two sessions which have been held each year since the Committee first began, but only on the understanding that this credit is carried forward for the year 1933.

"Considers that it is impossible to accept a reduction in other items without reducing the activity of the Health Organisation, impeding the work of various services and jeopardising the results anticipated from activities undertaken in several countries."

May 7th, 1931 (morning) (continued)

Dr. RAJCHMAN pointed out that the budget, which it was hoped would be passed by the Assembly, would in point of fact show only a very insignificant reduction in the Health Organisation's funds. It could not accordingly be said that the League was suspending the work of the Organisation. As a Conference was to be held in 1932, in all probability at Geneva, lasting six months and attended by three to four the world delegates, it would be very difficult to convene six months and attended by three to four thousand delegates, it would be very difficult to convene other Conferences or Committees at Geneva.

Sir George Buchanan assumed that the Committee would have an opportunity in October of considering any adjustments that might be necessary in consequence of the fact that no session of the Committee would be held in the early part of 1932.

In his view, it should be made quite clear in the resolution on the budget that the circumstances which made it impossible to hold two sessions in 1932 were outside the control of the Health

He would be glad to know later the amount of the additional sums available for special enquiries from other funds, either contributed by the Rockefeller Foundation, or specially voted for the development of League work in the Far East or in South America.

The President said that it would be easy to meet Sir George Buchanan's wishes on all three points mentioned.

M. VELGHE drew attention to the last paragraph in the draft resolution before the Committee. He had indicated the reductions which had been forced on the Bureau, but he could not conceal the possibility that those which it had accepted might not be the only ones. The Bureau had considered very carefully all the other items in the budget, but the work with which the Health Committee had to cope had been increased at the present session and it was entirely correct to say in the last paragraph of the resolution: "It is impossible to accept a reduction in other items without reducing the activity of the Health Organisation, impeding the work of various services

and jeopardising the results anticipated from activities undertaken in several countries."

It would probably be helpful if each member of the Committee on his return home would explain matters to his national delegation to the next Assembly and remind them how fruitful the Health Organisation's work had been, how highly it had been esteemed by the Assembly, how much work the Organisation had undertaken at the request either of the Assembly or of different countries, and emphasise how regrettable it would be if, in a moment of thoughtlessness the Organisation's budget should be reduced still further.

The President noted that all members of the Committee supported M. Velghe's suggestions. The budget estimates were approved.

11. Examination of the Report and Draft Resolution of the Commission entrusted with the Study of the Report and Budget of the Eastern Bureau at Singapore.

Fifth Meeting May 8th, 1931 (morning)

Dr. JITTA read his report (Annex 12) and the following draft resolution:

" The Health Committee:

" Approves the report of the Director of the Eastern Bureau in Singapore and the 1932

budget estimates for this Bureau;
"It endorses the resolution adopted by the Advisory Council at its session of December 1930, concerning the danger which would attach to the importation of the yellow fever virus into countries of the East. It notes with satisfaction the fact that three of these countries have already enacted legislation prohibiting the importation of this virus, with a view to experimental purposes;

"It desires to join the Advisory Council in the expression of its gratitude to Dr. Gautier for the valuable services he has rendered to the cause of public health in the East during the four years of his directorship of the Eastern Bureau. It desires also to extend its thanks to the members of the Advisory Council, and particularly its former Chairmen, Major-General Graham and Dr. van Lonkhuyzen, and to Dr. Hoops, who has been a friend and supporter of the Eastern Bureau since its creation."

M. Velghe referred to the question of the prohibition to import the virus of yellow fever. In the report examined by the Commission over which Dr. Jitta had presided, the Advisory Council of the Eastern Bureau had referred somewhat severely to the Permanent Committee of the Paris Office, which it considered had somewhat failed in its duty in not adopting immediately a proposal to promote an agreement for the purpose of prohibiting the import of the virus of yellow fever. The Permanent Committee had attached great importance to the question, but since it had not then been informed of the conclusions of its Commission on Yellow Fever, it did not feel able to express an opinion on so serious a matter before examining it thoroughly.

The Chairman of the Permanent Committee had stated that, if countries considered that they should protect themselves against the import of the virus, it was for them to take the necessary action. Three Eastern countries had already done so. It might be that, at its session to be held May 8th, 1931 (morning) (continued)

in the coming week, the Permanent Committee would adopt a resolution more in conformity with the views of the Eastern Bureau. The problem, nevertheless, merited close attention owing to the fact that the import of virus was very necessary for scientific studies, and it was possible that the scientific world regret it if the Office came to a hasty decision. Personally, M. Velghe supported Dr. Jitta's draft resolution, but did not wish it to be thought that there was any contradiction between the attitude he was at present adopting and that he had adopted in the Permanent Committee.

Sir George Buchanan was afraid the man in the street might misinterpret the phrase "importation of the yellow fever virus" as meaning importation of the infection itself, when it merely referred to the active virus as prepared for laboratory purposes.

General Graham thought that any ambiguity was removed by the subsequent wording "even for experimental purposes"

Professor Bordet wondered whether it was desirable to take so strict a measure as prohibition There was no danger in introducing the virus into countries in to import the yellow fever virus. which yellow fever did not exist.

Dr. RAJCHMAN pointed out that the resolution related only to countries in which yellow fever existed.

Professor Cantacuzène supported Professor Bordet's observation. In his view, it would be very dangerous to prohibit the importation of any virus whatever for laboratory experiments, particularly in view of the immense advantages drawn by science from such importation. same analogy, why not take similar measures in regard to plague and other diseases? In the present state of research and scientific methods it would be a step backwards from the point of view of civilisation, if the work of scientists were hampered.

M. Velche thought, on the contrary, that the danger was very great. Even in certain countries which were now free from yellow fever, an imprudent act committed by one laboratory

which was badly organised and inadequately supervised would suffice to introduce the infection. He did not wish to express an opinion on the scientific aspect of the question, but simply to show that the Permanent Committee of the Paris Office had perhaps been criticised somewhat hastily.

Dr. JITTA read that paragraph of his report which related to this question. He added that several cases of yellow fever had occurred in England, in the Netherlands and elsewhere as the result of laboratory experiments. Reference to importation by air which was quite a separate question, had been omitted intentionally from the draft resolution. He quite understood why the Paris Office had been unable to adopt a resolution, but the danger of the spread of yellow fever even by one or two infected mosquitoes, was undoubtedly great. For that reason the Advisory Council of the Singapore Bureau had adopted unanimously the proposal in question.

In reply to one of Professor Cantacuzène's remarks, Dr. Jitta said that in a great many

countries, particularly the Netherlands, there were very strict regulations in regard to laboratory

experiments on plague.

In conclusion, if Sir George Buchanan insisted on his observation, the text of the draft resolution could be made more clear.

Sir George Buchanan did not press his suggestion. As regards the merits of the question, he had considerable sympathy with Professor Cantacuzène's attitude. It was, of course, very unfortunate that cases occasionally arose of laboratory workers contracting yellow fever, but that hardly justified a recommendation deprecating importation, as there was no proof that infection penetrated beyond the laboratory.

Dr. ABT pointed out that, about eighteen months previously, the question had been raised by the delegate of the Dutch East Indies at the Committee on yellow fever of the Office, which after a long discussion included in its resolutions a paragraph calling the attention of Governments to the danger.

M. Velghe explained that the Office had been repreached for having failed to appreciate the extent of the danger and for not having entered into immediate negotiations with the Governments, with a view to the conclusion of an international Convention. That criticism was unjustified.

Dr. Abt considered that in such a matter the countries had not all the same interests. The countries of the Far East which felt that they were in danger were in complete accord, but not the others. He saw no objection to the conclusion of an agreement between the countries of the Far East, similar to that contemplated in the 1926 Convention, which the Office should then communicate to the other Governments. The Office could not, however, be expected to take the initiative in the matter.

Dr. RAJCHMAN explained that the Singapore Advisory Council desired its attitude to be welcomed sympathetically by the other sanitary administrations, and wished the agreement of the Far-Eastern countries to be made effective through the help of the other Governments. It would be sufficient for the Office to send a circular letter to the various Governments informing them of the decision taken by the Far-Eastern countries.

The draft resolution was adopted.

12. Nomination of the President and Rapporteurs of the European Conference on Rural Hygiene.

Sixth Meeting Nay 8th, 1931 (afternoon)

The PRESIDENT informed the Committee that the Spanish Government had proposed Professor Pittaluga as President of the European Conference on Rural Hygiene. The Preparatory Committee and the Health Committee would, of course, agree to ask the Council to ratify this selection which was entirely satisfactory from all points of view.

Speaking on behalf of the Preparatory Committee, he announced that Professor Parisot had been nominated Rapporteur to the Conference on the question of medical assistance, Item I on the agenda. Dr. Stampar had consented to act in the same capacity for the second item, the organisation of health services in rural districts. It would perhaps be necessary to find a second Rapporteur to help Professor Parisot, more particularly for the question of sickness insurance in rural districts.

No experts had so far been appointed to report on the third item on the agenda. M. Bonamico, engineer, would, of course, be asked to report on the question of land reclamation. Two other Rapporteurs would have to be chosen when the experts on rural sanitation met during the coming week, one on housing and the other on the water-supply and the disposal of refuse.

There would accordingly be six Rapporteurs in all.

The President proposed that the Committee should leave these appointments to the Chairman of the Preparatory Committee and the Health Section.

The proposals of the President were adopted.

13. Offer of Collaboration from the International Committee for Open-Air Schools.

The Committee noted the following resolution of the above-mentioned Committee:

. "The International Committee for Open-Air Schools (founded in Paris in 1928) at a meeting held at Brussels on April 7th, 1931 on the occasion of the Second International Congress of Open-Air Schools, wishes to assure the League of Nations Organisation of its desire to work in complete co-operation with it, and offers its services for the study of all questions having for their object the securing for school-children of permanent benefits from the open air and sunshine."

and agreed that the Medical Director should thank, in the name of the Health Committee, the International Committee of Open-Air Schools for its offer of collaboration.

14. Studies on the Question of Nutrition.

Professor Léon Bernard would be grateful if the Medical Director would submit to the Health Committee a first note on nutrition. The French Government attached the greatest importance to this question, in connection with which it had sent an application to the International Labour Office; the latter had intimated that its enquiries into the subject would certainly be pursued in close co-operation with the Health Section of the Secretariat.

Dr. Rajchman expressed satisfaction that this question had been raised. He would thus have an opportunity of indicating the work recently done by the Health Organisation. In the interval since the last session, the President of the Health Committee and the Health Section had endeavoured to collect information and bring various authorities into touch with one another. The President of the Health Committee and the Medical Director had visited Vienna, Berlin and Paris. The British Conference had supplied some information, and at the present moment certain proposals were being studied very actively. The Medical Director hoped that in a few months the staff of the Health Section would include a very competent official to deal with this problem alone. The Medical Director would get into touch with the competent Chief of Division in the International Labour Office with regard to collaboration with the latter.

15. Commission on the Fumigation of Ships:

Appointment of a New Member.

The President proposed that Dr. C. L. Williams, of New York, whose work had been of the greatest assistance to Surgeon-General Cumming, should be appointed a member of the Commission on the Fumigation of Ships.

This proposal was adopted.

Visit of the Commission on the Fumigation of Ships to Canada and the United States of America.

Surgeon-General CUMMING said the United States authorities would be very glad to welcome the experts on their visit to America. He suggested that they should visit Montreal at the time of the meeting of the American Public Health Association; he had been authorised by the President of that Association to invite the experts to attend. They would be able at the same time to study the work of the Canadian maritime quarantine station at Quebec.

Professor Fitzgerald supported Surgeon-General Cumming's suggestion. It would be a great pleasure to the authorities of the Dominion of Canada, the province of Quebec and the city of Montreal to welcome the experts at the time of the meeting of the American Public Health

May 8th, 1931 (afternoon) (continued)

Association, and to give them every facility for studying any aspect of the work on fumigation and maritime quarantine in which they were interested.

Sir George Buchanan suggested that the Commission on the Fumigation of Ships should hold a short informal meeting of those members who would be in Paris during the coming week, in order to draw up a general plan of the work to be done on the tour.

Dr. BOUDREAU saw no objection to Sir George Buchanan's suggestion.

On behalf of the experts, he thanked Surgeon-General Cumming and Professor Fitzgerald for their invitation. As the experts would probably visit the United States and Canada at the end of August, it might be possible for them to participate in the meeting of the American Public Health Association.

16. Reform of Penal Administration: Report of the Sub-Committee.

Dr. Hamel, Chairman of the Sub-Committee, submitted his report (Annex 13) and, in reply to an observation by M. Velghe, said that the expression "young persons" in Point 3, paragraph 4, was meant to apply to adolescents and not to children.

Surgeon-General CUMMING said that he had been asked, in connection with a change made in the administration of the federal penal institutions of the United States during the past year, to re-organise the medical and nursing work in those institutions. He then handed in a report on his work.

On the request of the President, Surgeon-General Cumming agreed to act as a member of

the Sub-Committee on the Reform of Penal Administration.

The following draft resolution was adopted:

"The Health Committee:

"Takes note of the report of the Chairman of the Sub-Committee for the Study of the Reform of Penal Administration (document C.H.1024);
"Requests the Medical Director to obtain further documentation as indicated in the

above report, and "Invites the Sub-Committee to continue its work in order to present a final report before the next Assembly of the League of Nations."

17. Preparatory Procedure for the Drawing-up of General Conventions.

The Committee adopted the following resolution:

"The Assembly in 1930 referred to the Technical Organisations certain rules for the preparatory procedure for drawing up general conventions, with a view to enabling the Assembly, at its next session, to consider whether changes should be made therein as a result of any suggestions which may be made'.

"The Health Committee, after having studied these regulations, adopts the following

resolution:

"The Health Committee:

"States that it has no objection to raise to the rules of procedure in question, which it considers to be of a nature to facilitate the ratification of international conventions, even if they may involve some delay."

18. Quarterly Publication of the Health Organisation.

Dr. RAJCHMAN drew the attention of the Committee to the note he had prepared on this point (document C.H.1003, Annex 2). He hoped that he would be able to submit the first number of the publication at the October session.

19. Study of Mental Hygiene.

The Committee requested the Medical Director to place on the agenda of the Committee's next session any question connected with mental hygiene, which the Committee might be competent to examine.

Sir George Buchanan welcomed this proposal. There were a number of questions in regard to which the Board of Control—the competent authority for mental hygiene work in Great Britain -considered international co-operation might be very useful; it would be glad to assist in the consideration of proposals made to the Health Committee.

20. Foundation of an International School of Advanced Health Studies in Paris.

Dr. RAJCHMAN informed the Committee that most probably the procedure laid down would have to be applied, should the French Parliament vote the law for the foundation of the School before the Committee's next session. The members of the competent Sub-Committee might accordingly expect to receive a communication in the interval between the present and the October sessions.

Way 8th, 1931 (afternoon) (continued)

Professor Léon Bernard added that, according to the information in his possession, the Chamber would probably discuss the Bill for the foundation of the School at its next session.

21. Invitations received by the Health Committee to be represented at Various Conferences and Congresses.

Annual Congress of the Royal Institute of Public Health.

The Committee decided not to send a representative to the Congress.

Fifth Imperial Social Hygiene Congress.

Sir George Buchanan intimated his regret that on this occasion he would be unable to represent the Committee at this Congress.

The Committee decided not to be represented at this Congress.

International Conference on Holiday Camps and Open-air activities, Geneva, August 26th-29th, 1931.

The Committee decided that Dr. Carrière should represent it at this Conference.

Second Meeting of the International Congress of Tropical Medicine, Amsterdam, September 1932.

The Committee took note of the information received and decided to adjourn its decision to a later session.

22. Adoption of the Report of the Health Committee on the Work of its Seventeenth Session.

This report was adopted with modifications of form (Annex 14).

23. Date of the Next Session.

The Committee decided to hold its next session from October 12th to 17th, 1931.

24. Close of the Session.

The President thanked his colleagues and the Secretariat for their assistance and declared closed the seventeenth session of the Health Committee.

ANNEX 1.

AGENDA OF THE SEVENTEENTH SESSION OF THE HEALTH COMMITTEE.

- 1. Decisions of the Council of the League of Nations at its Sixty-first (October 3rd, 1930) and Sixty-second Sessions (January 19th, 1931) on the Work of the Health Organisation.
- 2. Report of the Medical Director on Current Activities since the Last Session of the Health Committee (October 1930 to May 1931).
- 3. Collaboration of the National Government of the Republic of China with the League in Health Matters.
- 4. Activities of the Leprosy Commission.
- 5. Consultation of the Bureau of the Health Committee with the Director-General of Health of Bolivia on the Programme of Collaboration with the Government of Bolivia.
- 6. Report of the Opium Commission.
- 7. Report of the Chairman of the Commission on Physical Education on a Consultation of Experts held at Copenhagen on January 22nd, 1931.
- 8. Work of the Reporting Committees.
- 9. Improvement of Penal Administration.
- 10. Miscellaneous.

C. H. 967.

ANNEX 2.

REPORT BY THE MEDICAL DIRECTOR ON THE CURRENT ACTIVITIES OF THE HEALTH ORGANISATION SINCE THE LAST SESSION OF THE COMMITTEE (OCTOBER 1930-MAY 1931)

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CHAPTER I.

DECISIONS OF THE COUNCIL ON THE WORK OF THE HEALTH ORGANISATION.

I. The resolutions adopted by the Health Committee during its sixteenth session, held

at Geneva from September 29th to October 7th, 1930, were approved by the Council during its sixty-first and sixty-second sessions, October 3rd, 1930 and January 19th, 1931.

The decisions of the Council during its sixty-first session in regard to the establishment at Paris of an internal council during the advanced health studies and the convocation of a European conference on surell hydrone have already hear companies and the Committee. of a European conference on rural hygiene have already been communicated to the Committee. The Committee has also been informed concerning the action of the Council on the Standard Minimum Rules for the Treatment of Prisoners (document A.V/2.1930) drafted by the International Prison Commission, which the Assembly requested should be submitted to the Health Committee and to other organs of the League. The Secretary General was requested to submit a further report on the question to the next Assembly.

- The interim report presented to the sixty-first session of the Council by the representative of the Irish Free State on the work of the Health Committee during its sixteenth session, also dealt with:
 - (a) The appointment of Professor José Scoseria as an expert on the Health Committee;
 - (b) The opinion of the Committee that all technical experts belonging to the Committee, regardless of the mode of their election, should possess the same prerogatives as those recognised as members of the Committee;
 - The request of the Committee that the Council should approve the report on the Malaria Commission's tour in British India (August 23rd to December 28th, 1929) and should communicate it to the Government of India;
 - The Committee's recommendations in regard to the application of Articles 8 and 10 of the International Opium Convention; (Resolution XI, of the sixteenth session).

As regards Article 8, the Committee agreed to the withdrawal of the provisions of the Convention of preparations, lists of which were submitted by the Governments of Germany, Great Britain and Siam.

As regards Article 10, the Committee recommended that acedicone should come under the provisions of the Convention.

The Council adopted the following resolution:

- "The Council,
- "Agrees to the Health Committee's proposals in this report and, in particular; "Approves the appointment of Professor José Scoseria as an expert on the Health

Committee;

'Requests the Secretary-General to communicate to the Government of India the report presented by the members of the Malaria Commission upon their tour in British India (August to December, 1929);

Notes the decisions of the Health Committee in regard to the application of Articles 8 and 10 of the International Opium Convention of Geneva, 1925, and instructs the Secretary-

General to communicate these decisions to the contracting parties.'

3. A final report on the work of the Health Committee during its sixteenth session was presented to the sixty-second session of the Council on January 19th, 1931 by the representative of the Irish Free State (document C.30.1931.III), describing the decisions of the Committee on its programme, its methods of work, and the general direction of its future activity.

Reference was also made to the Committee's decisions on

- (1) Ascertaining whether it would be expedient to hold a meeting of the Medical Directors of Colonial Ministries of Countries having possessions in Africa and of the Health Administrations of other African countries;
 - The survey and plan of reorganisation of the port health services of China;
- (3) The visit of the Medical Director to China on the invitation of the President of the National Government;
- The collaboration with the Greek Government in the sanitary reorganisation (4) of Greece;

- (5) The collaboration with the Government of Bolivia in health matters;
- (6) The situation as regards malaria in Melanesia;
- (7) The infant mortality enquiries in Latin-American countries;
- (8) The collaboration with Bulgaria in the anti-malaria campaign;
- (9) The work of the Leprosy Commission.

The following resolution was adopted:

"The Council,

"Having examined the report submitted to it by the Health Committee on the work of its sixteenth session:

"Approves the proposals and recommendations made in the report as well as the

"Approves the proposals and recommendations made in the report as well as the observations of the Rapporteur."

 \mathbf{B}

4. The representative of the Irish Free State also presented a report to the Council (sixty-second session, January 19th, 1931) on the session of the Preparatory Committee of the European Conference on Rural Hygiene, held at Paris on December 8th and 9th, 1930.

The Preparatory Committee proposed to the Council that the European Conference should be postponed from April 23rd to June 29th, 1931, and asked for permission to add British and French experts, and a representative of the International Labour Office to its membership.

The Council approved these proposals.

C.

5. On December 16th, 1929, the permanent delegate of the Republic of Liberia accredited to the League of Nations requested the Council, on behalf of his Government, to appoint one of the three members of an International Commission of Enquiry to ascertain whether slavery or forced labour existed in Liberia as a normal social system. This request was acceded to by the Council. The Report of the Commission of Enquiry was forwarded by the Government of Liberia to the League in due course and came before the Council during its sixty-second session. The Liberian Government informed the Council that it had decided to accept and adopt the recommendations and suggestions of the Commission of Enquiry to the full extent of its resources, and asked that the League should give general and particular financial, as well as administrative assistance in the application of those recommendations and suggestions.

as administrative assistance in the application of those recommendations and suggestions.

On January 24th, 1931, the Council decided to set up a small committee, selected from among its own members, to examine the problem raised by the Liberian Government's request, and to consider in what manner it might be possible to assist the Liberian Government. The Council asked the Committee to examine, among other matters, the question of the administrative assistance necessary for giving effect to the social reforms suggested by the Commission of Enquiry, and also the question of financial and public health assistance with a view to the carrying out of these reforms

view to the carrying out of these reforms.

The Committee of the Council met at London on February 28th to March 3rd, 1931, and adopted resolutions, which provide for the despatch to Liberia of experts in general administration, finance and health matters, to draw up a concrete plan of assistance to be given to the Liberian Government in accordance with the request addressed by the latter to the Council of the League of Nations.

The Committee designated the expert in general administration, and the expert in finance, and asked the Secretary-General to request the Health Organisation to designate an expert in health matters.

These three experts will proceed as soon as possible to Liberia to study the present situation on the spot in close touch with the Liberian Government, and it will be their duty to suggest in what practical manner it would be possible to assist the Liberian Government to give effect to the recommendations and suggestions of the Commission of Enquiry.

The resolutions specify that

- (1) The experts will advise on the general lines on which the reforms should proceed and the order in which they should be undertaken, examining the possibility of proceeding by stages;
- by stages;
 (2) They will consider the question of the appointment of specialists, the number of such specialists, their powers, and the length of time their assistance will be required;
- (3) They will also examine the expenditure involved and make a survey of the resources available;
 - (4) In regard to the reports prepared by the experts, the Committee decided:
 - "It will no doubt be necessary to consult the Financial Committee and the Health Committee respectively in regard to those parts of their report or reports which refer to those subjects";
- (5) The Liberian Government will ensure every facility and assistance to the experts, and will supply them with all necessary information.

The Committee also adopted the following resolution on preliminary work necessary for the improvement of sanitary conditions:

"As an emergency measure the Committee decides to despatch a medical officer to Monrovia forthwith, who shall, in co-operation with the Liberian authorities and in collaboration with any experts which the Liberian Government may appoint, undertake the preliminary work necessary for the improvement of sanitary conditions in the capitals, and invites the Liberian Government to accept his assistance and give prompt effect to his recommendations to the full extent of its resources.

The Chairman informed the Committee that he was authorised to offer the services of a medical officer from the Gold Coast to carry out this preliminary work. Accordingly, Dr. W. M. Howells, Senior Health Officer of the Gold Coast, arrived in Monrovia on March 13th and got in touch with the Liberian authorities.

D.

6. In its report to the Council, the Advisory Committee on Traffic in Opium and other Dangerous Drugs (document C.115.1931.XI) commented on the procedure provided for in Article 10 of the International Opium Convention of Geneva 1925 in the following terms:

"Finally, the Committee was greatly struck by the importance of making the procedure provided for in Article 10 for bringing a new narcotic under the Geneva Convention more elastic and quicker. The slowness of this procedure is attributable to the fact that the question has to be referred both to the Health Committee and to the

Office international d'Hygiène publique at Paris.
"The Committee requested that the Health Committee should be asked to seek a means of accelerating the procedure provided in Article 10, and of reducing its duration if possible to a period of six months."

This report came before the Council at its sixty-second session on January 24th, 1931. The Rapporteur (the representative of Yugoslavia) presented a report of which the following is an extract (document C.137.1931.XI):

"The second point to which I wish to refer is the request of the Advisory Committee that the Health Committee should be asked to seek a means of accelerating the procedure provided for in Article 10 of the Geneva Opium Convention with a view to reducing the period involved by the procedure as much as possible. I suggest that the Secretary-General should forward this proposal to the Health Committee for its examination."

The conclusions of the report were adopted by the Council.

During its thirteenth session (October 1928), the subject came up before the Health Committee, and the following statements were made by the Medical Director and the Chairman of the Opium Commission:

"The MEDICAL DIRECTOR said that, though there was every reason not to hasten the procedure for the settlement of questions under Article 8, the position was different with regard to Article 10. It had recently happened that the Council, being unable to receive the views of the Committee sufficiently early, had decided, on the recommendation of the Advisory Opium Committee, presided over by Dr. Carrière, to forward a recommendation to the Governments, reserving, however, the decision of the Health Committee. It would accordingly be necessary to accelerate the procedure in order to avoid such a position recurring. Dr. Carrière was not only the Chairman of the Opium Commission of the Health Committee and of the Advisory Committee on the Traffic in Opium, but the Chairman of the Opium Commission of the Office international d'Hygiène publique, and he participated also in the work of the Special Committee of Experts of the Permanent Committee of the Office international. He proposed to authorise the two Commissions—the Commissions of the Health Committee and of the Permanent Committee of the Office international—which consisted virtually of the same members, to take such action as might seem appropriate after consultation with the Chairman of the Health Committee and the Chairman of the Permanent Committee of the Office in the intervals between the sessions, so as to avoid the delay of six months which occurred under the present procedure.

" Dr. Carrière said that the Permanent Committee in Paris had met in advance the recommendations of the Medical Director, and had decided to entrust its Opium Commission with full powers. In other words, the Opium Commission in Paris had full powers to settle a question after consultation with the President of the Permanent Committee without embarking upon the long process of discussion involved by the normal procedure. One step, therefore, had been taken. Would the Health Committee, in its turn entrust its Opium Commission, which was only the Commission in Paris under another name, with the same full powers? He presented this request on behalf of his colleagues of the Opium Commission."

Accordingly the following resolution was adopted:

"(c) The Committee likewise considered the procedure laid down in Article 10 of the International Opium Convention and the possibility of reducing as much as possible

the delays necessitated by this procedure. It was accordingly decided to authorise its Opium Commission to examine directly the questions which may be submitted to it in accordance with Article 10 of the Convention and, after having received from the President of the Permanent Committee of the opinion of the Office international d'Hygiène publique, to take such decisions as may appear to be necessary, with the approval of the President of the Health Committee."

An official communication on this matter from the Opium Section of the Secretariat will be laid before the Committee.

CHAPTER II.

A. — SERVICE OF EPIDEMIOLOGICAL INTELLIGENCE AND PUBLIC HEALTH . STATISTICS.

I. GENEVA.

The work of this service has continued according to the programme adopted at the beginning of 1929. The Statistical Report of Notifiable Diseases (E.I.14) containing the morbidity and mortality statistics of the various countries for 1929 revised and completed by the respective Health Administrations, is now being published.

The Monthly Epidemiological Reports, containing statistical tables relating to the principal infectious diseases and the essential epidemiological phenomena have appeared regularly. Since August 1930, reviews on encephalitis lethargica, cerebro-spinal fever, scarlet fever, diphtheria, undulant fever, measles, whooping-cough, relapsing fever and typhoid fever have been published in these reports.

The Weekly Epidemiological Record is published every Thursday. It contains, on the first pages, the official communiqué of the Office international d'Hygiène publique and, on the following pages, a summary of the latest information received at Singapore and Geneva, classified according to disease and region affected.

The Weekly Record also contains information received by the Health Organisation on the movement and prevalence of the less serious epidemic diseases as well as on the diseases included within the provisions of the International Sanitary Convention of 1926. In view of the fact that influenza appeared in Europe in November, special efforts were made to collect information from the Health Administrations concerned and to publish the most recent information in the Weekly Record and the Latest Epidemiological Intelligence. When it became evident that the outbreak of influenza was more serious in certain countries than the usual seasonal occurrence, letters and telegrams were despatched (February 19th to 24th) to a number of Health Administrations and the information received was published regularly.

The Health Committee will doubtless wish to express its appreciation to the Health Administrations which have furnished the latest information on influenza for publication in the Weekly Record and Latest Epidemiological Intelligence for the benefit of their colleagues in other countries.

II. EASTERN BUREAU AT SINGAPORE.

The sixth session of the Advisory Council was held at Singapore from December 27th to 30th, 1930. Doctor J. J. van Lonkhuyzen presided.

The report of the session and the Director's annual report are being published separately and will be communicated to the Health Committee before the May 1931 session.

The report of the Director of the Bureau deals with the following subjects:

- (1) The marked improvement in the position of the graver epidemic diseases in Far-Eastern ports during 1930 and the consequent decrease in the information received by the Bureau.
- (2) The extension of the Bureau's intelligence service due to the liaison established with the ports of Shanghai, Amoy, Bushire (Persia) and the receipt of supplementary information by mail from Macao, Tanganyika and Amoy.
- (3) Further decrease in the number of failures to pick up the message broadcast in code (13 in 1929, 10 in 1930).
- (4) The increased success in picking up the Bureau's message broadcast in clear for the benefit of shipping from stations at Malabar (daily), Tokyo, Karachi, Madras, Hong-Kong and Shanghai.

- (5) The report to the Bureau of sixty-three ships having on board cases of the major infectious diseases (plague, cholera, smallpox, cerebro-spinal fever, typhus fever). In twenty-eight instances, telegraphic notice of the prospective arrival of an infected ship was sent by the Bureau to the next port of call.
- (6) The notification of the Governor of the French possessions in India that he agreed to the territories under his control being related to the Bureau for the purposes of the International Sanitary Convention of 1926.
- (7) The work of the Bureau in co-ordinating research as respects bacteriophage, tropical pneumonia, plague, oral vaccinations against dysentery and dry smallpox vaccine.
 - (8) The receipt of the following contributions:

•				Value	1930 in Straits dollars
Japan (for 1929 and 1930) (Yens 30,000) .				•	26,311.06
Straits Settlements (for 1930)				•	3,027.—
Netherlands East Indies (for 1930)	•			•	7,083.—
Government of Hong-Kong (£275 os. od.) .					2,367.71
French Indo-China, (Piastres 6,000)				•	4,147.50
Federated Malay States (for 1929 and 1930)			•	•	6,000.—
Philippine Islands (for 1930)				•	2,000.—

The Health Committee will wish to express its appreciation for these new evidences of interest in the work of the Bureau on the part of the Health Administrations concerned.

The Advisory Council approved the report of the Bureau's Director, established the estimates for 1932, and adopted resolutions relating to the arrangment with the Office international d'Hygiène publique to forward to the Bureau telegraphically information regarding measures applying to Far-Eastern countries; to the danger of the introduction of yellow fever virus in the Far East, and to the departure of Dr. R. Gautier.

Dr. R. Gautier, who has directed the work of the Bureau for a period of four years, has completed his term and is returning to the Health Section, Geneva. He will be replaced in April 1931 by Dr. C. L. Park.

In accordance with its resolution adopted during the sixteenth session, the Health Committee will wish to refer the annual report and budget of the Eastern Bureau to the Sub-Commission under the chairmanship of Dr. J. Jitta.

B. — SYSTEM OF LIAISON WITH THE HEALTH ADMINISTRATIONS OF THE DIFFERENT COUNTRIES.

1. COLLECTIVE STUDY TOURS.

The Committee has discussed, on two occasions, the possibility of organising a collective

study tour on the milk supply, and has expressed its approval of the plan.

It is hoped that a small group of experts composed in accordance with the suggestions of the Health Committee may be able to visit the United States of America and Canada in the summer of 1931. Surgeon-General Cumming has generously offered the assistance of the United States Public Health Service, and Dr. Fitzgerald has invited the group to visit Toronto. In view of the limits imposed by time and distance, as well as budgetary limitations, it is proposed to limit the tour to cities situated on or near a line between Toronto and New York, and to restrict the number of participants to four or five.

These participants will be invited to prepare reports on various aspects of the milk supply and to act as rapporteurs to the larger group which will meet in Denmark in the autumn, and visit successively thereafter representative districts in England, the Netherlands, Western Germany and Switzerland.

Such a collective study should result in a number of valuable reports which will be of

particular interest to the Committee in view of its work on rural hygiene.

2. INDIVIDUAL MISSIONS.

The Committee has decided to extend the facilities of its system of liaison to those Health Administrations which have requested the collaboration of the Health Organisation—namely:

The Central Health Services of the Republic of China;

The Hellenic Health Administration;

The Bolivian Health Administration;

Moreover, as a result of the Committee's work on sleeping-sickness in Africa and the enquiry into health conditions in the Pacific Islands, individual missions will be provided for medical officers in those areas. The Committee has also agreed to provide facilities for studies abroad to medical officers of Health Administrations which decide to carry out enquiries into infant mortality along lines recommended by its Conference of Health Experts on Infant Welfare.

In addition, a number of individual missions will be provided for specialists to carry out studies on work included in the programme of the Health Organisation, and for officials recommended by their Health Administrations for special purposes.

Examples of current missions of the various types mentioned above are :

An individual study tour to an Austrian medical officer for the preparation of a bibliographical note on nutrition;

Opportunity for studies abroad afforded to a port medical officer who has become assistant director of port health work at Shanghai;

The Bolivian Director-General of Health has been studying public health administration in various European countries according to a programme prepared by the Health Organisation;

The health officer of Salonika has studied municipal health administration in a number of European cities;

A professor in the London School of Hygiene and Tropical Medicine has been enabled to study the work of the Institutes of Hygiene at Budapest and Nancy.

The preparation and organisation of such studies will be greatly facilitated when the International Centre for Advanced Health Studies is established in Paris.

CHAPTER III.

COLLABORATION WITH GOVERNMENTS AND PUBLIC HEALTH ADMINISTRATIONS.

A. — THE NATIONAL GOVERNMENT OF THE REPUBLIC OF CHINA.

On the invitation of the National Government (cable of November 27th, 1930) the Medical Director visited China for consultations in regard to the reorganisation of the national health services. He arrived in China on December 24th, 1930, and returned to Europe on March 23rd, 1931. He will report to the Committee on the progress of the programme of collaboration approved during the fifteenth (March 1930) session.

B. — LIAISON WITH LATIN-AMERICAN COUNTRIES.

I. BOLIVIA.

The final report of Dr. Mackenzie and Dr. Pascua on their mission to Bolivia, in compliance with the request of the President of the Republic, was considered by the Bureau of the Committee on March 26th in accordance with the following resolution:

"The Health Committee decides to place at the disposal of the Bolivian authorities the facilities of its system of liaison with health administrations, and requests its Bureau to proceed with the study of the programme of collaboration, in consultation with the Director-General of Health of Bolivia" (Resolution VI, document C.627.M.248.1930.III).

Dr. Bilbao, Bolivian Director-General of Health, who was accompanied by his assistant, Dr. L. P. Barrientos, and was delegated by his Government to discuss the programme of collaboration with the Health Organisation, arrived in Europe in October 1930, and studied public health work in important centres of Austria, Czechoslovakia, Germany, Greece, Hungary, Poland, Roumania and Yugoslavia, according to a programme arranged by the Health Section.

The Committee will receive a report on the results of its Bureau's consultation with Dr. Bilbao at this session.

2. Enquiries into Infant Mortality.

The report (document C.H.908(1)) on the Enquiries into Infant Mortality in South America, presented to and approved by the Health Committee during its sixteenth session has now been published in French and English editions. Copies of the report have been communicated to the Health Administrations of Latin-American countries.

3. SEROLOGICAL CONFERENCE AT MONTEVIDEO.

On the invitation of the Government of Uruguay, Professor Jadassohn was selected by the Health Committee to preside over the South American Serological Conference convened by the Institute for the Prevention of Syphilis at Montevideo (document C.627.M.248.1930.III, page 82). Professor José Scoseria (President of the National Health Council of Uruguay) was Chairman of the organising committee for the Conference, and the technical secretarial work was entrusted to Dr. Moerch of the Danish State Serum Institute and Dr. Olsen of the Health Section.

Thanks to the generosity of the Government of Uruguay, experts from the Argentine Republic, Brazil, Chile, Uruguay and Paraguay, as well as the authors of the serological methods which had given the best results at Laboratory Conferences convened by the Health Organisation in Europe, were invited to carry out at this Conference comparative studies on the value of the different methods employed. These studies were made according to the principles on which previous Laboratory Conferences convened by the Health Organisation had been based.

The results of the Montevideo Conference are described in detail in a report which is now

being published.

During the Conference, 966 samples of serum and 200 samples of cerebro-spinal fluid were examined, while twelve different methods of serological diagnosis were compared. The results are shown in the following table:

Method	Syphilis: Percentage of positive reactions	Controls: Percentage of positive reactions	Controls: Number of positive reactions			
	Less than I per cent of non-specific reacti					
Kahn's Precipitation "Presumptive" Test (carried out by Professor R. L. Kahn, Ann Arbor, Michigan, U.S.A.) Muller's Clotting (Ballungs) Precipitation Test (carried out by Professor R. Müller, Vienna). Kahn's "Standard" Precipitation Test (carried out by Professor R. L. Kahn) Modified BW. 1 Test (carried out by Dr. A. Sordelli and Dr. J. M. Miravent, of Buenos Ayres). Modified BW. 1 Test (carried out by Dr. E. J. Wyler, London). Modified BW. 1 Test (carried out by Dr. R. Scaltritti	75.6	I	3			
	69.3	0.7	2			
	63.9	0	0			
	55.9	0	0			
	54.4	0	0			
and Dr. J. Cassiniga, of Montevideo)	49.9	0	0			
	More than I per cent of non-specific reactions.					
Modified BW, ¹ Test (carried out by Dr. J. E. Moreau, Montevideo)	64.7	13.9	42			
	62.2	2.4	6			
	55.5	2.6	8			
	54.9	4.3	13			
	52.4	4.5	6			
	45.4	5.6	17			

The Health Committee will doubtless wish to extend to the Government of Uruguay, to the Institute for the Prevention of Syphilis at Montevideo and to Professor José Scoseria, Chairman of the organising committee, its heartiest congratulations on the success of this first Laboratory Conference in South America.

The Committee will also wish to thank Professor Jadassohn for the manner in which he carried out the task entrusted to him.

¹ Bordet-Wassermann.

The Health Committee will also desire to approve the suggestions contained in the following resolution adopted by the Conference :

- "The Conference congratulates the Montevideo Institute for the Prevention of Syphilis on its action in convening in South America a Laboratory Conference on the serodiagnosis of syphilis, organised on the same principles as the Conferences of this nature previously convened by the League of Nations Health Organisation; and,
- "Recognising the great value of the results of this Conference, due to the fact that the serologists of the different South American countries were enabled, by employing as experimental material the same sera and cerebro-spinal fluids, to compare the efficacy of their methods in relation to those found to be best at the previous Laboratory Conference held at Copenhagen,
- "Recommends that the Health Organisation of the League of Nations should invite the Montevideo Institute for the Prevention of Syphilis to continue the work of the Conference on the serodiagnosis of syphilis and should co-ordinate, in collaboration with the Danish State Serum Institute—which acts as the central laboratory of the Health Organisation—and with the League of Nations Secretariat, comparative studies on this subject by the various South American serological laboratories."

C. — REQUEST OF THE BULGARIAN GOVERNMENT REGARDING THE CAMPAIGN AGAINST SYPHILIS IN CERTAIN REGIONS OF BULGARIA.

At the request of the Bulgarian Health Administration, Professor Jessner, Assistant Director of the Dermatological Clinic of the University of Breslau, visited Bulgaria from December 29th, 1930, to January 9th, 1931. After consulting with the public health authorities and the members of the Commissariat of the League of Nations for the settlement of Bulgarian Refugees, Professor Jessner visited the Department of Burgas. Since his report to the Health Committee during its sixteenth session, the following progress has been made:

- 1. The Director of Health convened a Conference in January 1931 of all officials engaged in the anti-venereal campaign to discuss the future programme of work.
- 2. Dispensary at Burgas. The number of new cases increased from 38 in September to 79 in December. The number of consultations and treatment given increased from 86 in September to 818 in December. Of the 222 new patients who applied at the dispensary up to December 31st, 1930, 72 had syphilis and the remainder suffered from other venereal or skin affections.
- 3. Anti-Venereal Department of the Burgas Hospital. The construction of this wing was completed in December and it was opened for service in the middle of January.
- 4. In November and December, Dr. Schauloff, the syphilologist of the Department of Burgas, visited six of the arrondissements to confer with the district, village and brigade doctors on the examination of the population for syphilis.
- 5. In all the arrondissements of the Department, cases previously found were examined, positive cases were given combined treatment, and the number of samples of serum submitted by physicians for examination showed a heavy increase; for example, 24 of the 44 village physicians submitted a total of 582 samples of serum from the middle of August to the end of October, while the same number of physicians submitted 900 samples in November.
- 6. Special efforts are being made to obtain periodically exact information on the number of persons examined, the number of cases found and the number of treatments given.

D. — COLLABORATION WITH THE GREEK GOVERNMENT IN HEALTH MATTERS.

1. The inauguration of the Athens School of Hygiene took place on March 16th, 1931, in the presence of the Prime Minister, His Excellency M. Venizelos.

In previous reports, reference was made to the courses to be given at the school, and to the entrance qualifications for the students. Telegrams of congratulation were addressed to the Minister of Health, the Director of the Athens Centre and the Director of the School by Professor Madsen, in the name of the Health Committee, Professor Léon Bernard, in the name of the directors of schools of hygiene, over whose conferences at Paris and Dresden he presided in 1930, and the Medical Director respectively.

The commencement of work at this school must be a source of great satisfaction to the Greek Government, and the Health Committee, as it represents a most important stage in the application of the plan of co-operation.

- 2. Progress has been made in the organisation of health centres at Corfu, Arta (Epirus) and Canea (Crete). A building for the health centre at Canea has been purchased. At Corfu and Arta, the sites are ready and plans for the buildings have been completed.
- 3. In accordance with the arrangement with the Greck Government, the Health Organisation secured the services of Professor Julius Tandler, Vienna, who arrived in Greece on January 6th and remained until January 23rd, advising on the organisation of the health services in the Athens-Piræus metropolitan area. His report should be received in time for the May session of the Committee.
- 4. In accordance with the invitation of the Minister of Health during the sixteenth session of the Committee, the Secretary of the Malaria Commission arrived in Greece on October 28th, 1930, and remained until November 12th, 1930, studying the antimalaria campaign in various regions, and in particular the new anti-malarial organisation. The Minister of Health gave him every possible assistance. His report (document C.H./Malaria/154) has been communicated to the Malaria Commission.

E. — COLLABORATION WITH THE HEALTH ADMINISTRATION OF CZECHOSLOVAKIA.

In November 1930, during the visit of the Medical Director to Prague, H.E. De F. Spina, the Minister of Health and Physical Education discussed the possibility of establishing a closer collaboration between the Health Organisation of the League and the Health Administration of Czechoslovakia.

On November 27th, the Minister sent a letter to the Medical Director, stating:

"I hope to send you shortly a plan dealing with the different questions on the programme which our Health Administration intends to attempt to solve. I shall be very grateful if you will give your attention to this problem in order that our collaboration with the Health Section may be facilitated.

" I view this collaboration as follows:

- `` (I) The Health Section might place at our disposal, when requested, the information needed for the study of several specific questions;
- "(2) It would be highly desirable that the work of some of our collaborators to whom special problems are assigned in accordance with the plan I have communicated to you should be facilitated in order that they may be able to gain experience in regions best adapted for their purposes;
- "(3) Members of your Organisation might collaborate in Prague in the solution of different problems;
- "(4) A problem which I shall later indicate to you might be included in the programme of international studies carried out by the Health Committee of the League of Nations.
- "In regard to (3) above, I should like to express to you once more my great satisfaction that it has been possible to place the services of Dr. Tomanek at our disposal in order that he might work with us in the Republic. I intend to utilise his services, in collaboration with our sanitary officials, in a detailed study of sanitary conditions in Slovakia and he will be asked to participate in the work of organising a health centre in Sub-Carpathian Russia.
- "May I give you the following information in regard to this centre. It will be a central institution bringing together within its internal organisation all elements of sanitary work, private as well as public. This institution will be a centre for the co-operation of all the agencies carrying on health work and, while maintaining a form of organisation sufficiently elastic to permit the private co-operating agencies to preserve their independence, it will be attached to the State Health Services.

- "That part of the Health Centre in Sub-Carpathian Russia which will belong to the State will consist of:
 - "(1) A mobile epidemiological brigade;
 "(2) A station for bacteriological diagnosis;
 "(3) A department of epidemiology.

- "That part which will belong to private welfare agencies will be composed of the following three departments:
 - Department of demography and propaganda;

Social welfare and health; Department of alimentation.

"Special columns of workers (well-diggers, masons, carpenters) will be sent to selected sites to stimulate the construction of model sanitary dwellings in collaboration with the

population.

"Social and health assistance will be given simultaneously with the application of measures for the control of infectious diseases (control provided for by law) and should be a valuable auxiliary to the State in relation to the dangers resulting from epidemic diseases.

In accordance with this request, Dr. Mackenzie and Dr. Tomanek of the Health Section visited Czechoslovakia in January (January 20th to February 15th) to consult with the Health authorities the details of the programme of collaboration described above. They visited important centres in Slovakia and Sub-Carpathian Russia and met the administrative and health officials concerned in the work described by the Minister.

On March 13th, a further letter was addressed to the Medical Director by the Minister of Health and Physical Education, who, after expressing his appreciation for the visits of the

two members of the Health Section, continued:

- "The collaboration with the Health Organisation might most usefully develop along the following lines:
 - "(1) Study of the health conditions existing in the city of Bratislava in order to formulate recommendations for the future development of its public health services;
 - "(2) Study of the varying needs of various districts in Slovakia for health centres (in the beginning this study will be limited to a certain number of districts in the North where action seems most urgently required);
 - Organisation of the work of the future health centre for Sub-Carpathian Russia now under construction, under the direction of the Minister of Health and Physical Education.
- "On the irreturn to Prague, Dr. Mackenzie and Dr. Tomanek were invited to attend a meeting at the Ministry of Health and Physical Education in which officials from various sections of that Ministry, the local political administrations of Slovakia and the State Institute of Hygiene participated.
 "In accordance with the opinions expressed and the recommendations made at that

meeting I suggest:

- "(1) That the collaboration should extend simultaneously to the three points described above;
- "(2) That the study should be organised by the Ministry of Health and Physical Education according to a plan to be prepared by Dr. Mackenzie and Dr. Tomanek at Geneva, with such other members of the Health Organisation as you may consider proper; which plan should afterwards be presented to the Ministry of Health and Physical Education;
- That Dr. Tomanek should be entrusted with this study with the assistance of one or more officials which the Ministry of Health and Physical Education may assign for this purpose. In accordance with the terms of your letter, Dr. Tomanek may be accompanied by one or more members of the Health Organisation of the League of Nations in case such appears to be desirable.
- "I desire once more to draw your attention to the interest and importance which my Ministry attaches to this collaboration and to express the hope that the proposed study will result in recommendations which will assist in the preparation of a concrete programme of public health for Czechoslovakia."

CHAPTER IV.

TECHNICAL SECRETARIAT OF COMMISSIONS.

A. — LEPROSY COMMISSION.

I. BANGKOK CONFERENCE (December 8th to 12th, 1930).

The Health Committee, at its sixteenth session (October 1930), decided that the Leprosy Commission should meet at Bangkok, during the eighth congress of the Far-Eastern Association of Tropical Medicine.

The Health Committee passed the following resolution in the matter:

"The Health Committee,

"Having received the report of Dr. Burnet, the Secretary of the Leprosy Commission (documents C.H.887 and C.H.887(a)):

"Decides to submit this report, and particularly the programme of future work, to a meeting of the Leprosy Commission, which might with advantage be held at Bangkok during the Congress of the Far-Eastern Association of Tropical Medicine;

"Notes the observations of the Medical Director relating to a programme of international centres of study at Rio de Janeiro and Tokio, and requests the Leprosy Com-

mission to study this matter in detail."

In the unavoidable absence of Professor Carlos Chagas, Professor Bernhard Nocht, who had already accepted an invitation to collaborate as an international expert at the new Leprosy

Research Centre at Rio de Janeiro, acted as President of the Bangkok Conference. ¹
The agenda included the following points, which were discussed on the basis of a memorandum drawn up by the Secretary of the Commission and approved by the Health Committee

(document C.H.943).

Part I: Internal Questions:

Organisation of the International Centre at Rio de Janeiro. Organisation of the International Centre in Japan.

Programme of future action.

Part II: External Questions. — i.e., questions to be communicated to the Congress of the Far-Eastern Association of Tropical Medicine:

Drafting of the Commission's report, with conclusions, chiefly concerning the principles of leprosy prophylaxis, on the basis of a draft prepared by the Secretary of the Commission.

President:

Dr. Bernhard Nocht, Geheimer Medizinalrat, Director of the Institute of Tropical Diseases, Hamburg.

Professor Carlos Chagas, Director of the Oswaldo Cruz Institute, Rio de Janeiro (absent).

Surgeon-General H. S. Cumming, Director-General of the Public Health Service of the United States of America (absent), replaced by Dr. N. E. Wayson, Surgeon, Public Health Service of the United States of America, Leprosy Investigation Station, Honolulu, Hawaii.

Major-General J. D. Graham, Public Health Commissioner with the Government of India, New Dolbi

Dr. G. Alexander Mitchell, Chief Health Officer for the Union of South Africa, Pretoria.

Professor Ernest Muir, M.D., F.R.C.S., Leprosy Research Laboratory, School of Tropical Medicine and Hygiene, Calcutta.

Professor Mataro Nagayo, Director of the Government Infectious Diseases Institute of the Tokio Imperial University (absent), represented by Dr. Masao Ota, of the Tohoku Imperial University,

Major-General Sir Leonard Rogers, C.I.E., F.R.S., I.M.S., Honorary Medical Adviser to the British Empire Leprosy Relief Association, London, (absent).

Dr. H. Windsor Wade, Chief Pathologist, Public Health Service of the Philippine Islands; Medical Director of the Leonard Wood Memorial for the Eradication of Leprosy, New York.

Secretary:

Dr. Etienne Burnet, Secretary of the Leprosy Commission of the League of Nations Health Organisation.

There were also present at the Conference:

Dr. C. L. Park, Member of the Health Section of the League of Nations Secretariat. Dr. R. Gautier, Director of the Far-Eastern Bureau of the League of Nations Health Organisation.

¹ Members of the Conference:

Procedure.

The Commission met at Bangkok, from December 8th to 12th, first in one of the rooms of the Congress of the Far-Eastern Association of Tropical Medicine, at the University, and then at the Chulalongkorn Hospital. The excellent organisation was due to the President, Prince Thavara Mongolwongs, and to the two Secretaries of the Congress, Major-General Phya Damrong Baedyagun and Dr. O. Deggeler, Inspector of Hospitals in the Netherlands East Indies.

The first meeting, devoted to internal questions, was private, and at subsequent meetings, when the report and conclusions were discussed, a small number of leprology experts were

invited to be present-namely:

Dr. C. DE LANGEN, Dean of the Faculty of Medicine, Batavia; Dr. John Lowe, Medical Superintendent, Dichpali Leprosy Hospital, India; and Dr. James W. McKean, Director of the Leper Settlement at Chiengmai, Siam.

In conformity with the Health Committee's instructions, the Commission decided that its report should be communicated to the leprologists at the Congress and to the Congress as a whole, at a general meeting devoted to leprosy, which was duly held on December 12th.

On the Siamese Government's invitation, the Commission visited the Phra Daeng Lepro-

sarium, south of Bangkok, and most of the members took part in the trip to the north of Siam, to visit the Chiengmai Leprosarium, an important institution belonging to the American

Prince Sakol Varnakara, Director of Public Health in Siam, was present in person at every meeting of the Commission, thus demonstrating his interest in the questions under discussion and the importance which his country attaches to the League's work. Prince Sakol is the author of important publications on leprosy in Siam.

At the opening of the Bangkok Conference, all the members of the Commission were invited to visit Manila, in their individual capacity as members of the Conference organised by the Leonard Wood Memorial for the Eradication of Leprosy.

I. Internal Work of the Commission.

Centres.

All the available information concerning the setting up of the Rio de Janeiro and Japanese centres was placed before the new members of the Commission. Major-General Graham communicated the correspondence with Brazil and the preliminary declarations of the Brazilian Govern-

cated the correspondence with Brazil and the preliminary declarations of the Brazilian Government Both countries' resources in the matter of leprosy institutions, laboratories and funds were gone into. Big leprosy countries, such as Brazil and Japan, it was felt, should each have their own centre, like India and the Philippines, and should aim at international co-operation. Professor Ota gave an account of the Japanese Government's plans and the proposed appropriations for anti-leprosy work. The Commission approved the programme for the centres, subject to a detailed examination of local resources and any suggestions resulting from the Bangkok and Manila Conferences. It recommended that the new centres should study the working of the old ones, to establish the necessary contact. It adopted the following resolution: resolution:

"The Commission,

"Approves the setting up of international study centres at Rio de Janeiro and in Japan, and the programme of studies for these centres. It strongly urges that persons called upon to work in these centres should spend a certain time in the Calcutta, Culion and Honolulu institutions."

Programme.

The Commission approved the general plan of action, and particularly the research

programme, embodied in the memorandum.

Discussion centred on the fundamental experiment in regard to leprosy treatment—i.e., a comparison of two like groups of cases, under like conditions, one of which groups is receiving chaulmoogra treatment while the other is not. What are the conditions and technique for such an experiment, if feasible? Technical and social difficulties have to be reckoned with. The Commission recommended that the experiment should be carried out by the Brazilian International Centre and by other big institutions.

2. External Questions.

Report of the Commission.

(a) Discussion of the Report. — The Commission split up into Sub-Commissions which kept in constant touch, texts being discussed and approved at plenary meetings.

From the outset, the difficulty was realised, at the present stage of our knowledge, of formulating technical recommendations for the eradication of leprosy. As regards treatment,

two schools of thought emerged from the exhaustive discussions, one laying far more stress than the other on special treatment. General and dietetic treatment were unanimously advocated, as was the fundamental comparative experiment on the efficacy of treatment. A recommendation was embodied in the report concerning intradermic inoculation, on the basis of actual experience up to date. Recommendations were passed urging the standardisation, so far as possible, of remedies and methods of application. Not every member admitted the analogy between leprosy and tuberculosis from the standpoint of general prophylaxis. Prince Sakol submitted some valuable observations on mental conditions in the treatment of leprosy. For the question of treatment, the Commission is particularly indebted to Dr. Muir, Dr. Wade and Dr. Wayson, the specialist members.

Segregation was generally advocated, the term isolation, however, being substituted so as to avoid the specific historical connotation. Isolation, it was agreed, must vary according to the country: dispensaries, regarded as essential in India, are not equally suitable in South Africa or in the Netherlands East Indies. Isolation is not sufficient as a prophylactic measure, but must be supplemented by epidemiological control, treatment, and education for patients and public alike. Dr. Mitchell energetically combated the notion of the leprosy campaign as an undertaking of so special a nature as to be virtually independent of general public health measures; the equipment employed to combat other infectious, contagious and avoidable diseases can be used, to some extent, also for leprosy. From the standpoint of public health it is not of capital importance whether 60 or 65 per cent of the cases treated are cured or improved: leprosaria cases, particularly old cases, come second—the important point is to prevent fresh cases.

Granting the comparative efficacy of treatment—particularly special treatment—and of isolation in institutions, some complex scheme for prophylaxis had to be found, consisting of measures which will vary in relative importance according to the conditions obtaining in the particular country. The Commission recommended simple and elastic laws, the essential features being notification and the isolation of cases proved bacteriologically positive and infectious, and also facilities for treatment.

Permanent epidemiological control, education and propaganda are essential, and successful examples are already to hand. To quote Dr. Mitchell: confidence is the basis of any system of prophylaxis. Prince Sakol described conditions in Siam as shaped by its ancient Buddhist culture and the part played by the monks in the social life of the country. Professor Ota contributed an important statement on dispensaries. Japan, for the time being, prefers isolation in leprosaria as a means of prophylaxis and it will be interesting to compare leprosy in that country with the movement of the disease in countries where more complex methods are employed.

Marriage, cohabitation and procreation are delicate questions, for which it is difficult to formulate rigid universal principles. The Commission passed a general recommendation based on modern conceptions in regard to the preservation and improvement of the human race. For children, separation and periodical examination at school would be one of the main features.

The Commission could not do much beyond thus formulating general principles of prophylaxis. In view of the general programme for the forthcoming Manila Conference, at which its members would be present, and hoping that the Manila agenda would supplement its own proceedings, it simply made technical suggestions regarding the practical points still outstanding.

The Commission realised the need for uniformity in the clinical, therapeutical, and scientific language employed by leprologists, and for some general agreement as regards the specific terms used to define lesions, and signs of improvement or the reverse. Further, the forms of leprosy must be classified, while current terms such as cure, infectious, positive, negative, contagious, must be revised and defined. The remedies found most satisfactory as regards efficacy and technique should be indicated. The Commission, in short, called for standardisation in the matter of terminology, treatment and documents of a statistical character.

Difficult though it will be to arrive at even a preliminary standardisation of remedies and methods, the Commission realised the need for some expression of its opinion on the subject; while noting the difficulties it recommended that something should be done in the matter, in conformity with the Health Committee's traditions.

The Commission heard:

- (1) A letter from Sir Leonard Rogers, expressing his misgivings in regard to segregation and his confidence in the efficacy of early treatment;
- (2) A note from Dr. McKean on the importance of agricultural isolation settlements and the treatment of lepers under humane and medically satisfactory conditions.

Prince Sakol added that the Siamese Government was prepared, in addition to the existing establishments, to found two new agricultural settlements, in the north and in the south,

respectively.

The Conference noted Professor Ota's communications and Professor Nocht, the President, on behalf of the Commission, congratulated the Japanese Government on its anti-leprosy schemes. It will be interesting to compare the movement of leprosy in Japan where the system of isolation in leprosaria obtains, and in countries which have adopted a different system.

(b) Text of the Report. — In this first report of the Commission is set forth for the first time the doctrine of leprosy prophylaxis, meaning by doctrine the principles on which the experts of different schools and opinions are agreed, but which take into account the peculiar requirements of individual countries. This report is now being printed.

The Commission was anxious to come to a decisive conclusion as regards the two very controversial questions of treatment and segregation, on the basis of known scientific facts

and the experience of practising leprologists.

(c) Plenary Meeting of the Congress of the Far-Eastern Association of Tropical Medicine. — Professor Nocht, President of the Bangkok Conference, was elected Chairman by the Congress. On behalf of the Conference, he thanked the Bureau of the Congress and the Siamese Government for the cordial reception and the facilities so generously offered to the Commission. General Graham, as a member of the Health Committee, sketched the history of leprosy as dealt with by the Committee since 1925, pointing out the part played by the United States of Brazil from the outset, the purpose of the Bangkok Conference and the results anticipated by Governments and by the Public Health Administrations in leprosy countries.

Dr. Burnet, Secretary of the Commission, described his enquiry into leprosy in Europe, South America and the Far East, and explained how the question of leprosy had come before the Health Committee. Dr. Lowe, Dr. Muir and Dr. Wade, members of the Congress and of

the Leprosy Commission, submitted technical communications.

II. Manila Conference (January 8th to 23rd, 1931).1

The Leonard Wood Memorial for the Eradication of Leprosy organised the Manila Conference as a conference of experts to discuss technical questions, in particular, the treatment of leprosy. The members of the Leprosy Commission at Bangkok were invited by the Wood Memorial to take part in the Manila Conference in a personal capacity.

and Hygiene, Calcutta.

Dr. E. E. Neff, Medical Inspector, Mogokai Central Leper Hospital, Fiji Islands.

Dr. Bernhard Nocht, Geheimer Medizinalrat, Director of the Institute of Tropical Diseases, Hamburg.

Dr. M. Ota, Tohoku Imperial University, Sendai, Japan.

Dr. J. N. Rodriguez, Inspector of Treatment Stations, Public Health Service of the Philippine

Íslands

Dr. J. C. Tull, Government Pathologist, Singapore, Straits Settlements.

Dr. H. Windsor Wade, Chief Pathologist, Public Health Service of the Philippine Islands; Medical Director of the Leonard Wood Memorial for the Eradication of Leprosy, New York.

Dr. N. E. Wayson, Surgeon, Public Health Service of the United States of America, Leprosy Investigation Station, Honolulu.

The British Empire Leprosy Relief Association was represented by two eminent leprologists: the Secretary-General, Dr. Robert G. Cochrane, and Dr. Ernest Muir, of the Calcutta School of Tropical Medicine and Hygiene.

Dr. H. W. Wade was elected President.

The Conference was held at the Manila Hotel, from January 8th to 23rd, 1931. There were two series of meetings, one before and one after the tour to the Philippine Archipelago to visit the various leprosy institutions, including the Cebu treatment station and the Culion colony. The discussions were continued during this tour, and meetings were held regularly on board.

The Conference split up into Sub-Commissions, liaison being ensured by the Executive Sub-Commission and a Drafting Sub-Commission. The Sub-Commissions dealt with the following questions: treatment, programme of lesions, clinical questions, prophylaxis, classification of leprosy, special review.

¹ Members of the Manila Conference:

Dr. Etienne Burnet, Secretary of the Leprosy Commission of the League of Nations Health Organisation.

Organisation.

Dr. Robert G. Cochrane, M.D., M.R.C.P., D.T.M. & H., Secretary, The British Empire Leprosy Relief Association, London.

Mr. H. I. Cole, Ph.D., Chief Chemist, Culion Leper Colony, Culion, Palawan, Philippine Islands. Dr. J. Fajardo, Director of Public Health, Public Health Services of the Philippine Islands. Major-General J. D. Graham, Commissioner for Public Health with the Government of India. Dr. G. Gushue-Taylor, Superintendent, Mackay Memorial Hospital, Taihoku, Formosa. Dr. V. G. Heiser, Director for the Far East of the Rockefeller Foundation.

Dr. Lee S. Huyzenga, Superintendent, Mission Hospital, Jukao, Kwangsi, China. Dr. H. Joyeux, Director of the Public Health Bureau, Hanoi (Tonkin), Dr. A. N. Kingsbury, Director of the Research Institute, Kuala Lumpur, Federated Malay States. Dr. P. H. J. Lampe, Director of Public Health, Surinam.

Dr. C. B. Lara, Principal Medical Officer, Culion Leper Colony.

Dr. A. C. Leroy des Barres, Inspector General of the Public Health Service of French Indo-China. Dr. J. Lowe, Medical Inspector, Dichpali Leprosy Hospital, India.

Dr. J. L. Maxwell, Lister Institute of Medical Research, Shanghai.

Professor Ernest Muir, M.D., F.R.C.S., Leprosy Research Laboratory, School of Tropical Medicine and Hygiene, Calcutta.

Dr. Wade, Medical Director of the Wood Memorial since January 1st, 1931, had informed the Bangkok Conference of the programme for the Manila Conference, as follows:

1. Technical questions.

2. Foundation of an International Leprosy Association and of an international review.

3. Visit to the Philippine institutions (Cebu, Zamboanga, Iloilo and Culion).

He had drawn up for discussion a memorandum covering the technical questions relating to leprosy. A second memorandum was devoted to the International Association and the review.

After the Bangkok Conference had discussed the principles of prophylaxis and drawn up a general programme of technical questions, the Manila Conference, in the natural course of its work, proceeded along similar lines. For a number of questions calling for action by the Public Health Administrations and agreement between those bodies, and the delicate and difficult question of standardisation, it appealed directly to the authority and means of action of the Health Committee.

An important memorandum by Sir Leonard Rogers was distributed to the Conference: he argues that segregation, though still useful in certain circumstances, is out of date, and that the system of the future must be a voluntary one, both economical and efficacious, ensuring early treatment, so that the leprosaria need only receive advanced cases, which are probably incurable.

The Conference ended with a public meeting at the Philippine Medico-Pharmaceutical College.

I. Work of the Conference: Technical Questions.

The two schools of thought present at Bangkok were again in evidence at Manila, and on many points the difference of opinion, due to a sense of responsibility, was exceedingly keen. Continuing on the lines of the Bangkok Conference, the leprologists at Manila undertook, however, to formulate principles for practical action and to endeavour to come to an agreement upon a working doctrine. They discussed in detail treatment, isolation, clinical and scientific terminology, bacteriological control, the technique of bacteriological examinations and the preparation of remedies, and drew up technical principles to which great value attaches by reason of the leprologists' unanimous agreement and acknowledged competence.

The report of the Manila Conference will be published in March 1931 in the *Philippine Journal of Science*, and there will be special reprints. Pending the publication of the text an analysis may be useful:

- (a) International viewpoint. Need for international interchanges and study tours and for a leprosy handbook or year-book, the Conference expressing itself as follows:
 - "The preparation and periodical revision of such a survey would be a laborious and somewhat expensive task, hardly possible except through the agency of an organisation such as the Leprosy Commission of the League of Nations or an Association of leprologists."
 - (b) Uniformity of methods and terminology. To quote the report:
 - "The Conference strongly endorses the conclusion of the Leprosy Commission of the League of Nations concerning the desirability of attempting to standardise the forms used in recording and reporting leprosy work. It feels that this is of great importance in the comparison of results obtained by different observers, which is almost impossible at the present time.
 - "As the work will entail the collection and detailed study of forms now in use in various active institutions throughout the world and can best be done under the auspices of a permanent organisation, the Conference resolves to invite the Leprosy Commission of the League of Nations to undertake this and, after preparing standardised forms, to circulate these to leprologists throughout the world."

The Conference realised the need for uniformity in regard to the following points:

- (i) Designation of cases. Inadequacy of certain terms, to be avoided: Case of leprosy, suspects, clinical leprosy, incipient leprosy, infectious leprosy. For "Burnt out", substitute "arrested with mutilation".
- (ii) Designation of lesions. Accurate definition of the terms: leproma, macula, papule, nodule, infiltration; leprotic and trophic lesions.
- (iii) Microbiology. Employ the term: Mycrobacterium lepræ; avoid the term leprous toxin.

- (iv) Classification of cases. At the present stage of our knowledge, classification is firstly clinical, and secondly the forms of leprosy should be classified from the standpoint of prophylactic hygiene. Clinical classification is restricted to two types (with subdivisions): nervous and cutaneous. For administrative purposes there are two types: open
- (v) Lepra reaction as distinct from spontaneous exacerbation. Further research necessary.
 - (vi) Early diagnosis of leprosy.

(vii) Methods of examination. — Clinical: Dulling of sense of touch, pain, temperature, thickening of skin and nerves, mucous membrane; Bacteriological: Skin, mucous membrane of nose. Technical training.

(viii) Treatment of Leprosy. — General and special. Affirmation of the value of special treatment. Recommendation of studies, with a view to standardisation of treat-

ment. Organisation of treatment.

- Avoid the term cure. Quiescent cases, arrested (ix) Evaluation of progress. cases, arrest; interruption of arrest; relapses.
 - (x) Follow up of patients. Supervision over a lengthy period.
- (xi) Study of contacts: importance from the epidemiological and prophylactic standpoint. — Technical instructions for epidemiological enquiries are annexed.
- (xii) Standardisation of records; uniformity in clinical and pathological observations, cards, files, tables, statistics.
- (c) Prophylaxis. The Conference did not touch on the question. It approved the Bangkok report in principle and passed the following resolution:
 - "The Conference has received the report of the Commission on the prophylaxis of leprosy drawn up at the Bangkok meeting in December 1930.
 "The Conference has examined the report and decided to adopt it in principle."

- The Conference passed a recommendation urging that the Leprosy Commission should encourage and co-ordinate researches. It stressed the need for epidemiological research. Under the heading of clinical experiments, it recommended the fundamental experiment on treatment already recommended at Bangkok.

The Conference drew up a systematic programme for researches on leprosy.

2. The International Leprosy Association and the "Review".

The Manila Conference, consisting as it did of leprologists of different countries, felt qualified to suggest that leprologists all over the world should found an International Leprosy Association and addressed itself in particular to the founders of the Association set up in Paris in December, 1926.

The Conference drafted the Statutes and Rules of this new International Association, and appointed a provisional Bureau, 1 to be responsible for negotiations and transactions

connected with the framing of the final constitution.

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<sup>1</sup> The Bureau is constituted as follows:
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Dr. V. G. Heiser, Director for the Far East of the Rockefeller Foundation.

Vice-Presidents:

For the Eastern Section:
Professor Ernest Muir, Calcutta.

For the Western Section:

Professor Carlos Chagas, Rio de Janeiro.

Dr. Robert G. Cochrane, Secretary of the British Empire Leprosy Relief Association, London.

Secretary and Treasurer:
Dr. Brown, Director of the Manila Science Bureau.

Members of the Provisional Council:

For the East

Professor C. DE LANGEN, Netherlands East Indies; Professor M. NAGAYO, Japan.

For the West:
Sir Leonard ROGERS, London;
Dr. Etienne BURNET, League of Nations.

Member ex-officio:
Dr. H. W. WADE, Leonard Wood Memorial.

Editor for Studies relating to the Review: Dr. H. W. WADE.

Assistant Editors:

Dr. H. P. Lie, Bergen, Norway; Dr. James L. Maxwell, Shanghai.

The composition of the Bureau follows the scheme for the Association.

The Association would be organised on the following general lines:

Title: "International Leprosy Association", with the French sub-title: "Association internationale de la Lèpre".

Two kinds of members: active members (leprologists, properly so-called) and associate members.

Two main sections, each with its own bureau:

Western section (Europe, Africa, North and South America); Eastern section (Asia, Indian Archipelago, Australia, Oceania).

The Presidents of the two sections will be Vice-Presidents of the Association. There may be smaller sections, national or regional, affiliated to the main sections—this is proposed for congresses, meetings or other activities not necessarily affecting the whole Association, to facilitate the division of the work.

For the final constitution of the Association, the appointment of the Bureau and the adoption of the Statutes, there will be a referendum (by correspondence), carried out by the provisional Bureau.

The Conference agreed on the necessity for an international leprosy review, as an organ of the International Association: this will be the latter's first task. The general editorial Committee will include one representative at least of every country in the world. The review will deal with scientific publications and information and will serve as a vehicle for discussion. The scheme cannot be put through unless the International Association can count on about \$5,000 a year for the purpose. In view of the present uncertainty as to the membership and funds, the Conference asked the Leonard Wood Memorial for financial support.

- 3. Various Resolutions of the Manila Conference.
- (a) Request for a subsidy of \$5,000, from the Leonard Wood Memorial.
- (b) Recommendation concerning the publication of an illustrated monograph on the new treatment station at Cebu, founded in 1930 by the Leonard Wood Memorial.
- (c) Resolution adopting in principle the conclusions of the Leprosy Commission (Bangkok Conference) on prophylaxis.
- (d) Recommendations requesting the League of Nations Leprosy Commission to be responsible for the compilation of a handbook on leprosy, the unification of administrative and statistical documents and the co-ordination of scientific researches.

Apart from its practical value, the report of the Conference, with the technical instructions annexed thereto endorsing, as it does, the views of the Bangkok Conference, should result in greater uniformity in the study of leprosy, and subsequently, as regards several points, at all events in relative standardisation.

III. IMMEDIATE RESULTS.

The findings of the Bangkok and Manila Conferences have created a new situation.

The Bangkok text of the first report of the Leprosy Commission defines the general principles of leprosy prophylaxis. The Manila report embodies technical conclusions and instructions. Both reports stress the necessity of greater uniformity in the study and treatment of the disease. Further effort, it would seem, should be directed towards this end—i.e., towards standardisation.

Contact between leprologists would be promoted by the leprosy handbook or year-book, which formed the subject of the Manila Conference's recommendation to the Health Committee. As a basis for the handbook, a questionnaire might be sent to the public health administrations, leprosy associations and missions.

Both the Bangkok and Manila reports emphatically urged the importance of uniformity in clinical and statistical documents: clinical observations, individual records, reports, tables. Existing specimens could be obtained and compared and uniform models established to be approved by the experts and recommended for general use.

The standardisation of treatment—i.e., medicaments and methods—presents great difficulties, which were recognised by both Commissions. Standardisation could be limited, however, at first to points for which it is most urgent and feasible.

The first step is to institute methodical comparisons, as already done in a number of leprosy institutions. The following points might be dealt with immediately:

- (a) The fundamental experiment on treatment described in the reports, consisting of a comparison between two like groups of cases under like conditions, one of which groups is being given special chaulmoogra treatment while the other is not.
- (b) A supplementary experiment of the same type to determine the value of intracutaneous injections, mentioned in connection with results at Culion.
- An analysis of observations on a sufficient number of cases under continuous treatment, according to categories (form of leprosy, gravity, etc.), to determine the conditions and the reasons for the success or otherwise of the treatment.
 - The most satisfactory methods of preparing oils and esters.

The international centres for the study of leprosy should prove a most useful institution. The Health Committee will no doubt receive information concerning their organisation from the President of the Leprosy Commission and from the Japanese representative on the Health Committee.

B. — THE MALARIA COMMISSION.

The programme of work of the Malaria Commission, as set out in the Chairman's report (document C.H./Malaria/149) was approved by the Health Committee during its sixteenth session. Since that session, the work has developed as follows:

1. Quinetum and Secondary Alkaloids of Cinchona. — The consultation of pharmacological, chemical and medical experts on the preparation and standardisation of quinetums, the methods of controlling these products, and other aspects of the problem (agricultural and economic, etc.) will be held at the beginning of May, 1931. A few English experts met with the Secretary of the Malaria Commission in London on January 16th for an exchange of views on this subject. Dr. H. H. Dale was in the chair. A report was prepared (document C.H./Malaria/152) which will be of much assistance to the experts who attend the May meeting.

Dr. T. A. Henry, Director of the Wellcome Research Laboratories at London, has agreed to prepare a report on the technical and chemical aspects of the question, which will serve as

a basis for discussion.

The recommendations of the experts who meet in May will be examined by the Sub-Committee on Quinine, and submitted to the Health Committee.

- Quinine. In January 1931 a circular letter (No. 19.1930.III) was addressed to the Health Administrations of all countries in which malaria exists asking their opinion on the advisability of convening a conference on quinine, and requesting them to furnish, if possible, information on the following points for the purposes of such a Conference:
 - (a) Actual prevalence of malaria in their countries;
 - (b) Number of malaria patients treated annually;
 - (c) Total imports of quinine or of secondary alkaloids of cinchona:

(i) Imported directly by the State;

- (ii) Amount purchased commercially and distributed free of charge; (iii) Total amount of quinine or secondary alkaloids distributed annually by the Health Administration:
 - (I) Gratuitously;
 - (2) At reduced prices;
- (d) Amount of quinine needed annually;
- (e) Legislation on quinine.

The information received in reply to these letters will be examined by the Sub-Commission on Quinine.

- 3. The late Professor Ascoli, Dr. A. Lutrario and the Secretary of the Malaria Commission who met with the President of the "Kinabureau" at Rome on November 16th, 1930, for an informal exchange of views, took note of the information furnished by the latter on the agricultural and economic aspects of the problem of quinine, and communicated to the Kinabureau certain of the Malaria Commission's publications on the problem of the secondary alkaloids and their therapeutic value. The President of the Kinabureau has agreed to furnish more complete information when desired.
- Malaria Courses. The directors of the Institutes at Hamburg (Institut für Schiffs und Tropenkrankheiten), London (School of Hygiene and Tropical Medicine), Paris (Laboratoire de Parasitologie de la Faculté de Médecine) and Rome (Scuola superiore di Malariologia) have kindly agreed to continue their malaria courses in 1931, in accordance with the request of the Malaria Commission.

The programmes of these courses have been printed and communicated to the Health Administrations of countries in which malaria is a problem. The following Health Administrations have signified their desire to take advantage of these courses: Bulgaria, Honduras, Indo-China, Italy, Portugal, Spain and Yugoslavia.

In 1930, there were seven students in the special course at Hamburg (three "boursiers" of the Health Organisation) twenty-three at Paris (ten "boursiers").

The practical courses were held as usual in Italy, Spain and Yugoslavia.

5. Programme of International Studies. — The following reports have been received from institutions and experts who are carrying out the international studies proposed by the Malaria Commission:

"Stovarsol and Quiniostovarsol in the Treatment of Malaria" (document C.H./Malaria/150), Dr. M. Peltier (Professor of Social Hygiene, Colonial Health Service, Marseilles);
"Observations on Thirty-one Cases of Malaria treated by Quiniostovarsol" (document C.H./Melaria/157), Dr. C. Mararana, and Dr. B. Dr. C. Mararana, and Dr. C. M

cument C.H./Malaria/151), Dr. C. Moraleda and Dr. P. De la Camara, of the Navalmoral

(Spain) Anti-Malaria Institute;

"The Movements of Anopheles at Various Seasons of the Year, with Special Reference to Infected Mosquitoes", Dr. I. J. KLIGLER, of the Hebrew University, Jerusalem;

"The Use of Plasmoquine in Sub-tertian Malaria", Dr. C. Russel Amies, Kuala Lumpur, Federated Malay States;

"The Effect of Opining on the Production of Comptonestes in Sub-tertian Malaria"

The Effect of Quinine on the Production of Gametocytes in Sub-tertian Malaria", Dr. C. Russel Amies, Kuala Lumpur, Federated Malay States.

6. Visit of the Secretary of the Malaria Commission to Greece. — In accordance with the invitation of the Under-Secretary of State for Health (Health Committee, sixteenth session) the Secretary of the Malaria Commission visited Greece from October 28th to November 12th, 1930, and placed himself at the disposal of the Central Health Authorities. The Government generously offered him every facility to study the problem of malaria in the various malarious regions of the country, and he was able to take account of the strenuous efforts of the Health Services to cope with this major public health problem. His report (document C.H./Malaria/154) has been communicated to the Malaria Commission.

C. — THE PERMANENT COMMISSION ON THE STANDARDISATION OF SERA, SEROLOGICAL REACTIONS AND BIOLOGICAL PRODUCTS.

A meeting of this Commission was held at Geneva on October 8th, 1930, to prepare the programme of work for 1931. The following attended:

Dr. MADSEN, Chairman;

Professor Bordet, Pasteur Institute of Brabant, Brussels;

Dr. Dale, National Institute for Medical Research, London;
Professor Kolle, Institute for Experimental Therapy, Frankfort-on-Main;
Dr. Ramon, replacing Professor Martin, of the Pasteur Institute, Paris;
Professor Fitzgerald, Connaught Laboratories, Toronto;

Professor Prausnitz acted as Secretary.

It was decided that two sub-commissions of experts, one on serological and biological questions, and the other on vitamins should be held simultaneously in London in June 1931, in order to prepare the work for the Permanent Commission which would meet after the subcommissions had concluded their work.

Decisions were also made on the following studies:

Antidiphtheria serum. — Samples of different avidity to be sent from Copenhagen to the Frankfort Institute, the National Institute for Medical Research, London, and to the Pasteur Institute at Paris, for the purpose of comparative tests.

Active Immunisation against Diphtheria. — Comparative tests to be carried out at the three institutes mentioned above and the Connaught Laboratories, Toronto. The investigations to be restricted to formol-toxins (anatoxin).

Schick Toxins. — Comparative examinations of two different Schick toxins selected by the National Institute for Medical Research to be carried out.

Perfringens Antitoxin. — Comparative tests of this antitoxin (supplied by the National Institute for Medical Research) at the institutes in Copenhagen, Frankfort and London.

Anthrax Serum. — Study of this question by the Pasteur Institutes at Paris and Brussels, the Serological Institute at Bucharest and the Izolarea Hospital at Jassy (Roumania).

Tuberculin. - The formal adoption of an international standard to be placed on the agenda of the June 1931 meeting.

Vitamins. — The experts invited to the London meeting will study the standardisation of vitamins, particularly vitamin D, under the Chairmanship of Professor Mellanby, of Sheffield University.

D. - WORK OF THE PREPARATORY COMMITTEE SET UP IN VIEW OF THE EUROPEAN CONFERENCE ON RURAL HYGIENE.

The second session of the Preparatory Committee was held in Paris on December 8th and 9th, 1930. A report (document C.H.952) was adopted setting out in detail the Committee's views on the subjects which should be discussed at the Conference under the three items on the provisional agenda. In the chapter of the present report relating to decisions of the Council on the work of the Health Organisation, the requests of the Preparatory Committee regarding the postponement of the Conference to June 29th, 1931, and the addition of three experts to its membership are described.

In addition to these, the Preparatory Committee reached a number of decisions and

adopted certain recommendations, as follows:

- (1) The Committee decided to appoint provisionally three rapporteurs to present to the Conference reports on each of the three items on the provisional agenda.
- (2) The Committee entrusted to a sub-committee the task of preparing draft regulations to govern the procedure of the Conference.
- (3) The Committee decided to entrust to groups of experts the preparation of reports on the three items on the provisional agenda. These reports would represent agreement on matters of principle so that the work of the Conference would thereby be greatly facilitated. One such group of experts was to be convened to discuss the first item on the agenda (provision of effective medical assistance in rural districts), another would meet to discuss the third item (rural sanitation), while the task of preparing a report on the second item (organisation of public health services in rural districts) would be entrusted to the Commission on Rural Health Centres which had already done useful work along this line (Conference at Budapest, November, 1930).
- (4) The Committee also decided that, in view of the difficulty of defining the term "rural", its usual significance should be accepted—that is, an area or district where agriculture is the chief or even the sole industry, and where all other industries are of small importance, and in the main dependent upon agriculture.

The following are among the most important of the Committee's recommendations:

- It was recommended that the members of the various delegations to the Conference should be persons experienced in social questions and should be representative of all the interests involved in rural hygiene-hygienic, agricultural, economic and social, including those of the agricultural employer and labourer.
- (2) It was agreed to recommend that the Conference in its discussion of the milk supply, should restrict itself to those aspects which concern rural districts alone.
- (3) It was agreed to recommend to the Conference, only the most important subjects included in the three items on the agenda. To this end, a list of the subjects was appended to the Committee's report.

In accordance with the decisions of the Preparatory Committee, a group of experts on medical assistance was convened at Geneva on March 9th to 12th. The group included representatives of rural health insurance institutions, public health administrators, officials in charge of medical assistance and representatives of the organised medical profession. The members communicated to the Health Section before the session a number of valuable reports, and the subject was discussed in the light of a memorandum (document C.H.959) prepared by the Health Section on the basis of these and other reports.

The group adopted a number of resolutions and decided that their report should consist of these resolutions, together with a résumé of the information in the national reports and

in the Minutes of the meeting.

The resolutions related to the following:

- The definition of effective medical assistance;
- The maximum number of persons in rural districts who might be properly cared for by one doctor. The maximum was fixed at two thousand;
 - The need for auxiliary medical personnel (nurses, etc.);
- (4) The need for persons capable of giving first aid and of carrying out the doctors' orders in the smallest rural community;

- (5) The necessity for providing rural populations and doctors with centres of diagnosis and, if necessary, treatment;
- (6) The need for suitable hospital accommodation in rural districts in the proportion of two beds for each thousand inhabitants, each hospital to have about fifty beds, and one such hospital to serve from twenty to thirty thousand inhabitants; adequate means of communication and transport were also recommended;
 - (7) The provision of laboratory facilities;
 - (8) The need for the services of medical specialists;
- (9) The means of realising this programme by the collaboration of the public authorities, the medical profession, health insurance institutions, private agencies.

The Health Organisation has been able to secure the assistance of M. M. Petrik, Chief of the Division of Sanitary Engineering at the School of Hygiene, Zagreb, to prepare a preliminary report for the group of experts on rural sanitation. Mr. Petrik has been able to consult the competent authorities on rural sanitation in France, Belgium, the Netherlands, Germany, Poland and Italy, which he visited successively. The experts will meet in April to prepare a report on the basis of the information collected by M. Petrik and the memoranda received from the various health administrations.

The Commission on Rural Health Centres will meet in April to prepare a report on the organisation of the public health services. On the recommendation of the Preparatory Committee, representatives of rural health insurance institutions, nominated by the International Labour Office, will be invited to attend.

The reports of these two groups of experts will be available for the seventeenth session of the Health Committee.

The Health Section is preparing the statistical chapter of the general report for the Conference. This deals with movements of population, mortality and morbidity, number and distribution of doctors and of medical institutions, and the financial and economic conditions of rural life.

The International Labour Office has agreed to furnish reports on health insurance and housing conditions in rural districts.

E. — WORK OF THE REPORTING COMMITTEES.

1. Reporting Committee for Maternal Welfare and Hygiene of Infants and Children of Pre-School Age.

A meeting of this Committee was held in Paris on December 9th to 11th, 1930. The members present were Dame Janet Campbell (Chairman), Professors R. Debré, E. Gorter and F. Root. Professor S. A. Gammeltoft, of the University of Copenhagen, attended during the discussion on maternal welfare.

A draft report on infant welfare, prepared by Professor Debré was discussed by the Committee, who asked Professor Debré to complete it in the light of the discussion. The main headings for the chapter on maternal welfare were decided on by the Committee, and there was a general exchange of views on the contents of the chapter on hygiene of the child of pre-school age.

Dame Janet Campbell afterwards visited selected centres in France, Germany and Denmark in order to collect information on maternal welfare and hygiene of the child of pre-school age.

The first chapter of the report on infant welfare should be ready in draft form for the May session of the Committee.

2. REPORTING COMMITTEE FOR HYGIENE OF CHILDREN OF SCHOOL AGE AND OF ADOLESCENCE.

In view of Professor Tandler's absence in Greece, he entrusted the task of preparing a draft report to his assistant Dr. H. Redtenbacher, of Vienna. This report will be submitted to Professor Tandler, who will complete it, and it will then be communicated to the other members of the Committee, Dr. A. Schlossman, of Düsseldorf, and Dr. G. Buchan, of Willesden. The membership of this Committee will shortly be completed by the addition of two experts. A meeting of the Committee to draft the final report will be held during the first half of this year.

3. Reporting Committee on Questions relating to the Control of Tuberculosis.

Professor Léon Bernard (Chairman) has invited Dr. C. Hamel (Germany), Dr. A. S. MacNalty (Great Britain), and Dr. W. B. Soper (United States of America), to become members of the Committee.

In his letters of invitation, Professor Léon Bernard has asked for critical statements on the anti-tuberculosis organisation existing in the countries mentioned and suggests that the following points are of outstanding importance:

. An account of the system of measures for the control of tuberculosis, as conceived and carried out in each of the three countries, giving:

The origin of the system and its underlying principles;

Analysis of its development in its various stages;

The present position in regard to the operation of the system; (3)

Critical appreciation, with particular reference to modifications effected in the light of technical and administrative experience;

(5) Readjustment or reforms proposed.

Appendix: National Bibliography on the subject.

Dr. MacNalty has accepted the invitation and has submitted a brochure on the Research Work in Tuberculosis of the Medical Research Council. He is now engaged in preparing a comprehensive report on the control of tuberculosis in Great Britain for the Ministry of Health, which will provide the Reporting Committee with the information it requires in respect of Great Britain.

4. REPORTING COMMITTEE ON QUESTIONS RELATING TO VENEREAL DISEASES.

The membership of this Committee is as follows: Professor J. JADASSOHN (Chairman), Professor H. GOUGEROT (France), and Dr. L. W. HARRISON (Great Britain).

A meeting of this Committee was held in Paris on December 6th, 1930, to decide on the questions with which the report should deal. It will be divided into three chapters:

- Administrative measures for the prevention of venereal diseases (including the question of statistics);
 - (2)

Methods of treatment; Methods of sero-diagnosis.

The results of the international enquiry into the treatment of syphilis carried out by the Commission of Experts on Syphilis and Cognate Subjects will serve as the basis for the chapter on methods of treatment.

Similarly, the results of the various laboratory conferences on the serodiagnosis of syphilis will be utilised in the preparation of the third chapter.

A considerable amount of information on the campaign against syphilis in different countries has been assembled by the Health Section.

In order to collect the necessary supplementary information, Dr. M. Jessner, Assistant Director of the Dermatological Clinic at the University of Breslau, has agreed to visit the centres which are most important in this respect, in France, Great Britain, Italy and the

Scandinavian countries. Professors Hans Martenstein and J. R. Moerch have also agreed to assist in the technical secretarial work of this Committee in connection with the second and third chapters of the report respectively.

5. Reporting Committee on Cancer, Rheumatism and Heart Diseases.

The Chairman, Sir George Buchanan, is engaged in preparing a report on cancer. He will doubtless wish to describe to his colleagues the progress of the work and the general lines of his report.

6. Reporting Committee for the Study of Health Centres.

At a meeting of the Health Committee in May 1929, the Health Section was instructed to collect information regarding health centres in certain European countries, with special reference to the lines along which they were likely to develop.

The subject was again taken up by the Health Committee in October 1930, when a letter was received from the Secretary of State in the Hungarian Ministry of Public Welfare and Labour inviting the Health Organisation to convene a group of experts on rural health centres at Budapest on the occasion of the opening of the health centre at Gödöllo and of the school for public health nursing and the physicians' house at the Hungarian Institute of Hygiene.

The Health Committee asked Dr. Chodzko to make suggestions concerning the experts

to be convened at Budapest, and to preside over the Reporting Committee on Rural Health

Centres.

Accordingly the members of the Reporting Committee and certain other experts 1 met at Budapest from October 27th to 30th, 1930, and adopted a report (document C.H.947),

¹ The following members of the Reporting Committee attended:

Dr. W. Chodzko, Director of the State School of Hygiene at Warsaw (Chairman);
Dr. Bela Johan, Director of the State Institute of Hygiene, Budapest;
Dr. M. Kacprzak, Chief of the Statistical Department, State Institute of Hygiene, Warsaw;
Dr. A. Metz, Medical Officer of Health of the County and District of Holback, Denmark;
Dr. Francisco Ruiz Morote, Public Health Inspector at Caceres, Spain;
Dr. J. Parisot, Professor of Hygiene and Preventive Medicine at the University, Nancy, France;

which has been distributed to the Health Committee, dealing with the organisation and

administration of primary and secondary rural health centres in rural districts.

This report was utilised by the Preparatory Committee of the European Rural Hygiene Conference, which requested the Reporting Committee to complete its report by taking into consideration, in addition to health centres, other methods of health organisation in rural districts.

7. ACTIVE IMMUNISATION AGAINST DIPHTHERIA, SCARLET FEVER AND WHOOPING-COUGH.

The studies on the results of active immunisation against scarlet fever and diphtheria, according to a uniform plan decided on in July 1929, have now been going on for nearly two years in Czechoslovakia, Germany, Denmark, France, Great Britain, Hungary, the Netherlands and Yugoslavia. As a large amount of data has been collected by the experts concerned, they have been invited to meet in London on June 19th, 1931.

The experts 1 have been requested to submit their data to the Health Section before March 25th, so that the rapporteurs selected may be able to prepare reports to serve as a basis

for the discussion which will relate to the following:

I. — Scarlet Fever:

- The comparative immunising value of the antigens employed in vaccination;
- The Dick reaction and susceptibility to scarlet fever;
- Local and generalised reactions after vaccination;

The Dick reaction among vaccinated persons;

- The neutralising action of the serum of vaccinated persons on the toxin (e) of streptococcus hæmolyticus;
 - (f) Immunity to Dick toxin and protection against scarlet fever.

2. — Diphtheria:

Methods of vaccination;

- Comparative immunising value of the antigens employed in vaccination (Ramon's anatoxin, toxin-antitoxin mixture, O'Brien's toxoid)
 - Local and generalised reactions after vaccination with these antigens;

(d)

The Schick reaction among the vaccinated; Antitoxin content of the serum of the vaccinated; (e)

- Comparative morbidity and mortality among the vaccinated and (f)unvaccinated;
- Virulence and toxicity of strains of diphtheria bacilli isolated from the (g) vaccinated and unvaccinated respectively.

Malignant Diphtheria resulting fatally in spite of Serotherapy.

An informal consultation of experts 2 took place in Berlin on November 17th to 19th, 1930, to discuss the study of cases of malignant diphtheria which result fatally in spite of treatment with antitoxin.

The experts decided that these cases should be studied on the basis of a questionnaire which was later sent to experts in Austria, Belgium, Czechoslovakia, Denmark, Finland, France, Germany, Great Britain, Hungary, the Netherlands, Norway, Poland, Roumania and Sweden.

The importance of this problem is heightened by the spread of this serious form of diphtheria in certain European countries, and the consequent occurrence of a comparatively large number of deaths.

Dr. Hynek Pelc, Chief of the Department of Social Hygiene, State Institute of Hygiene, Prague; Dr. Milivoj Rankov, Director of the Tropical Diseases Institute at Skoplje, Yugoslavia; Dr. Kornel Scholtz, Secretary of State, Ministry of Labour and Social Welfare, Budapest; Dr. Gustav Seiffert, Counsellor to the Bavarian Ministry of the Interior, Munich; Dr. A Stampar, Inspector-General of Health, Ministry of Health, Belgrade; Dr. J. H. Tuntler, Inspector, Child Welfare, Tuberculosis and Venereal Diseases Service, Netherlands Ministry of Labour, Commerce and Industry, Groningen.

The following were invited to attend the Conference in a consultative capacity:

M. Milivoj Petrik, Chief of the Division of Sanitary Engineering, Institute of Hygiene, Zagreb; Mlle. M. Steller, Chief of the Public Health Nursing Service, State Hygienic Institute, Budapest; Mr. Daniel Wright, Chief of the Division of Sanitary Engineering, School of Hygiene, Athens.

In attendance as guests of the Conference were:

Professor J. DE BOKAY, President of the Consultative Body of the Stefania Organisation (Private Hungarian Health Agency for Maternal and Infant Welfare).

Dr. W. Leland Mitchell, Member of the staff of the International Health Division of the Rockefeller Foundation.

¹ Experts have been invited from the following countries: Czechosle Germany, Great Britain, Hungary, the Netherlands, Poland and Roumania. Czechoslovakia, Denmark, France,

² These experts were:
Professor Th. Madsen, Director of the State Serum Institute, Copenhagen;
Professor Bessau, Director of the Infant Clinic, University of Leipzig;
Professor M. Friedemann, of the Rudolf Virchow Spital, Berlin;
Professor F. Reiche, of the General Hospital, Hamburg-Barmbeck.

Whooping-Cough.

Professor J. Bordet has agreed to undertake the preparation of the vaccine to be employed in the comparative studies, and has sent the necessary amounts to the experts who have consented to participate.

These studies are being carried on in Belgium, Denmark, France, Germany, Great Britain,

the Netherlands, Roumania and Spain.

F_{\cdot} — THE OPIUM COMMISSION.

1. APPLICATION OF ARTICLES 8 AND 10 OF THE INTERNATIONAL OPIUM CONVENTION OF GENEVA, 1925.

(a) Article 8.

Among the preparations which the Health Committee at its sixteenth session decided should be exempted from the provisions of the Opium Convention there are three to which objections have been raised by certain Governments:

In a letter, dated January 5th, 1931, the Government of the Netherlands informed the Secretary-General that, in its opinion, the reasons given by the Health Committee for the application of the provisions of Article 8 to tablets of cocaine-atropine (oculets) each containing a maximum of 0.0003 grammes of cocaine salt and a minimum of 0.0003 of atropine salt, were not in conformity with the letter and the spirit of Article 8.

In a letter dated January 6th, 1931, the British Government raised certain legal objections

to the conditional exemption by the Health Committee of:

- (1) Sterilised solutions of morphine, eucodal and atropine, one of the conditions of exemption being that they should be supplied only in ampoules of I.I cubic centimetre.
- (2) "Anti-opium" tablets exempted from the provisions of the Convention on the condition that they should not be offered to the public under the name of "anti-opium".

The British Government doubts whether, under the terms of the Opium Convention of Geneva, such conditional exemption of a preparation is permissible, and it appeared to them impracticable that a given preparation should in certain cases be within the provisions of the Convention and in others be exempted. The British Government therefore suggested that the question whether the terms of Article 8 permit of an exemption conditional on such things as the type of name and container of a preparation should be referred to the Legal Section of the Secretariat.

Accordingly, the Legal Adviser of the Secretariat has been asked to give an opinion on this

The British Government also requested that the three lists of preparations which the Health Committee has exempted from the provisions of the Convention and published successively should be replaced by a single list of the preparations which the Committee has, up to the present, exempted under Article 8 of the Geneva Convention precisely describing their pharmaceutical formulæ and without duplication. Until such a list is prepared, the British Government do not propose to take any steps to remove the control over the import and export of preparations exempted from the provisions of the Convention by the Health Committee.

The single list of exempted preparations mentioned above was ready for publication when the British Government's letter was received. In view of the objections raised to the conditional exemption of certain preparations, the publication of the single list has been delayed until the question has been decided.

(b) Article 10.

In a letter dated January 7th, 1931, the British Government informed the Secretary-General that, before accepting the resolution of the Health Committee providing for the inclusion of acedicone under the provisions of the Opium Convention, they wished to know whether this recommendation applied also to the salts and preparations of this substance, and in the affirmative, if it applied also to all preparations containing more than a certain percentage of acedicone.

In conformity with the procedure laid down in Article 10, the President of the Health Committee communicated this question for opinion and report to the Office international

d'Hygiène publique.

STANDARDISATION OF METHODS FOR ASCERTAINING THE PERCENTAGE YIELD OF MORPHINE FROM RAW OPIUM.

During 1930, the Advisory Committee on Traffic in Opium and Other Dangerous Drugs received two proposals in regard to the need for the standardisation of the methods for ascertaining the percentage yield of morphine from raw opium from the British representative on the Committee (document O.C.1096) and the Hungarian Government (letter of September 4th, 1930) respectively.

The Advisory Committee having decided to ask the Health Committee to take up the study of this question (document C.121.M.39.1930.XI, page 186, paragraph 582), the proposal was communicated to the Medical Director by the Opium Section. The President of the Health Committee agreed that action should be taken as soon as possible in order that the results might be ready, if practicable, for the International Conference on the Limitation of the Manufacture of Narcotics which will begin on May 27th, 1931. Accordingly, Professor L. van Itallie, of the University of Leyden, was consulted and invitations to co-operate in this study were addressed to the following:

Professor L. VAN ITALLIE, Professor of Pharmacology and Toxology at the University

of Leyden;
Dr. H. BAGGESGAARD RASMUSSEN, Professor of Chemistry at the "Pharmaceutiske

Laerenanstalt", Copenhagen;
Dr. Eder, Professor of Pharmacognosy and Pharmaceutic Chemistry, Polytechnic School, Zurich;

Dr. A. Goris, Professor of Gallenic Pharmacy at the Paris Faculty of Pharmacy; Dr. E. KNAFFL-LENZ, Professor of Pharmacology and Toxology at the University of Vienna;
Dr. Carl Mannich, Director of the "Pharmaceutisches Institut", Berlin-Dahlem.

Professor van Itallie, who will act as Chairman of the Group, has kindly agreed to prepare the necessary documents for the first meeting of these experts which will take place in April

In the section of this report describing the decisions of the Council, reference is made to the Advisory Committee's resolution on the need to accelerate the procedure under Article 10 of the Geneva Opium Convention.

G. — COMMITTEE OF EXPERTS ON SYPHILIS AND COGNATE SUBJECTS.

Since the last meeting of the Health Committee, the participating clinics in France, Germany, Great Britain, Denmark and the United States of America have submitted further records so that there is now a total of over twenty-five thousand. The study of these records is being continued by Professor Martenstein under the direction of Professor Jadassohn, Chairman of the Committee, who will report on the progress of the work and present to the Health Committee in May a preliminary report on the results of various methods of treatment in respect of primary and secondary cases of syphilis.

The work of Professor Jessner in Bulgaria on behalf of the experts is described elsewhere

in this report.

H. — PHYSICAL EDUCATION.

During its sixteenth session, the Health Committee decided to appoint a group of experts under the chairmanship of Professor Ottolenghi who was invited to make suggestions regarding the members of this group.

Preliminary to the constitution of this group, it was decided to ask a few experts to prepare

a draft programme of study.

This consultation took place at Copenhagen on January 22nd, 23rd and 24th. In addition to the President of the Health Committee and Professor Ottolenghi, the following attended:

Professor Durig, Director of the Institute of Physiology at the University of Vienna; Professor Knoll, Director of the "Institut für Leibesübungen der Universität' Hamburg;

Professor Liljestrand, Director of the "Karolinska Institutet Farmakologiska Laboratoriet", Stockholm.

Professor LINDHARD, Director of the "Statens Gymnastik Institut".

Professor Loewy, Director of the "Institut für Hochgebirgsphysiologie und Tuberkuloseforschung", Davos.

Professor Piasecki, Director of the Institute for Physical Education of the Faculty

of Medicine, Poznán.
Professor Schnell, Stadtmedizinalrat, Halle.

Professor Ottolenghi prepared a report on the consultation (document C.H.956) which was communicated to the members of the Health Committee on February 27th, 1931.

The experts made several proposals for submission to the Health Committee. The main headings are given below:

(1) That reliable date based on studies carried on by uniform methods in different countries should be collated; such data to bear on the effect of physical effort and exercise on metabolism, respiration, the circulation of the blood, the renal functions, body temperature and fatigue;

- (2) Methods should be devised to measure periodically the effects of various systems of physical training employed during the period of growth in order:
 - To determine the stage of development and the functioning of the organism before physical training;
 (b) To determine the comparative effects of these systems.

The experts also made the following recommendations:

- The Health Section should act as an international centre for physical education by:
 - Collecting bibliographical material;
 - (b) Translating and possible publication of important works written in the less widely-known languages;
 - (c) Providing facilities for exchange of staff and arranging study tours;
- (2) Researches should be undertaken in co-operation with the International Educational Cinematographic Institute for the purpose of :
 - (a) Making accessible to the various countries accurate information regarding the more important systems of physical education;
 - (b) Facilitating the study of the essential problems affecting physical training.

CHAPTER V.

POSITION OF STUDIES AND ENQUIRIES.

A. — THE PROBLEM OF CANCER.

On the proposal of Sir George Buchanan, rapporteur on cancer questions, the Health Committee at its sixteenth session decided to invite the collaboration of experts, through the Health Administrations of various countries where cancer of the uterus is treated by radiological methods, in order that records of cases treated by this means might be recorded on the forms prepared by the Sub-Commission of Radiological Experts. The following replies have been received:

Australia. — Dr. J. J. Cumpston, Director-General of Health, states that Dr. Robert Fowler, a leading gynaecologist of Melbourne, has been entrusted with the study, and that the latter hopes to record a series of 100 consecutive cases on the forms supplied by the Health Organisation,

Belgium. — Dr. Timbal, Chief of the Public Health Services, has entrusted the study to Dr. J. Murdoch, Chief Physician of the Cancer Centre at the Free University of Brussels. The data at this centre are being classified according to the method proposed by the Sub-Commission, and information on the results will be communicated at the end of 1931.

Canada. — Dr. J. J. Heagerty, Chief Executive Assistant, Department of Pensions and National Health, has arranged with sixteen outstanding Canadian gynæcologists that the forms shall be used in recording their cases of cancer treated by radium.

- The President of the National Board of Health agrees to undertake the distribution of record forms to the institutions in Denmark where radium is used in the treatment of uterine cancer.

Spain. — Professor Pittaluga has arranged for the co-operation of the Institute of Cancer and the Medical Faculty, Madrid.

United States of America. — Surgeon-General Cumming has asked Dr. Robert B. Greenough, Chairman of the Cancer Committee of the American College of Surgeons, to co-operate.

France. — The Director of Public Welfare and Health states that sixteen cancer centres will participate in the enquiry.

Great Britain. - Sir George Buchanan has made arrangements for the collaboration of a number of English institutions.

Irish Free State. — The representative of the Irish Free State accredited to the League of Nations states that the enquiry has been initiated in Dublin.

- Dr. G. Basile, Director of Health, has taken up the matter with the Central Statistical Institute.

Japan. — The Director of the Sanitary Bureau suggests that the enquiry should be entrusted to the Japanese Society for Cancer Research in the Pathological Institute of the Imperial University, Tokio.

Norway. — Dr. Wefring, Director of the Public Health Service, states that the Norwegian Committee for Cancer Research will co-operate in the enquiry.

Czechoslovakia. — The Minister of Public Health and Physical Education has entrusted this work to Professor Ostral, and it will be carried out under his supervision by the leading gynæcologists in Bohemia and Moravia.

Uruguay. — Professor Scoseria has arranged with Dr. Poury to carry out the enquiry in the Pereira Rossel Hospital, Montevideo.

B. — ALCOHOLISM.

- I. The preparation of a bibliographical report on the question of alcoholism in relation to accidents was undertaken by the Health Section in collaboration with Dr. Carozzi, of the International Labour Office. Preliminary studies indicate that exact data on which to base this report are lacking in the larger countries.
- 2. The report on the studies undertaken by Professors Ostenfeld, Heitmann and Neander, at the request of the Health Organisation, on tuberculosis in the Scandinavian countries is being printed. The Health Administrations of Finland, Poland and Sweden have been informed that copies of the report will be communicated to them.
- 3. Letters have been addressed to the competent authorities in Austria, Belgium, Denmark, Germany, Great Britain, Italy, Netherlands, Norway and Switzerland, asking them to communicate to the Health Section information on the legal and administrative provisions which are applied in respect of the consumption of alcoholic beverages. Replies have been received from Germany, Italy, Norway and the Netherlands. The Committee will receive a report based on these and other replies, and on information available in publications.

C. — DANGERS RESULTING FROM THE USE OF X-RAYS.

In accordance with a decision of the Health Committee during its twelfth session, the Health Section collected a large amount of information on the dangers resulting from the use of X-rays. On the suggestion of Dr. Jitta, the co-operation of Dr. H. Wintz, Professor of Gynæcology at the University of Erlangen was secured. On the basis of the information collected, Professor Wintz has prepared a critical report containing proposals for preventing such dangers. His report is divided into the following chapters:

- (1) Protection against the dangers of the rays themselves;
- (2) Protection against the dangers which may be caused by the installation of X-ray apparatus;
 - (3) Hygienic measures;
 - (4) Protection against the dangers arising from the burning of Röntgen films.

A resumé of the existing legislation in the various countries is annexed to each chapter. The report has been translated and is in process of publication.

D. — PROPOSED MEETING OF THE MEDICAL DIRECTORS OF THE HEALTH SERVICES OF COLONIAL MINISTRIES (AFRICA).

The resolution adopted by the Health Committee at the last session was communicated in October to the Directors of Health in the Colonial Ministries of Belgium, France, Great Britain, Italy, Portugal and Spain. Favourable replies have been received from Belgium, France, Great Britain and Portugal.

Letters were also addressed to the Health Directors of the various African countries in accordance with the terms of the resolution. Three replies have been received up to the present, favourable in the case of Algiers and Morocco, while the director of the Health Service at

Tangiers will be unable to attend such a meeting.

E. — ENTOMOLOGICAL STUDIES IN MELANESIA.

The Health Committee will remember that after having heard, at its sixteenth session, a report from Dr. Hermant on the mission undertaken in the Pacific Islands, it adopted the following resolution:

- "(1) The question of an entomological survey in Melanesia, with special reference to malaria and filariasis, should be referred to the Malaria Commission and that, if possible, the survey should be made in the coming year;
- "(2) Facilities for 'interchange' should, as far as is practicable, be afforded to medical officers of the Pacific Islands, notably in connection with Congresses of the Far Eastern Association of Tropical Medicine and with a general study-tour in the Pacific region;
- "(3) Questions concerning the relationship between syphilis and yaws, arising out of the report of the Mission, should be referred for consideration and report to the reporting Committee on questions relating to venereal diseases."

The text of this resolution has been transmitted to Dr. Cumpston, Director-General of Health of Australia, in a letter dated November 6th, 1930. Dr. Cumpston was invited to give his advice and opinion regarding this Survey, which could be untertaken by one or two experts, and he was also asked if, on their departure, the work could be continued on the same lines by local officials and if it would be possible to train one or two medical officers at the Tropical School in Sydney, or in India, with a view to their carrying on the investigations.

Dr. Cumpston replied by a letter dated February 10th, 1931, as follows:

- "You intimate that you will be grateful for my advice and opinion and ask for suggestions. It seems to me that the problem might well be approached from the report of the League's Mission of 1928 and 1929 and especially from the points of view indicated on pages 58 and 59. In that portion of the report, it is pointed out that there is great necessity for:
 - "(a) A comprehensive entomological survey of the whole of Melanesia, extending over a considerable period and dealing intimately with the question of the vector or vectors of each disease in particular localities;
 - "(b) An examination of the whole of the literature which at present exists on the question of mosquito fauna in Melanesia, with the tabulation of this literature, in order to present a complete picture in readily accessible form.
- "The particular application of these general considerations to filaria and malaria
- is also indicated.

 "It is clear that, for the complete execution of this project, a very much longer period of time will be necessary than could be considered to be available by a Mission of the kind which is indicated in your letter of November 6th, and which, in fact, we both
- have in mind.
 "On the other hand, a great deal could be done in the nature of a preliminary survey
 loving the foundations for more protracted and of a somewhat deliberate character, laying the foundations for more protracted and systematic continuous work, and I think we would be well advised to bear in mind in any scheme, as the principal objective, the establishment of a system of relations or procedure which would tend towards the maintenance of this work on an established and permanent basis, the local administrations being encouraged to carry on as a routine function such collection, identification and recording operations as are reasonably within their powers, while at the same time transferring specimens and records to one central point where more deliberate examination in the way of classification and correlation can be maintained.
- "With these general principles in view, I would suggest a scheme somewhat of the following kind:
- "A preliminary survey lasting approximately six months should be made, during which the Mission entrusted with this survey should carry out the following functions:
 - "(1) The collection of specimens of mosquitoes; other possible disease vectors might be collected, but these should be regarded as secondary in importance to mosquitoes;
 - "(2) Records should be examined of diseases existing in each centre and, so far as is practicable within the time-limits, district distribution of disease should be correlated with district distribution of mosquito species;
 - "(3) Clinical aspects of disease, where these have relation to prevention and control by measures directed against mosquitoes, should be collected and recorded.

- "It is thought that this programme would be sufficient to occupy the Mission very fully for the period proposed, and, indeed, even for this programme it would be necessary to select carefully and to limit the districts in which the Mission shall work. The following personnel is suggested:
 - "(a) The authorities responsible for the administration of the colonial possessions of France might nominate either a medical officer trained in tropical diseases or an entomologist trained in medical entomology, or preferably both;
 - "(b) From the School of Public Health and Tropical Medicine in Sydney this Department would be prepared to supply the services of a medical officer trained in tropical medicine, a trained entomologist and, if necessary or desirable, a laboratory assistant;

"so that the expedition would consist then of either three or five persons. The members of the staff of the school whose inclusion in the Mission is now suggested would be available as from August 1931, which date might be considered as suitable for the commencement of operations. This Department would be prepared to pay the salaries of the three officers mentioned and to provide the necessary equipment for their work for the period. It is, however, regretted that it would be impracticable for this Department to contribute towards travelling allowance or transport expenses for either the personnel or their equipment; the adverse economic conditions in Australia render such contribution impracticable.

"It is thought that perhaps the Government of France might be prepared to consider a similar arrangement in respect of any officer deputed by it to take part in this expedition.

a similar arrangement in respect of any officer deputed by it to take part in this expedition. "As for the direction of the expedition, this would be in the hands of the Health Organisation of the League, but it would be clear that much advantage would accrue from active association of Dr. Cilento with the direction of operations, and it is accordingly suggested that, while authority would be vested exclusively in the Health Organisation and general directions would be received from yourself, yet, after the arrival of any overseas members and the assembling of the expedition at Sydney, a programme of operations should be drawn up by Dr. Cilento and submitted to a committee consisting of Dr. Cilento, Professor Harvey Sutton—the Director of the School of Public Health and Tropical Medicine at Sydney—the French member of the expedition nominated for this purpose by yourself, with myself as chairman.

"It would be necessary to make provision for detailed instructions in the event of difficulties arising during the course of the tour; provision for this I would leave in your hands with only the suggestion that any assistance that I can personally give is available either in settling the details or in transmitting matters of greater importance to you for

decision.

"It is felt that it would be wise to have one member of the expedition definitely

appointed as leader with some authority vested in him as your deputy.

"This Department will put in hand immediately the examination of the whole of the literature and will have this as far advanced as practicable by August 1st. There will be no difficulty in training two young medical officers at the School of Public Health and Tropical Medicine in Sydney for any work that has to be done subsequently.

and Tropical Medicine in Sydney for any work that has to be done subsequently.

"If the proposal that the French Government should take part is not adopted, then this Department would be ready to continue with the proposals made above and make available the services of three members of the staff of the School of Public Health.

"It remains only to suggest that any French member would be at considerable disadvantage if he were unable to speak English."

ANNEX 3.

MEMORANDUM BY THE MEDICAL DIRECTOR ON HIS SECOND MISSION TO CHINA

(December 23rd, 1930, to March 10th, 1931).

T

The Committee will remember that the health programme approved by the Chinese Government in December 1929 was based on the decision to use the technical headquarters staff of the Ministry of Health for field activities and to begin by establishing a Central Field Health Station as the nucleus of a future national field health service. The plan provided further for the transfer of the Quarantine Service administered by the Ministry of Finance to the Ministry of Health. In view of the necessity of a national institution for under-graduate instruction and post-graduate training, as well as for the creation of national traditions in administering such institutions, the programme recommended also the establishment of the first National Hospital. In addition, it was considered necessary to take up for serious study the elaboration of a provincial health administration, and collaboration was decided upon with the Province of Chekiang, where conditions were considered favourable in view of the sanitary programme adopted by the Provincial Government. Finally, while the building of the foundation for a modern health service had been provided for, there was the immediate problem of smallpox and cholera control in Shanghai which had to be dealt with.

The joint study with the Minister of Education of the reform of medical education was also agreed upon, this problem being considered a major question requiring urgent reform with a view to providing suitable facilities both in regard to under-graduate and post-graduate instruction.

Advice and assistance was requested from the League of Nations along the lines on which it had been made available in the past to other countries — namely:

- (a) The technical collaboration of the Health Organisation and its Commissions, as well as of other technical organisations of the League, for consultation in drawing up specific health schemes;
- (b) The provision of opportunities for participation in the advantages offered through the League system of interchanges of technical officers and "study fellowships";
- (c) Collaboration in the establishment and development of the Central Field Health Station by posting a technical officer of the Health Organisation in an advisory capacity during the initial stages;
- (d) Collaboration with the Ministry of Education's Commission on Medical Education. (A request from the Minister of Education on this subject was also received by the Health Organisation.)

It was specially desired that the services of the Health Organisation for the study of these problems, as well as in a general advisory capacity, should be available through acceptance by the League of the National Government's invitation for continued collaboration.

II. QUARANTINE SERVICE.

1. The Health Committee will remember that, at its October session last year, after considering Dr. Park's report on his survey of Chinese ports and the re-organisation of the Port Health Services, and hearing the views of its Commission for Quarantine Measures in China which had studied the above report, as well as the quarantine regulations promulgated by the Ministry of Health at Nanking, it approved the scheme proposed, subject to any modifications which its Quarantine Commission might find it necessary to make after conferring with experts delegated by the Communications and Transit Organisation. The Committee also requested the Medical Director to take the steps necessary to submit the scheme to the National Government of China.

As the Committee is aware, its Quarantine Commission duly met in Paris on October 20th, 1930, to confer with the experts delegated by the Communications and Transit Organisation, and after this exchange of views Dr. Park's report was approved. I then transmitted it, as arranged, to Dr. J. Heng Liu, together with a covering letter. (Copy of this letter is attached to the present Note.)

2. The National Quarantine Service of China has now been functioning under the able direction of Dr. Wu Lien-teh, for nine months in Shanghai and three months in Amoy. The Port of Swatow will also come within Dr. Wu Lien-teh's Service very shortly. Dr. E. B. Young and Dr. Tsai-Hong, who last year carried out studies of port health procedure in Europe and America in accordance with programmes prepared by the Section under the "Individual Missions" system, returned to China to take up their duties in the National Quarantine Service at the end of 1930. Dr. Lin Chia-swee and Dr. Wu Chang-yao have been nominated by the Central Health Administration for similar studies this year, while Dr. Chin Nai-yi, who will be given facilities for acquiring special experience in fumigation of ships, will, on return, assume responsibility for the well-equipped modern fumigation plant attached to the quarantine station at Shanghai.

The Committee will be glad to learn that Dr. Park, who visited the United States of America and Japan on his way to Singapore to take up the directorship of our Bureau, had an opportunity of discussing with General Cumming and his collaborators the work of our Fumigation Commission and also discussed with the competent Chinese colleagues the present working of the National Quarantine Service and the nominations of candidates for our scholarships this year.

Dr. Wu Lien-teh is taking active steps to start this year the erection of the new quarantine station at Shanghai as described in Dr. Park's report.

3. Members of the National Government, as well as Dr. J. Heng Liu and Dr. Wu Lienteh, desired me to express their gratitude to the central and local health authorities in Germany, Great Britain and the United States of America for the splendid facilities offered for the studies of the Chinese quarantine officers last year. They also highly appreciate the willingness of these authorities in the above-named and other countries to afford similar facilities in the future.

The Chinese Government is fully aware that the Health Committee, with the experts of the Communications and Transit Organisation associated in the study of the quarantine scheme, has secured not only the best advice obtainable on the question but also the co-operation and goodwill of all concerned, including that of the officers of the International Shipping Conference.

During my ten weeks' stay in China, I found that the diplomatic and consular authorities of the various foreign countries fully recognised the efficiency of the new Quarantine Service and were following its work with sympathy.

III. CENTRAL FIELD HEALTH STATION AND CENTRAL HOSPITAL.

ORGANISATION.

1. The Central Field Health Station is being actively organised and will begin functioning in its temporary quarters within a few weeks' time. Plans for the permanent building are being rapidly completed, and the work of construction should start this summer. It at present occupies the former building of the Ministry of Health, where ample accommodation exists for the necessary laboratories and offices. The Central Hygienic Laboratory in Shanghai is to be incorporated in the Central Field Health Station.

In conformity with the terms of the memorandum indicating the functions of the Station, drawn up at the request of the Ministry of Health at Conferences of Directors of Schools of Hygiene convened by the Health Organisation in May and July 1930, the Station will be divided into nine sections:

- Bacteriology and Epidemiology;
- 2. Chemistry;
- Sanitary Engineering;
- 4. Parasitology and Malariology;
- 5. Maternity and Child Welfare Services;
- 6. Vital Statistics;
- 7. School Health and Physical Education;
- 8. Medical Relief and Industrial Hygiene;
- 9. Public Health Propaganda and Education.

STAFF.

The competent staff, composed of well-trained and experienced medical officers, has been selected and will gradually take up its duties in Nanking. Nine were transferred from the technical staff of the former Ministry of Health, while one expert was taken from the National Epidemic Diseases Prevention Bureau in Peiping, another from the National Midwifery School in Peiping and a further two from the Central Hygienic Laboratory in Shanghai. Various members of the former Ministry's technical staff, now carrying out

studies in the United States of America under the Rockefeller Fellowship system, will, on their return, be commissioned to work at the Station.

In addition, four foreign experts are being invited to reinforce the personnel at the Station, among whom is Dr. W. W. Peter, who many years ago started a centre of public health propaganda in Shanghai, acquiring considerable experience and well-earned renown in this field. At the invitation of Dr. J. Heng Liu, he has now arrived in Nanking to assist for six months in the Department of Propaganda and Education, where his knowledge of the Chinese people and language and his recent experience in the United States of America will make him a valuable collaborator.

We are invited to find an expert who would assist in developing the Service of Parasitology and Malariology during a period of two years, and we hope to be able to comply with this request during the summer.

For the Service of Sanitary Engineering, Dr. Victor Heiser, on behalf of the International Health Division of the Rockefeller Foundation, has already been able to send Mr. B. R. Dyer to Nankin. The latter possesses a very wide and varied experience obtained principally in Mexico, British India and Ceylon.

It is hoped also to secure the services of a foreign statistician in a similar capacity for the Service of Vital Statistics.

All these foreign experts are being, or will be, appointed as members of the Station staff.

FIRST ACTIVITIES.

The main efforts of the staff are now concentrated on the organisation of the various services and the erection of the new building. The field work will be begun without delay, the improvement in sanitary conditions in Nanking and its immediate neighbourhood being considered as the principal objective. Close collaboration has been established with the City Health Department, which is in charge of a very competent medical officer. A "Demonstration Rural Health Centre" is being set up in connection with an agricultural station situated some twenty miles outside Nanking (Tang-shan).

The Committee will be particularly glad to learn that the Maternity and Child Welfare Service has been generously endowed by a prominent Chinese citizen (Mr. Hu Wen-hu), who converted the sum of 350,000 Mexican dollars into a Trustee Fund, the Board being under Dr. J. Heng Liu's chairmanship, and he promises, if that sum did not suffice, to raise the fund to \$475,000.

THE CENTRAL HOSPITAL.

2. The Minister of Finance had allocated as from January 1st, 1930, a sum of one million dollars for the creation of the basic institutions; 400,000 dollars have already been made available this year for the purpose, and the Central Hospital in Nanking has been created as the first National Hospital.

The very competent staff of this Hospital is already rendering valuable services to the Nanking population and forms the nucleus of what it is confidently expected will ultimately develop into a large medical and health unit in full activity. The Hospital may certainly be regarded as a model institution, and Dr. J. Heng Liu is to be congratulated, not only on having set it up, but also on the continuous daily supervision which he contrives to give to it.

3. The Committee will be equally glad, although not surprised, to know that the collaboration of Dr. B. Borcic in the work of the Station is highly appreciated by Dr. J. Heng Liu and his collaborators, as well as by members of the National Government. Dr. Borcic has completely identified himself with the purposes of the Central Health Administration and is closely associated in all its achievements and difficulties. Dr. P. Z. King, the Director of the Station, makes particularly full utilisation of Dr. Borcic's wide experience in organising the Station and preparing the plans and technical equipment for the future building.

IV. MEASURES TO CONTROL CHOLERA IN SHANGHAI.

The Committee was informed in my last report (October session, 1930) of the successful progress of the measures taken last summer in the Shanghai area for the prevention and control of cholera. These measures were undertaken in accordance with a plan jointly established by the Municipality of Greater Shanghai, the International Settlement and the French Concession. The Committee will remember that Dr. Gautier and Mr. Stouman, as well as Dr. Park, were consulted on various aspects of this campaign.

The measures in question were taken on a very extensive scale; the Public Health Bureau of the City Administration of Greater Shanghai, under the able direction of Dr. Hou Ki-hou, was responsible for 404,000 inoculations. The Public Health Department of the International Settlement (now in the expert hands of Dr. Jourdan) and that of the French Concession (under M. Verdier) were able to effect about 66,000 inoculations respectively.

No inoculations had been performed upon the 87 cases of cholera which occurred subsequently in Greater Shanghai (which excludes the International Settlement and French Concession). The Committee will find among the documents before it the first volume of the National Quarantine Service publications, containing a preliminary epidemiological report upon the investigations into this epidemic.

V. PRESENT PROGRAMME.

ORGANISATION OF THE NATIONAL HEALTH ADMINISTRATION.

The Committee cannot fail to be impressed by the manifold activities developed since its last session by the National Health Administration in the execution of its plan. The National Government of the Republic of China has given ample and material evidence of its interest in, and support of, this health programme. As already stated, a sum of over 400,000 Mexican dollars was placed at the disposal of Dr. J. Heng Liu by His Excellency the Minister

of Finance as from January 1st, 1931.
In November last the plenary session of the Executive Committee of the Kuomintang, which has constitutional authority to decide upon the policy of the Government, resolved to simplify the central machinery of the Government, in view of the urgent necessity for stringent economies in the administration of the country. As a result, the Ministry of Agriculture was incorporated with that of Industry, Trade and Labour into one State Department, while the Ministry of Health, becoming an autonomous health bureau within the Ministry of the Interior, was to be known henceforth as the "National Health Administration" (Wei Sheng Shu). The Government at the same time made it clear that this administrative re-organisation would in no way interfere with its intention to establish an efficient health service.

His Excellency General Chiang Kai-shek, President of the National Government of China, has authorised me to inform the Health Committee that the Government is determined to carry out the extensive programme of public health work, along with other activities in the field of national reconstruction. He stated that the plan submitted by Dr. Liu and approved by the Executive Yuan on December 25th, 1930 (see document C.118.M.38.1930.III), had his full approval and support and that it must be carried out in detail without delay. He emphasised that the National Health Administration, an abridged Constitution of which had been passed by the Legislative Yuan, was being given instructions not to curtail any part of its programme, in spite of the fact that the new organisation would be rather smaller in size than its predecessor. The President further declared that, in the event of the new Constitution's proving too limited, changes could doubtless be made from time to time in order to enlarge the scope of the Administration.

GENERAL DEVELOPMENT OF THE NATIONAL HEALTH ADMINISTRATION.

A public health programme being regarded by the Government as an integral part of the plan for national development, it had naturally to be adapted by the executive authority to the material possibilities of the situation. As part of the general plan, it thus became indispensable for the Wei Sheng Shu to "draw up an immediate programme of the most urgent work required and practicable during the next few years. This would have to be related to the financial resources available and therefore involve a careful examination by the Ministers concerned of the utilisation of the present resources in order to discover how far they could be made available for the programme. It was to be clearly understood that the work of these first few years would be experimental, limited in objective and range of application, and would serve usefully as a preparation for a longer term and more comprehensive plan of the future. In this first period, experience would be gained as to the most useful type and method of work and an opportunity given to those best fitted to lead and direct in future to show their qualities. Moreover, some of the work thus undertaken under the direct initiative and direction of the National Health Administration, would serve as a pattern for the extension of such work, in later years, by provincial and local authorities.

After detailed consultations, it was decided to confine the national activities in the field of health during the next three years as follows:

(a) The establishment of the Central Field Health Station and the development of the Central Hospital as a nucleus of the national medical and health services, this Station to operate within selected regions as regards all major problems of sanitation, preventive medicine and medical relief.

(b) The creation of an Experimental Medical School, and the reinforcement

of the few existing national medical colleges of the higher type, for the training of

suitable officers for the later work.

 (c) The gradual extension of the National Quarantine Service.
 (d) The co-ordination of the various modern centres of public health activity in the country.

The Government is fully aware that all this work, important as it is, obviously forms only the indispensable nucleus of activities which, as time goes on, will call for wide expansion and development.

3. HEALTH DEPARTMENTS IN TEACHERS' TRAINING COLLEGES.

The Central Field Health Station, in addition to practical field experimentation, has to determine the general trend of its initial activities. Its nine services will come into action one by one, in response to the immediate demands of the situation. Its Director will not await the full development of his staff before applying it to the problems in the field. It has been decided that, to extend the general activities in public health, the training of a few teachers in primary and secondary schools for collaboration in this field is urgently needed. Such activities will be organised by the Station in the following manner:

The School Health and Physical Education Service will be responsible for the organisation of health work in teachers' training colleges. It will aim at organising a health department in each of the sixteen larger and more important colleges in the country, converting existing divisions for physical education into such departments. The requisite personnel would be trained either at the Central Station at Nanking, or abroad. These college health departments would assume responsibility for the sanitary conditions as well as for the health and social welfare of the students. The teaching of health and physical education would be given reality by means of a health centre attached to the college as the working organ of the department. This health centre would also be utilised for a limited portion of the town and the adjacent rural area. While the centre would be in the charge of a medical officer belonging to the National Health Administration, all students of the college would have to be trained at the centre as assistants in the social welfare activity, thus becoming acquainted with the mode of life of the people and with methods of prevention of social disease, and would also receive instruction in emergency and first-aid treatment, etc.

This plan will be applied immediately in the Central University of Nanking and one or two of the principal training colleges, and will be extended as soon as practicable to other teachers' training centres, to provincial training colleges and to agricultural colleges.

4. SCHOOL MEDICAL SERVICE.

An efficient School Medical Service — as exemplified by the Department of Public Health in Shanghai and the Health Centre at Peiping — is capable of being organised in China, despite economic difficulties; it offers, in fact, one of the few immediate channels through which a national medical health service can be made effective. The decision was accordingly taken that this should be one of the first major efforts of the Central Field Health Station conducted through a Commission appointed jointly by the National Health Administration and the Ministry of Education. Medical officers for municipal Services will be trained by the Central Field Health Station, both in Nanking and in other training areas where candidates can participate in the type of service which they will be called upon to organise and administer.

5. MATERNITY AND CHILD HEALTH WORK.

The opportunity and demands for the provision of maternity and child health work have already been recognised and a beginning made in 1929 on a national programme which, within the limits of the three-year plan, has been included as a further major effort of the National Health Administration, acting through the Hu Wen-hu Maternity and Child Welfare Service of the Station, and with the advice of the Central Midwifery Board created in co-operation with the Ministry of Education.

After the completion of a survey for the purpose of classifying and registering the existing private and State institutions, the policy of establishing regional national midwifery centres will be followed. At present the Peiping Midwifery School is in full activity, and it is intended, in addition to the new Nanking School, to start others at Hangchow, Canton and Hankow. In the meantime, plans will be prepared for the creation, after the three-year period, of a provincial centre in each Province. In the interval, the first National School at Peiping will be reinforced in order to permit of sending candidates for the teaching staffs of the other national centres to be trained abroad.

The National School's two-year course has been approved by the Central Midwifery Board. It will accept middle-school graduates, or other applicants with equivalent training. These will become teachers in provincial centres, where a six-months course will be given for the training of primary school graduates as practising midwives. Similar six-months courses will be given at the National Schools.

Full recognition of a National School will not be granted until the minimum requirements have been met by the local city administration in regard to registration of midwives, birth and death registration and the provision of a minimum child health programme, as laid down by the Central Field Health Station.

The latter Station, in addition to training in midwifery, will exercise control over the practice of this art through those local health administrations where a modern service is in full operation, and it is hoped to dispose of sufficient trust funds for grants in aid to be made for midwifery training and for the undertaking of child health activities by selected local authorities. Investigations into the medical problems connected with these subjects will of course be encouraged by the Station.

6. Co-ordination of Municipal Health Services.

The municipal health services of Shanghai, Nanking, Canton, Peiping and Tientsin have been very active, particularly that of Shanghai, which has developed rapidly during the past five years under the continuous direction of Dr. Hou Ki-hu. The policy and methods of these services, however, differ considerably, although the problems to be faced are in all cases very similar. The Central Field Health Station will therefore undertake the task of co-ordinating their activities and perhaps of standardising certain of their routine methods. A plan is also being prepared, assigning various problems to the different municipal health departments, in order to discover the most appropriate method of procedure. At the same time a system of "appraisal", adapted to conditions in China and applicable to municipal health work, is being worked out and will be eventually put into practice by the Station.

7. MEDICAL EDUCATION.

The Committee will recall that the services of Professor Knud Faber were placed at the disposal of the National Government of China for a period of three months last year, in order that a survey of existing medical schools should be carried out and recommendations duly formulated. Dr. Faber met everywhere with full assistance in his studies, and Dr. J. Heng Liu expressed, for himself and his colleagues, hearty appreciation of the efforts made by Dr. Faber and of the report which he had prepared. This report, together with a covering memorandum which I have prepared, has been placed before the Committee at its present session, in the same way as the report presented to it in March last on the mission carried out by Dr. Boudreau and myself in China. I cannot leave this subject without a reference to the Medical and Health Centre in Nanking. The Central Field Health Station and the Central Hospital form the nucleus of this unit. The Hospital will be completed by the addition of a main building containing the Hu Wen-hu Maternity Service, two wards, an out-patient and a clinical and general department.

The Experimental Medical School recommended by Professor Faber will, as explained in my memorandum, form the third unit of the Centre.

In addition, the Health Centre will be utilised for post-graduate medical instruction covering a two-years curriculum.

VI. MAIN OBJECTIVES OF A NATIONAL HEALTH AND MEDICAL SERVICE.

With the establishment of the Central Field Health Station, the time became ripe for considering whether the formation of one single National Health and Medical Service might not be proceeded with. It will be remembered that the programme adopted in December 1929 was based on the recognition of the fact that the task of sanitation for the country as a whole could scarcely be undertaken in view of stupendous difficulties, both financial and technical. Furthermore, it was realised that public health activity to be successful must be fully supported by provincial and municipal governments, and the Central Government could not be expected to take the whole of the burden upon itself. This policy, however, must for obvious reasons take some time to materialise.

In existing conditions, the efforts of the Central Government would, as has been shown, be concentrated on fundamental problems, with the object of demonstrating the earnestness of purpose and the unity of the national policy. This demonstration of the value of preventive medicine is closely linked up with the provision of medical relief; but it was recognised, in view of the conditions already described — namely, the limited number of hospitals (700) most of them small and under-equipped, unsupervised either by State or local authority, and of the limited number both of fully trained doctors (5,000) and of medical schools, involving a totally inadequate annual output of physicians — that the first task consisted in constituting a technical corps of organisers capable of setting up within measurable time the indispensable institutions and of initiating and supervising the necessary activities. The Central Field Health Station represents the headquarters of this corps, which is being recruited from among the hundred or so physicians who have either had full training in public health or have proved their qualifications in the field of practical action.

The nucleus of this corps will deal first with the problems already described in this note, directing its efforts along three main lines: first, the educational movement, which presents one of the most hopeful signs of constructive work in the country. The new China is being built up by the elementary and secondary teachers and the agricultural instructors. These teachers should be induced to live healthy lives at their "Normal Colleges" and agricultural schools; they should be trained to become active agents in the initiation and promotion of methods of sanitation, conceived as a social activity intended to raise the general standard of life. Within the next three years the National Field Health Medical Service proposes to establish health centres at the sixteen national "normal" colleges and the various high schools of agriculture, aided by the departments of physical education and health in those colleges. By means of these centres, the health of the students will be supervised, and they will be taught, as part of their curriculum, the social work of those institutions.

The young generation brought up in the network of modern schools established by the municipal and provincial authorities should be assured of such possibilities of normal bodily development as medical services, despite economic difficulties, can help to create and maintain. The example of Greater Shanghai, certain districts of Peiping and other cities, proves that a school medical service can be effectively organised and developed to the greatest benefit of the community. The National Service would initiate, co-ordinate and guide the functioning of school medical services and polyclinics.

Notable progress has been achieved during the last few years in the provision of institutions for maternity welfare, midwifery schools and maternity and infant homes. With the generous donation already mentioned, which will enable the Central Field Station to establish a special maternity and infant welfare centre, a practical programme for the rapid extension of such activities to several of the chief centres during the next five years has been elaborated and there is no reason why it should not come into operation forthwith.

The National Quarantine Service, already functioning as a part of the National Health Administration, would in fact be a branch of this National Medical Health Service, as would also the Manchurian Plague Prevention Service and the National Epidemic Diseases Prevention Bureau in Peiping. Finally, the activities of health bureaux existing in certain municipalities would be co-ordinated by the Station, and their public health and medical staffs might be incorporated in the National Medical Health Service and recommissioned for work in the municipalities.

It may be added that a new Army Medical Service is now being organised by Dr. J. Heng Liu, who, in addition to his directorship of the "Wei Sheng Shu", acts as Surgeon-General of the National armies. His new officers will be trained at the Experimental Medical School in Nanking. Senior medical officers in the new Army Medical Service will act as organisers capable of assuming full responsibility for the health of large army units, as well as for medical relief in times of peace and war. In many instances they will be able to supplement the work of officials of the National Health and Medical Service or even occasionally replace them. If trained in this way to become interchangeable, the officials of the two corps can be utilised equally well in ordinary conditions as well as in times of great national emergency.

Qualified observers in China agree that the prospects of a successful application of a national development plan are more hopeful at present than they have been for the last twenty years. A period of intense activity lies before the National Health Administration and before all our Chinese colleagues engaged in public health work as well as their friends and well-wishers. There is thus every reason to believe that the Chinese National Health Administration, assured of the active interest of the leaders of the Government, and in particular of the firm support of the far-seeing Minister of Finance, will be able, with courage and determination, to carry out the fundamental programme indicated in this note.

VII. COLLABORATION UNDER THE "FELLOWSHIP" SYSTEM.

In further continuation of our plan of collaboration, as approved, on the recommendation of the Health Committee, by the Council at its fifty-ninth session, in May 1930 and by the Assembly in the following September, arrangements were made with the National Health Administration of China for facilities to be given this year for specialised studies abroad to candidates and members of the National Quarantine Service, members of the Central Field Health Station staff, including its training areas, and directors of health departments in teachers' training colleges.

In addition, it is hoped that the services of a malariologist will be available early this summer for the Central Field Health Station in Nanking, as well as those of an expert in pharmacology and pharmaceutics in connection with a survey and recommendations in regard to the control of patent medicines in China.

It is confidently hoped that the Health Committee and its various technical commissions will be continuously available to advise the National Health Administration in connection with its plan of reconstruction.

Appendix.

LETTER TO DR. J. HENG LIU, CHINESE MINISTER OF HEALTH, FROM THE MEDICAL DIRECTOR, DATED NOVEMBER 6TH, 1930.

I am very pleased to forward to you herewith the report on the re-organisation of your Quarantine Services, in accordance with the request that the Health and Transit Organisations of the League should study jointly measures required for the transfer and re-organisation of these Services. The report was presented to the Health Committee at its September meeting and referred for consideration to a Commission of that body, whose deliberations were assisted by P. Z. King and Dr. Hong Tsai.

The Commission embodied its views in a note (copy of which is attached) to the Health Committee, in which it approved the report and warmly commended the regulations which you had promulgated.

The Health Committee, in adopting the report, authorised the Commission to take further action after conferring with the experts delegated by the Communications and Transit Organisation of the League.

This Conference, at which Dr. Tsai also assisted, expressed its approval of the report in a further note (copy of which is attached) after considering the opinions expressed by the Commission and by the experts representing the interests of the shipping community. Among the matters which came under review in considering the report, there are several in regard to which I would like to make a few observations.

1. The first of these is the question of financing the service. The fear of maritime countries had been that charges might be imposed on foreign shipping which would be used to finance the Quarantine Service and perhaps even shore health services.

This fear has been dispelled by the fact that a definite sum, sufficient to meet ordinary expenditure, is being made available by the Minister of Finance from the Customs Revenue for the Port of Shanghai, and by the fact that the published tariff of charges is reasonable.

Attention was drawn to the provisions of Article 18 of the International Sanitary Convention of 1926, which stipulates that if, on account of the application of measures for the destruction of rats or insects, charges are levied, the rate shall be in accordance with a tariff published in advance and so drawn up that the State does not on the whole derive any profit.

It will be very helpful in maintaining the feeling of security now existing if it is known that regular contributions, sufficient to meet the ordinary expenditure of the Service, are to be made in respect of each port where a service is established.

2. The second question was that of the personnel of the Service. The choice and training of personnel was regarded as being very important if the goodwill and co-operation of shipping interests, which are so essential to smooth working, are to be maintained.

It was pointed out that ships' masters, who have ample opportunity to compare quarantine officers in different ports throughout the world, will accord every assistance to quarantine officers who show that it is their intention to determine, by a reasonable application of the powers given them, the sanitary state of vessels which they board. On the other hand, they are very intolerant of delays caused by quarantine measures casually applied or having no direct objective.

3. The third point related to the extent to which quarantine measures would be applied. The question of how far quarantine measures are necessary in any particular case is a matter in regard to which the shipping interests were much concerned.

There are two important points involved:

- (a) To take into consideration, in applying measures at Chinese ports, any measures which may have been applied at other ports (Article 46 of the Convention).
- (b) To perform quarantine duties in Chinese ports so efficiently that other countries will recognise the measures applied and so feel it unnecessary to reimpose similar measures in their own ports.

The application of point (a) is particularly directed towards the recognition of certificates of deratisation or exemption from deratisation (Article 28 of the Convention), but also towards the recognition of examinations carried out at ports previously called at and of measures taken in the face of infection or suspected infection on vessels (Articles 45, 46, 47 of the Convention).

- 4. Coastal Shipping. The shipping interests were anxious that, in respect of its passenger traffic, coastal shipping should not be subjected to the same degree of quarantine restrictions as would be applied to passenger traffic from foreign ports.
- 5. Another matter on which all members laid stress was the questions of an arrangement with neighbouring countries. The desirability was affirmed of concluding special agreements with the authorities at Hong-Kong on the one hand and Japan on the other which would make the application of quarantine measures more efficacious and less burdensome at Canton and Shanghai.

In this connection, I need only remind you that you have foreseen the desirability of an arrangement in regard to vessels trading regularly between Japan and Shanghai, Hong-Kong and Canton by taking power to make exemptions under the Regulations.

6. There was a general feeling too that, at the appropriate time, it would be an advantage if your Government were to proceed to the ratification of the Convention of 1926.

This will involve obligations on your part to know what and where infectious and epidemic diseases are occurring and to be in a position to see that measures of control are taken. It presupposes that at least one of your ports is so equipped that it is capable of dealing with any quarantine emergencies that might arise and, in addition, imposes an obligation to keep a medical supervision over your migration traffic.

These are obligations which your service will later be able to fulfil completely, but perhaps at the present moment you may feel it would be somewhat premature to undertake them.

7. On the other hand, it would be a step in the right direction if you were officially to notify the Director of the Office international d'Hygiène publique at Paris that "in conformity with the terms of Article 28 of the International Sanitary Convention of 1926 and for all purposes of that article, the port of Shanghai possesses the equipment and personnel necessary for the deratisation of ships".

I had hoped that you could see your way to have obtained the assistance of an expert fumigation officer as a preliminary to taking this step, as it carries with it the right to issue certificates of exemption from deratisation which are only issued after thorough search to determine the absence of rats. This is a somewhat difficult task and, moreover, it is necessary in issuing such certificates to explain the basis on which it was considered that a ship could be exempted. I am looking forward, however, to discussing this with you during my forthcoming visit.

As Singapore is the Regional Bureau in the Far East for the Office international, the simplest procedure would probably be to send a communication regarding Shanghai in the above form through the Bureau, should you decide to accept the suggestion made by the Health Committee.

(Signed) Ludwik RAJCHMAN,

Medical Director.

ANNEX 4.

NOTE FROM Dr. J. HENG LIU ON THE HEALTH BUDGET

OF CHINA (1931 to 1933).

	Capital	First year	Second year	Third year
1. Wei Sheng Shu	\$ (approved) 1,000,000	\$ { 420,000 514,640	\$ 420,000 514,640	\$ 420,000 514,640
3. Central Hygienic Laboratory	<u>-</u> ·	59,880	76,200	100,000
4. National Epidemic Prevention Bureau	_	112,870	180,000	180,000
5. North Manchurian Plague Prevention Service	_	150,000	250,000	250,000
6. Central Hospital	(contribution for additional building) 350,000	300,000	360,000	360,000
7. Nanking city field demonstration	50,000	60,000	60,000	60,000
8. Tangshan rural field demonstration	(contribution) 10,000	18,000	18,000	18,000
9. Hsien field demonstration	50,000	60,000	60,000	60,000
10. First National Midwifery School, Peiping	100,000	41,016	60,000	60,000
11. Second National Midwifery School, Nanking	(for equipment) 30,000	_	60,000	60,000
12. Third National Midwifery School, Canton	100,000		60,000	60,000
13. Fourth National Midwifery School, Hankow	100,000		60,000	60,000
14. Nursing School, Nanking	100,000	-	60,000	60,000
15. Research fund to the Chinese Drugs Research Institute		24,000	24,000	24,000
16. Quarantine Services:				,
National Quarantine Service Headquarters		36,000	36,000	36,000
Shanghai	_	60,000	60,000	60,000
Amoy		24,000	24,000	24,000
Swatow		24,000	24,000	24,000
Canton		36,000	36,000	36,000
Newchwang	_	24,000	24,000	24,000
Antung		18,000		18,000
Tientsin		-	24,000	24,000
Tsingtao		_	24,000	
Chingwantao			24,000	24,000
Hankow	— ,		24,000	24,000
Chefoo	-	-	18,000 18,000	· ·
Weihaiwei			18,000	18,000
Foochow	_		18,000	18,000
Totals	1,890,000	1,982,406	2,652,840	2,676,640

ANNUAL BUDGET OF THE CENTRAL FIELD HEALTH STATION, NANKING.

	\$	\$	\$
A. SALARY AND WAGES			256,200
I. Salary		240,720	
1. Officers of selected appointment	50,400		
2. Officers of recommended appointment	72,000	•	
3. Officers of delegated appointment	82,080		
4. Employees	36,240		
II. Wages		15,480	
1. Carpenters, photographers, etc	4,680		
2. Servants	10,800		
			-
B. Running Expenses			94,440
I. Supplies, stationery, etc		13,200	
II. Correspondence	,	6,000	
III. Printing		20,400	
IV. Rent		14,400	
V. Upkeep		28,440	
VI. Miscellaneous		12,000	
C. EQUIPMENT, ETC			134,000
I. Equipment		38,000	
1. Instruments	9,600	·	
2. Books and periodicals	4,800		
3. Others	23,600		
II. House and furniture		12,000	
III. Construction		84,000	
1. Courses for health officers, inspectors.	24.000		
nurses, etc	24,000		
special activities	60,000		
D. Special Expenses			24,000
I. Special	• .	0.5	
II. Travelling expenses		6,000	
Superior,		18,000	
E. CONTINGENT			6,000
Total			514,640

ANNEX 5.

NOTE BY Dr. J. HENG LIU, ON THE THREE-YEAR PLAN FOR THE CHINESE NATIONAL HEALTH SERVICE.

Recent developments in China have resulted in the amalgamation of the Ministry of Health with the Ministry of Interior. I have, in consequence, been appointed Director of the new National Health Administration. The fact that, together with its auxiliary organisations, more technical personnel will be provided under the new constitution approved by the Legislative Yuan than under the former Ministry of Health implies that the health service will be placed on a more solid foundation than before.

THE CENTRAL FIELD HEALTH STATION AT NANKING.

In order to make its organisation more effective financially, as well as politically, the Government will put the Central Field Health Station as one of the technical services under the new National Economic Council. The old buildings of the former Ministry of Health will be used pending the erection of new buildings, which will be started shortly and are expected to be completed in 1932. The annual budget for this station for the next years is \$514,640 (see Annex 4).

With the object of developing it into a field station for North China, similar to the Central Health Station in Nanking, the activities of the *National Epidemic Prevention Bureau* (Peiping) as well as its budget, will be gradually expanded (see Annex 4, item 4).

Similarly, the activities of the North Manchurian Plague Service will likewise be so expanded as to enable it to serve as the Field Health Station for the three north-eastern provinces (see Annex 4, item 5).

Since July 1st, 1930, the National Quarantine Service has already taken over the quarantine work for the ports of Shanghai and Amoy. Arrangements have been made by the service to take over the port of Swatow as from April 16th of this year. It is scheduled that the remaining quarantine services — namely, those of Canton, Chungsan (Tongkawan), Foochow, Hankow, Tientsin, Newchwang, Antung, Tsingtao, Chingwantao, Chefoo, and Weihaiwei — will be inaugurated by the service before the end of 1932. The expenditure for these services will be drawn as heretofore from the maritime Customs (see Annex 4, item 16).

In regard to midwifery training, thanks to the success attained by the First National Midwifery School in Peiping, the further establishment of three national midwifery schools in the cities of Nanking, Canton and Hankow will soon be undertaken. The programme for these is as follows:

Second National Midwifery School, Nanking, 1931. Third National Midwifery School, Canton, 1932. Fourth National Midwifery School, Hankow, 1933.

Budgets for the above schools are shown in Annex 4, items 10, 11, 12 and 13.

Plans have been made for the establishment of provincial midwifery schools in Hopei, Kiangsu, Chekiang, Hupeh and Kwangtung within the next three years.

A school for the training of *Public Health Nurses* will be founded in Nanking in 1932, budget for which will be \$60,000 annually (see Annex 4, item 14).

The training of public health officers and of sanitary inspectors will be undertaken by the Central Field Health Station. An annual sum of \$24,000 is included in the budget of the Central Field Health Station for this purpose (see Annex 4).

As field activities for the Central Field Health Station, a municipal health demonstration in Nanking, a rural health demonstration in Tangshan and a hsien health demonstration will be started in 1931. Their annual budgets will be \$60,000, \$18,000 and \$60,000 respectively (see Annex 4, items 7, 8 and 9).

Full co-operation will be given by the Central Field Health Station to municipal health organisations of large cities with the object of having them fully developed during the next three years in order that they may serve as demonstrations for the provinces.

RELATED ACTIVITIES.

1. HEALTH EDUCATION.

Arrangements have been made to commence health education courses in the Normal College of the Central University in 1931. The next two years will witness similar arrangements in two other universities, one located in Peiping, and the other in Canton.

2. ARMY MEDICAL SERVICE.

The Central Field Health Station will also assist the National Army Medical Corps in re-organising an army medical school to serve as an experimental medical school.

3. CHINESE DRUG RESEARCH INSTITUTE.

A special appropriation has been made for this purpose, (see Annex 4, item 15). The National Health Administration will appropriate \$24,000 per annum for this institution.

4. OPIUM HOSPITAL.

Complying with the wish of the National Government to suppress opium consumption in China, a model opium hospital will be established to study the problems of opium addiction and its treatment.

5. Anti-cholera Campaign in Shanghai.

Thanks to the co-ordination of anti-cholera activities of the Chinese and foreign health authorities of Shanghai as initiated by me last year, a valuable report has been submitted by the Quarantine Service (Report Series I) for future guidance. This joint work will be intensified this year, and a meeting to that effect has been held on April 10th, 1931.

C.H.920.

ANNEX 6.

NOTE BY Dr. J. HENG LIU, ON THE QUARANTINE SERVICE OF SHANGHAI.

Nanking, September 4th, 1930.

The former Sanitary Service, Port of Shanghai, which had, up to June 30th, been administered by the Shanghai Commissioner of Customs under authority of Superintendent of Customs and Treaty Port Consuls, was formally taken over on July 1st by the National Quarantine Service operating directly under the Ministry of Health. The director of the service is Dr. Wu Lien-teh, who is concurrently chief technical expert of the Ministry of Health and chief quarantine officer of Shanghai.

The Shanghai Sanitary Service used to receive the following contributions for its maintenance:

International Settlement	
Disinfecting Co	$8,000 \\ 12,000$
Approximate income	28,100 32,800

Expenditure included salary of the Port Health Officer (8,400 taels), salaries of staff of the Woosung Hospital and upkeep of the Quarantine launch *Pootoo*. For years there has been a deficit of 4,000 to 5,000 taels per annum, and at the time of taking over by the new Quarantine Service there was an outstanding debt to the Customs Revenue of over 14,500 Shanghai taels.

After prolonged negotiation, the Ministry of Finance (controlling the Customs) decided to liquidate the old debt of the Sanitary Service, hand over the quarantine launch and Woosung Hospital buildings as well as the private fumigating plant which had, by previous arrangement, passed over to the Customs on June 30th, 1930.

Hence, the new Quarantine Service of Shanghai started its career on July 1st, unencumbered by previous debts and was able to bear its share of responsibility of inspecting vessels coming from declared infected ports — e.g., those from Cebu, Ilo-Ilo, Saigon, Calcutta, Bangkok, etc. — controlling the fumigating plants and operating them with proper Government authority and guarantee of certificates.

The fumigating division reports the following since July 1st, when it took over the work from the Disinfecting Co.

Number of vessels fees collected (Shanghai taels)
July . . . 89 6,897.59
August . . 68 3,994.35

The Woosung Quarantine Officer reports that, since July 1st, seven ocean-going steamers from infected ports have been inspected and given pratique.

Owing to the old age of the quarantine launch (46 years), a new motor launch, 50 feet long, equipped with the latest oil consuming engine, has been ordered and will be ready for use in December. The cost is 18,000 taels. Plans are also being drawn for the establishment of an up-to-date quarantine station on the north side of the river. The cost will be approximately \$450,000. The present medical staff in Shanghai consists of:

Director of Quarantine and Chief Quarantine Officer: Dr. Wu Lien-teh.

Senior Quarantine Officer returning from Europe and United States of America: Dr. E. B. Young.

Assistant Quarantine Officer, Woosung: Dr. Hu Shuin-ho.

Assistant Quarantine Officer, Woosung: Dr. Lu Shao-ho.

Quarantine Officers in charge of Fumigation: Dr. Pai Shih-en, Dr. Chin Nai-yi.

Of the above, the Director is a Cambridge graduate, Dr. Young is from Detroit and has recently enjoyed a League Fellowship to study quarantine in Europe and America, two are graduates of Hong-Kong University, one is from the Peiping Union Medical College, and the last is M.D. of St. Johns University, Shanghai. All can speak and write English fluently.

ADVISORY COMMITTEE.

To help advise the Director of Quarantine on important matters pertaining to the port, an Advisory Committee has been appointed, including the Commissioner of Customs of Shanghai and the President of the Huangpu Conservancy Board. The harbour-master is at all times ready to assist with his experience and advice.

FUTURE PROGRAMME.

As soon as work in Shanghai has been placed on a solid footing, the ports of Newchang (which already possesses the finest quarantine station in China and is controlled by the Director of the Manchurian Plague Prevention Service) and Antung (which has also had its hospital and quarantine station for seven years) will be taken over by the National Quarantine Service. It is hoped that, after this, the important emigrant ports of Amoy and Swatow, which yearly send 500,000 emigrants to Malaya, Netherlands East Indies, Philippines, Siam, and other parts in the south, will be organised on a scientific and humane footing, so that both emigrants and the territories which receive them will be freed from worry regarding communicable diseases.

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ANNEX 7.

NOTE BY THE MEDICAL DIRECTOR ON THE REPORT ON MEDICAL SCHOOLS IN CHINA PREPARED BY PROFESSOR KNUD FABER.

The report by Professor Knud Faber on medical schools in China is the result of careful studies made in that country, at the request of the National Government of China, from September to December 1930. The resulting remarkable document contains the considered conclusions arrived at by the author, whose efforts were highly appreciated by the various Chinese medical and health authorities by whom it was examined, and whose comments are given in a separate document (C.H.1009 and 1009(a)).

- 1. Two conclusions in regard to a policy for medical education arise inevitably from realisation, on the one hand, of the present economic, social and medical conditions in China and, on the other, of the growing international interest in the reform of medical education and the increasing worldwide socialisation of medicine. If it is remembered that there are not more than 700 hospitals in the whole of China, the bulk of which are small and inadequately equipped, besides being outside the control of either central or local national authorities, and not more than some 5,000 doctors trained in the theory and practice of scientific medicine, with a very small number of medical schools capable of providing a fraction of the doctors needed, the first conclusion drawn, as emphasised by Professor Knud Faber, is that the needs of the country as a whole can best be met in the first instance by developing community medical protection through institutions rather than by an attempt to provide the entire country with practitioners of medicine.
- 2. The acceptance of this first conclusion will influence markedly the type of technical demands that will be made on the medical personnel, and this in turn will affect the training required.
- 3. China is, in general, unprovided with either a medical profession or a public health service. It would seem desirable to make plans for both in conjunction rather than for each separately, and, before considering any programme of medical education, the main factors in the development of a public medical service may be examined. In the first place, units of population exist in a more or less organised state which, although deprived like the rest of the country of adequate medical protection, may readily support a public service. Such units are the schools, the railways and other public utility services the factories and industrial enterprises and there are, of course, the armies. In the second place, urban and rural administrations here and there are expressing their desire to meet Government responsibility for medical relief by instituting public services. But apart from these rare exceptions, the real impetus in the immediate future must come from the National Health Administration.
- 4. As has been stated elsewhere, the Government has drawn up a three-year public health scheme for immediate application in limited areas and with limited objectives. Within the selected areas during this initial period an attempt will be made to provide the population with a system of health centres to be considered as outlying "primary stations", dependent upon, and directed from, bigger, more comprehensive institutions at larger centres. These secondary institutions would in turn communicate directly with the central medical and health unit for the whole area. It is clear that the qualifications of the medical staff at the base and secondary institutions need to be of a higher standard than those of the primary centre personnel.
- 5. One cannot but welcome Professor Faber's recommendation to establish an Experimental Medical School. It would be difficult to apply experience gained elsewhere to the conditions peculiar to China without a considerable amount of adaptation. Even in countries farthest advanced in medical science and practice, these doctrines are undergoing searching revision, and it becomes all the more necessary to abstain from adopting literally any one classical national programme. A bold experiment may be noted in the attempt of the Union of Soviet Socialist Republics to link up new methods of medical training with the exigencies of the national reconstruction plan.

The Experimental Medical School would thus serve to determine the type of training most suited to producing candidates for public medical services in China. As an experiment in the adaptation of medical training it will certainly be followed with real interest in the various countries by all those interested in the reform of medical education.

- 6. The Experimental Medical School should logically be established in the central area selected for the reconstruction activities. It is the Government's desire that this should be Nanking, and that its Medical and Health Centre with all its units should be utilised for such a purpose. In this way it will be possible fully to utilise the primary and secondary health stations for training purposes.
- 7. It will be generally agreed by those who have studied the question in China and elsewhere that for the venture to be successful the experimental school must possess a particularly competent teaching staff, and as this school will endeavour to follow a shorter curriculum than that of normal medical schools, its staff must include men of high scientific standing and wide teaching experience. Further, it is important that:
 - (a) It should be laid down that the curriculum is to be revised yearly by a Committee including members both of the Faculty and experienced medical administrators from outside;
 - (b) That three or four members of the Faculty should be selected for their special experience and known interest in medical education.

It should be a feature of the school (for which ample precedent exists in Europe and elsewhere) that students are allowed free board and tuition and receive a small stipend in exchange for an undertaking to enter public service after training. A system of "bonding" students, in order that the cost of training may be recovered in case of default, might be enforced without difficulty.

In view of the character of the teaching staff and of its work, the budget of this school will exceed that which might be considered practicable for future medical schools of the same type.

- 8. Another function of the experimental school would be the training of such auxiliary medical personnel as may prove to be necessary under a system of community medical protection of an essentially institutional character.
- 9. The value of the experiment cannot be estimated until at least two successive groups have been fully graduated from the proposed school. It might then be found that other existing schools would have to adapt themselves, though not necessarily in detail, to the new principles and standards that had emerged.

In the meantime, during the first year of application of the plan of national reconstruction, it is indispensable to strengthen the facilities at existing schools and, in particular, at the Sun Yat-sen University Medical College at Canton, the National Central University Medical College at Shangai, and the Peiping Union Medical College. According to Professor Faber, these schools fulfil the rôle of medical colleges rather than medical schools, being capable of giving fuller training than is provided in the latter and thus contributing to the formation of teachers for the schools of the future.

However, one cannot but agree with Professor Faber's insistence upon the difficulty connected with the supply of teachers. These are usually recruited from among the most promising members of the staff of large medical institutions possessing not only adequate hospital but also research work facilities and are able to maintain generally a high standard of medical discipline. For some years to come the Peiping Union Medical College will be in a better position in this respect than other schools and will continue to afford intellectual stimulus to other schools not possessing the same full equipment and staff. Even the Peiping Union Medical College, however, requires reinforcement if it is to fulfil its functions successfully, and other institutions state that the following additional facilities are needed:

Canton. — The Sun Yat-sen University Medical School has a budget of \$200,000 (Cantonese). The University hospital receives a grant of \$8,000 monthly from the University in addition to its own income of \$12,000 per month, leaving a margin for additional equipment and improvements. The foreign staff are paid in gold currency. New buildings for bacteriology, hygiene, physiology and a hospital for ophthalmology and psychiatrics are planned, for which about \$350,000 (Cantonese) would be required, and, in addition, the School needs three professors (for pediatrics, psychiatrics and legal medicine) who will probably be forthcoming for the next school year.

Shanghai. — The Central University Medical College needs to expand its services, and it is considered that a minimum annual budget of half a million dollars is required. An increase in the budget of from \$140,000 to \$250,000 has been proposed for next year. For the second half of the sum needed — namely, \$500,000 — private support is received, but this should be arranged on a sliding scale and the Government eventually be able to increase its appropriation up to \$500,000 a year.

Peiping. — The present facilities of the Peiping Union Medical College are relatively large, although providing only for the instruction of classes of twenty-five to thirty students, and it appears important, from general considerations, to expand the classes to fifty, which would involve only small additional facilities. In fact, with a somewhat modified policy, much larger returns could be obtained, particularly in regard to the formation of teachers for other schools, and the requisite standards should be more easily obtainable with a wider field of selection: classes of fifty are not only more economical but increase the chances of finding able men qualified to become teachers or research workers or administrators, as well as augmenting the number of competent doctors who are so indispensable to bring the medical profession up to the requisite standard.

It would appear that in two fields of instruction the College requires enlargement. In the important fields of psychiatry and mental hygiene specialised teachers and hospital facilities are needed, while the Department of Hygiene and Public Health, unlike the

others, lacks the essential elements for the organisation of group instruction in this field, although it has for many years given undergraduate instruction of a high order.

It is to our mind indispensable that the Peiping Union Medical College, with the rôle that it plays on behalf of Western medicine in China, should possess facilities for adequate post-graduate public health training.

According to information received, the completion of the College in the manner indicated would obtain much larger returns and could be affected with a relatively moderate increase

in the present budget.

It is possible that information will be received shortly that the National Government is prepared to finance the additional facilities urgently required by the schools at Canton and Shanghai, while the Peiping Union Medical College will have to seek funds from private sources.

10. In conclusion, special emphasis should be laid on Professor Knud Faber's indication of the important part to be played by the Ministry of Education in formulating and promoting the reform of medical education in China. An experienced full-time official in this Ministry who would assume responsibility for this important technical aspect of national reconstruction could render inestimable service, particularly if he were assisted by a commission set up concurrently with the National Health Administration and selected from among the leading men in the medical schools, in public health and in the medical profession of the country.

C.H.1013.

ANNEX 8.

NOTE BY PROFESSOR MIYAJIMA ON THE PREVENTION OF LEPROSY.

We have now before us a very interesting report by the Secretary of the Leprosy Commission which has been prepared after laborious studies he has undertaken in many parts of the world. A careful study of the report suggests the following questions:

Why is leprosy in Europe and North America rapidly decreasing and has even in certain parts of the world almost entirely disappeared?

In Japan, too, as shown by Dr. Tsurumi's report (see Annex 9), the tendency of a gradual decrease of leprosy is evident in recent years. But we have not so far been aware of the real cause of that phenomenon. Is the cause to be found in the segregation of lepers as one of the most important measures for its prevention? Or is it to be ascribed to general improvement in modern life in the country or some other contributory causes? It seems that this question should be carefully looked into before any conclusion can be reached. If leprosy is as infectious as tuberculosis, then the segregation of patients would be the most effective measure which would result in a marked decrease in the number of cases. Although there is no doubt about the infectious nature of leprosy, of which a causative agent, bacillus Lepræ, has been discovered, the fact remains that new cases appear usually among near blood relatives and the contagion among non-blood relatives is very rare. This fact has led the people from ancient times in Japan to consider leprosy as a hereditary disease, and this belief still persists among them at the present day. In case of marriage, any hereditary trace of leprosy is rigorously searched in order to exclude any one whose relatives had been victims of this disease.

In medical literature, it is not difficult to find proofs of the low rate of infection of leprosy in Japan. After investigation in a lepra colony in Kusatsu, Dr. Nishino reported in 1908 a curious fact. At the time of his investigation, forty-six families lived in Kusatsu, among which only two families were found free from leprosy, while the remaining forty-four families had 144 cases out of 178 members. The two families which had no cases had each fourteen persons in the household and had settled there for several generations, and had been in continual intercourse with lepers, yet not one of them had been infected. Another example may be cited here. In 1908, Dr. Tsurumi and I carried out an epidemiological investigation on leprosy in the Prefecture of Yamanashi where we found 463 lepra families. These families numbered 1,573 members, including 521 lepers. Upon investigation, we found 174 cases of which one of a couple, husband or wife, had been a leper but the other was quite healthy. As to the length of the period of their life in common, it varied according to from a few months to over 40 years. This might point to the fact that the infection of leprosy between non-blood relatives is quite rare. On the other hand, the infection occurs more frequently among close blood relatives. For instance, we found among 463 lepra families, 152 families which had more than two lepers at the same time. If we may assume

the fact that the infection in the family is brought from a patient to other members of the family, the infection rate may be classified as follows:

Between parents and children 7.03
Between brothers 4.2
Between other family members 2.7

Perhaps after long experience and close observation of the facts as regards the hereditary tendency in lepra cases, the people came to believe in hereditary traits in leprosy infection and the lepra families have met the fate of social ostracism and strict segregation. This was one of the reasons why too much significance was attributed to hereditary infection of the disease. The difficulty was obvious in a static society which had no mobile population, that a lepra family had been known for generations and no healthy family would contract marriage with any member of that lepra family. This led the lepra families to intermarry with each other. If we suppose the possibility of inheritance of predisposition for leprosy, then it is most probable that a new case may appear in families, the members of which are predisposed to the contagion.

As our knowledge of the predisposition in human organism is still insufficient in general and especially for leprosy, a thorough study in this field is most desirable.

As to the causes for the decrease in number of leprosy cases, we should not overlook those contributing causes which are found in the social movement in the present period, such as the movement of population, occupational changes, etc. Take, for example, the population movement in Japan in recent years. Between 1873 and 1913, the population increased to 40,563,166 in actual figures. During these 40 years, the movement of the population was chiefly towards the big cities. The rate of increase in rural and urban population was as follows: in rural districts 12 per cent, while it was 27 per cent in small towns, 137 per cent in medium towns and 146 per cent in metropolitan cities. It is easy to see that, even in Japan, the concentration of population was in urban districts. Furthermore, statistics of population classified by occupations between 1872 and 1920, show a remarkable increase of population in commerce and industry but a small increase in agriculture and forestry; the population in agriculture and forestry was 77.1 per cent in 1872 and 51.6 per cent in 1920, while the population in industry and commerce was 10.6 per cent in 1872 and 31 per cent in 1920, of the total population. It shows clearly the rapid development of commerce and industry. Such a change in social condition must have a considerable influence in public health. The rapid increase of tuberculosis in Japan has been ascribed to this social movement.

This important social factor has been overlooked in respect of leprosy. During the period taken into account there must certainly have been many rural families with lepers who migrated to urban districts where they lost their hereditary identity and consequently intermarried with healthy families. It would not be entirely out of place, I think, to advance a hypothesis that the hereditary predisposition for the infection of leprosy because of this intermarriage with healthy families has been gradually changed, resulting in physical improvement and consequent decrease in the cases of leprosy.

On the other hand, assuming that there exists predisposition for the infection, there is danger in leaving a leper patient in a home where predisposed members live, and the segregation of the patients in their homes may not be an entirely safe method to adopt. It is necessary, in order to guard against the infection of predisposed persons, to enforce the segregation of lepers in leprosaria.

In conclusion, a system segregating the patients in their homes would be unreasonable. Unfortunately, this important problem is still unsolved and scientific investigation in this other and domains is extremely desirable.

C.H.999.

ANNEX 9.

NOTE BY Dr. TSURUMI ON THE REVISION OF THE JAPANESE LEPROSY LAW OF 1907.

The prevention and eradication of leprosy are vital problems from the standpoint of the public health of any nation and of mankind in general. The Japanese Government has therefore long been endeavouring to cope with this terrible scourge: it has of late years been increasing and enlarging its leprosaria, the success of its efforts being reflected in a marked fall in the number of cases.

The fact, however, that at present only 3,000 beds exist in all the various leprosaria, whereas there are still over 14,000 persons in the country suffering from the disease, makes one realise the immediate need for more vigorous measures with a view to improving the situation.

The present leprosy law was promulgated in 1907, its chief object being to organise assistance for sufferers, particularly vagrants. But, from the standpoint of treatment in general and of prophylactic measures, much still remains to be done.

Last autumn, when contemplating more vigorous measures against leprosy, we were gratified to learn of the keen interest taken in these problems by Her Majesty the Dowager Empress.

A national leprosarium was recently opened at Nagashima, while an association of prominent persons has been formed to assist lepers and reinforce measures of prophylaxis. This association is already at work, and its activities will be further extended as the importance of the problem comes to be more fully realised. Measures have been taken among all classes of the people to enlist public opinion in support of a more active campaign for the prevention of leprosy.

From an international standpoint, there is a growing realisation of the need for coordinated preventive measures, in order to enable the State to discharge with dignity its social responsibilities.

On these various grounds the Japanese Government decided to submit to the Imperial Diet a revised draft law on leprosy, with a view to supplementing the existing preventive measures.

The chief points of the revised draft are the following:

- 1. A new and wider definition of the term "leper", for purposes of admission to leprosaria, has been adopted. Under the present law, the leprosaria only accept "lepers" who are unable to pay for treatment themselves and who cannot secure admission to a home. These conditions are, of course, far too restrictive from the standpoint both of preventive measures and of hospital treatment. It is proposed, therefore, to amend the present law by establishing as a criterion for the admission of lepers that they shall be "persons whose condition is such that there is a risk of their propagating the leprosy microbe". These cases will now be admitted to a leprosarium regardless of the question of expense or the possibility of admission to a home.
- 2. Hospital treatment and expenditure out of temporary relief funds for patients, their associates and the persons with whom they are living, will be met by the Treasury or by the prefectures.

In the past, such expenditure was borne by the patients themselves or by persons responsible for their maintenance. It often happened that patients could not be admitted to a leprosarium because the necessary funds were not available or admission might mean a family tragedy, the effect in either case running counter to the object in view—the prevention of the disease.

- 3. The administration may prohibit lepers from engaging in occupations which involve any risk of propagating the microbe of the disease. If, owing to such prohibition or admission to hospital, a person cannot provide for his own maintenance, the competent prefectures must defray the costs. As a provision to this effect is found in the law for the prevention of tuberculosis, it was thought necessary to introduce it in the leprosy law.
- 4. A further provision was required to prohibit medical officials or persons in the official leprosy prevention service, or former holders of such posts, from divulging the name or family of patients whether alive or dead, whom they have treated, and from divulging any fact that might be taken as presumptive evidence that a person is likely to be infected. Present-day social conditions make the insertion of this provision imperative from a prophylactic standpoint.

Moreover, it has been thought necessary to revise the regulations regarding the right to demand a medical examination when a case is diagnosed as leprosy, and to enact additional provisions, such as:

- (1) Regulations for the disposal of infected or suspect objects:
- (2) The repeal of the provision whereby private institutions may be allowed to take the place of prefectorial leprosaria;
- (3) Further regulations regarding supervision over the establishment and administration of private leprosaria.

MOVEMENT OF LEPROSY IN JAPAN PROPER.

The number of lepers in Japan proper is gradually declining. Three censuses have been taken, the results of which are as follows:

Date of census	Number of cases	Number of cases per 10,000 inhabitants
1925	16,261 15,351 14,263	$egin{array}{c} 2.92 \ 2.57 \ 2.21 \ \end{array}$

There is also a slight downward tendency in the annual death rate.

The number of deaths from leprosy per 10,000 deaths is as follows:

 1899 . . .
 22.59

 1912 . . .
 10.02

 1926 . . .
 6.71

 1928 . .
 5.80

There were 717 deaths from leprosy in 1928.

LEPROSY IN ADULTS.

The term adult applies to all persons who have reached the age for military service. The medical examination of conscripts showed a very marked decline in the number of cases.

Year of examination	Year of Nu examination cases		umber of es discovered	Relative number per thousand of cases discovered among conscripts		
1897 .					620	1.54
1912 .					351	0.77
1926 .					215	0.45
1928 .					128	0.22

The number of cases discovered during the period of military service was:

1897			25
1912			18
1928	٠.		8

C.H./Malaria/167(1).

ANNEX 10.

CONCLUSIONS OF THE SUB-COMMITTEE OF EXPERTS ON QUINETUM.

- 1. The name "Quinetum" should be reserved for a preparation consisting of quinine, cinchonidine and cinchonine in equal parts, that being approximately the normal proportion of these alkaloids in *Cinchona succirubra*.
- 2. A new standard preparation "total alkaloids of cinchona" which we propose to name "Totaquina" should be recommended for the treatment of malarial populations. This preparation should contain at least 70 per cent of crystalline alkaloids, of which not less than 15 per cent must be quinine. Amorphous alkaloids should not exceed 20 per cent, mineral matter not more than 5 per cent and water not more than 5 per cent.
- 3. The Sub-Committee of Experts propose that the Malaria Commission of the League of Nations should bring the new standard preparation ("Totaquina") to the notice of the interested Governments with a view to the adoption of the formula in the national pharmacopæiæ. The Commissions of the National Pharmacopæiæ would prescribe the tests necessary for analytical control of the product (see Appendix).
- 4. In countries where cinchona febrifuge is at present manufactured or used, the competent authority should bring, by addition of crystalline or crystallisable alkaloids. the product as now manufactured to the "Totaquina" standard.
- 5. In the malarial tropical countries where the cost of imported drugs may prohibit their use. Governments should examine the expediency of cultivating einchona species for local use as total alkaloids of einchona "Totaquina" or for chemical or galenical preparations of the bark. Before undertaking such cultivation, however, careful preliminary enquiries into local conditions should be made with the assistance of medical, botanical, chemical and agricultural experts.
- 6. According to the information forwarded by Professor Zünz and from the experience of those who have lived in Africa, it is well known that natives accept and even seek

vegetable drugs found on their own soil in preference to imported remedies. In view of this attitude, it would be desirable to place at the disposal of African colonies the results of the experiments in cinchona cultivation made in British East Africa and in the Belgian Congo and to communicate to the Governments the knowledge acquired both as to the species to be selected and as to the agricultural conditions required.

Appendix.

PRELIMINARY NOTE ON THE ANALYSIS OF "TOTAQUINA".1

INTRODUCTION.

The composition proposed for "Totaquina" is such that it can be made by extraction of the total alkaloids of the barks of such species as Cinchona succirubra and Cinchona robusta; but no particular cinchona species is prescribed as a source, provided always that the final product has the composition specified.

The following schedule of tests is of a preliminary character only and is intended merely to suggest the lines upon which the preparation of a pharmacopæial monograph may be ultimately constructed.

Colour: Yellowish-white.

Consistence: Fine powder.

Taste: Bitter.

Odour: None.

Solubility: Hardly soluble in cold water, sparingly soluble in ether, easily soluble in chloroform and warm alcohol (96 per cent).

Qualitative tests: The preparations should give the thalleioquin reaction (indicating the presence of quinine) and Grahe's reaction for cinchona alkaloids.

Moisture: The loss on drying at 100° C. does not exceed 5 per cent.

Ash: The ash left on ignition should not be more than 5 per cent.

ESTIMATION OF TOTAL BASES.

A quantity of 1.55 gramme of "Totaquina" is dissolved in warm alcohol (96 per cent), and the solution filtered. The alcohol is evaporated, the residue dissolved in 10 c.c. of normal hydrochloric acid and the solution titrated with normal solution of sodium hydroxide to determine the total alkaloidal content. This solution is to be used for the following estimation.

ESTIMATION OF QUININE AND CINCHONIDINE.

The solution is warmed on a water-bath during one hour, then cooled and filtered. To the filtrate, add one drop of a 10 per cent solution of tartaric acid in water, followed by 1.5 gramme of sodium tartrate. dissolved in 10 c.c. of water. Allow to stand two hours to ensure complete precipitation of the tartrates of quinine, and cinchonidine. The precipitate is then filtered off, washed, dried at 110° C. and weighed.

In this precipitate, the relative proportions of quinine and cinchonidine may be determined by:

- (a) The polarimetric method, using as a basis the known specific rotations of quinine and cinchonidine or,
- (b) The use of Zeisel's method for the determination of the methoxyl in the quinine present.

In the filtrate from the precipitated tartrates cinchonine and amorphous alkaloids can be estimated by any of the ordinary methods.

Any other methods worked out on the basis of further knowledge acquired will be included in supplementary schedules.

ANNEX 11.

REPORT BY THE OPIUM COMMISSION

Rapporteur: Dr. CARRIÈRE.

A number of questions have been brought before the Health Committee relating on the one hand to the application of Articles 8 and 10 of the Geneva Convention and on the other to the draft Convention on the Limitation of the Manufacture of Narcotic Drugs which is shortly to be submitted to an international Conference. The Opium Commission has studied them at three meetings and has decided to make the following proposals.

APPLICATION OF ARTICLES 8 AND 10 OF THE GENEVA CONVENTION.

ARTICLE 8.

This article makes it possible to exempt from the effect of the Convention certain preparations which contain narcotic drugs and which cannot give rise to the drug habit on account of the medicaments with which the said drugs are compounded.

Two of the Health Committee's decisions on this subject were taken conditionally. One referred to anti-opium tablets and the other to sterilised solutions of morphine or eucodal combined with atropine. The Health Committee considered that anti-opium tablets, which contain eucodal combined with powdered ipecacuanha, quinine sulphate and caffeine may only be given the benefit of Article 8 if the qualifying term "anti-opium" is omitted, as it ascribes a quality to these tablets which they do not actually possess.

With regard to sterilised solutions of morphine or eucodal in combination with atropine, the Committee considered that the proportion of half a milligramme of atropine to two centigrammes of morphine or eucodal was sufficient to prevent any abuse. It was of opinion, however, that in order to preclude in practice any possibility of recovering the drug these solutions should be supplied only in ampoules of 1.1 c.c.

These exemptions were therefore conditional and the British Government questioned their legality. The legal adviser of the Secretariat, when consulted on this point, replied that in his opinion the exact text of the Convention did not authorise conditional exemptions; the reply to any request for exemption of a preparation from the application of the Convention could only be yes or no.

In these circumstances your Opium Commission suggests that you should refer these two preparations for a further opinion and report to the Permanent Committee of the Office international d'Hygiène publique. This proposal is contained in the following resolution:

Resolution 1.

" The Health Committee

"Decides to communicate to the Office international d'Hygiène publique, for opinion and report, the observations of the British Government concerning anti-opium tablets given in the Siamese List and the sterilised solutions of morphine, eucodal and atropine on the German List, such preparations having been conditionally exempted by a decision of the Health Committee dated October 7th, 1930."

The exemptions provided for in Article 8 are based on the presence in a preparation of medicaments which render any abuse impossible. In order to simplify the procedure the French Government proposed that, when a preparation has been exempted from the Convention on the ground that it contains such a medicament, all new preparations containing that medicament in the same proportion in relation to the narcotic content shall be exempted under Article 8 without further formality. As this is a technical question, we propose that you refer it for preliminary opinion and report to the Permanent Committee of the Office international d'Hygiène publique, in accordance with the following resolution:

Resolution 2.

"The Health Committee

"Decides to communicate to the Office international d'Hygiène publique, for opinion and report, the French Government's proposal that, on the basis of preparations individually exempted hitherto owing to their containing a substance which precludes abuse, it should be agreed that all new preparations containing the same substance in proportions at least as great relatively to their narcotic content should, without further formality, be considered exempted."

The application of Article 8 also gave rise to some observations from the Governments of the Netherlands and of Egypt.

The Netherlands Government pointed out the disadvantages resulting from the application of this article. At the moment nothing can be done except to take note of these observations.

The Egyptian Government's observations refer to two preparations—cigarettes of Grimault and anti-dysentery mixture—which the Committee exempted under Article 8 although in fact, by their composition, they do not come under the Convention; they must therefore be removed from the list of exempted preparations.

ARTICLE 10.

The Committee has already decided that accdicone must be considered as capable of giving rise to the drug habit and should therefore be brought under the provisions of the Convention. The British Government pointed out that this decision should apply equally to the salts of this drug and to preparations of which it forms part. We consider this remark justified and propose that you should take it into account by adopting the following resolution:

Resolution 3.

- "The Health Committee
- "Considers that preparations containing acedicone (acetylodemethylodihydrothebaine) should be brought under the provisions of the Convention whatever their acedicone content.
- "It also considers that the salts of acedicone should be brought under the Convention in pursuance of the provisions of Article 10 of that Convention."

We would remind you that the Committee has already taken a similar decision regarding the salts and preparations of eucodal, dicodide, dilaudide and the esters of morphine.

With regard to Article 10 there still remains the recommendation adopted by the Opium Advisory Committee to the effect that the procedure for applying this article should be accelerated.

The Committee will no doubt remember that it decided by its resolution of October 31st, 1928, to accelerate this procedure by authorising its Opium Commission to examine directly the questions which may be submitted to it in accordance with Article 10 of the Convention and, after having received from the President of the Permanent Committee the opinion of the Office international d'Hygiène publique, to take such decisions as may appear to be necessary, with the approval of the President of the Health Committee.

I would also point out that the Committee of the Office took a similar decision.

The Health Committee's decision has never been applied hitherto because the Opium Commission has always met simultaneously with the Committee. The legal adviser of the Secretariat has however been requested to examine it and has expressed doubts whether the Health Committee can legally delegate powers to one of its Commissions. On the other hand he held that a conditional delegation of powers would be admissible provided the Opium Commission's preliminary opinion was circularised to members of the Committee for their approval or for any observations.

During the discussion on this question by the Opium Commission, it was pointed out that, should one of the members of the Committee who is not a member of this Commission raise any objections to the latter's preliminary opinion, he should be given an opportunity of defending his views before the Committee itself. The Commission adopted this view and expressed it in the following resolution:

Resolution 1.

- "The Health Committee,
- "Having noted the opinion of the legal adviser of the Secretariat, according to which the Health Committee has no authority to delegate a part of its powers to a Commission:
- "Retracts the decision taken on October 31st, 1928, and decides that the preliminary opinion of the Opium Commission, instead of being transmitted direct to the Council after receiving the approval of the President of the Health Committee, shall, in future, be circulated first for submission to all the members of the Committee. Should one of these members raise any objections to this preliminary opinion of the Opium Commission and maintain such objections after explanations furnished by the Chairman of the Commission, the preliminary opinion would be brought up before the Committee."

One of the members of the Commission further requested that, if its decisions were not taken unanimously, they should be brought up before the Committee. But when it was pointed out to him that, as the Commission is an advisory organ, it was sufficient for its decisions to be taken by a majority, he withdrew his proposal.

In respect of Article 10 the Opium Commission would draw your attention to a proposal by Mr. May, member of the Central Board set up by the Geneva Convention, reversing the procedure fixed by this article. While, according to this procedure, a substance can only be subject to the provisions of the Convention after a preliminary opinion has been obtained from the Office international d'Hygiène publique to the effect that it is capable of giving rise to the drug habit, Mr. May proposes that all suspected substances should be ipso facto subject to the Convention, and that substances proved to be harmless should be subsequently exempted. The Opium Commission recognised that this proposal was of real importance and, without wishing to adopt a definite resolution on the subject, considers it worth examining.

STANDARDISATION OF THE METHODS OF ASCERTAINING MORPHINE CONTENT.

Some time ago the Advisory Committee on Traffic in Opium laid before the Health Organisation a suggestion for establishing a standard method of ascertaining the morphine content of raw opium. This suggestion was prompted by the fact that the various methods laid down by pharmacopæiæ do not always give identical results. The Chairman of the Committee decided that this question should be submitted to a Committee of experts appointed ad hoc.

This Committee met at Geneva on April 9th and 10th, 1931. After studying the general aspects of the problem, it drew up a programme of research which is at present before the Opium Committee. The Committee of Experts hopes to be able to finish its work by the end of next September.

The Opium Committee, after consideration of this programme of work, proposes that you should approve it by adopting the following resolution:

Resolution 5.

"The Health Committee

"Accepts the programme of research (document C.H.975) drawn up by the Commission of Experts set up to devise a standard method of ascertaining the morphine content of raw opium."

QUESTIONS REGARDING THE WORK OF THE CONFERENCE ON THE LIMITATION OF THE MANUFACTURE OF NARCOTIC DRUGS.

We have yet to examine various questions relating to the work of the forthcoming Conference on the Limitation of the Manufacture of Narcotic Drugs.

Article 3, paragraph 2, of the draft Convention prepared by the Advisory Committee on Traffic in Opium as a basis for the work of the Conference, and Chapter 1, paragraph 6, of the Annex to this draft, provide for the creation of a "competent authority" responsible for examining and appraising the estimates furnished by Governments as to their drug requirements and, if necessary, establishing such estimates for countries which have not supplied them. These estimates will serve to establish the world's requirements; they are therefore the corner-stone of any scheme of limitation.

The task before this "competent authority" is thus extremely important. The

The task before this "competent authority" is thus extremely important. The Advisory Committee therefore considered that the medical corps, as being directly and especially concerned with all questions raised by limitation, should be associated with the work of this authority; it felt that the best means of solving this problem was for the Health Committee to be represented on the "competent authority". The Secretary-General accordingly asked the Health Committee to state whether it considered that it should be so represented.

The Opium Committee, after some discussion, recognised the need for the Health Committee's participation in the work of the "competent authority" subject to the reservation that its representation should be such as to enable it to fulfil its mission and to exercise upon the authority's deliberations an influence commensurate with the importance of the tasks with which that body was to be entrusted. It therefore drew up the following resolution:

Resolution 6.

" The Health Committee

"Considers that it should be represented on the competent body contemplated by Article 3, paragraph 2, of the draft Convention on the Limitation of the Manufacture of Narcotic Drugs, this body having the task of examining the estimates supplied by the various Governments of their requirements in the matter of narcotic drugs, and of establishing such estimates, where necessary, for countries which have not furnished an estimate. The representation of the Committee on that body should, moreover, be adequate to enable it to exercise upon its deliberations an influence commensurate with the importance of the tasks with which that body is entrusted."

The Secretary-General further submitted to the Health Committee the question as to which substances should be limited as regards production. The Opium Committee accepted the provisions of the draft Convention on this point, but drew attention to a gap in these provisions in that they contained no clause covering the limitation of narcotic drugs

subsequently declared to be habit-forming, as a result of the application of the procedure prescribed in Article 10 of the Geneva Convention.

The Committee considered that such a provision was indispensable and accordingly

drew up the following resolution:

Resolution 7.

"The Health Committee

"Considers, as regards the products the manufacture of which should be limited, that the Convention ought to include a provision whereby any products which may subsequently be pronounced habit-forming, may by application of Article 10 of the Geneva Convention, be subjected to limitation."

There remains the last question submitted by the Secretary-General to the Committee, regarding the substances to which the control provided in the Geneva Convention should

be applied.

A distinction should be drawn between "limitation" and "control". Certain substances, the limitation of which is not necessary or would not be possible - such as codeine, for example — should nevertheless be controlled in order to avoid the abuses to which they are always open. Some of them can or could be used for the manufacture of habit-forming drugs; further, their manufacture might cloak the existence of large

or small quantities of morphine which would so escape all control.

The Advisory Committee in its draft Convention contemplated the possibility of controlling all derivatives of morphine which do not at present come under the provisions of the Geneva Convention. The Opium Committee agreed in principle, but raised the question as to what the ultimate limits of such control should be. Articles 6, 12, 13 and 18 of the Geneva Convention contain detailed provisions in this respect. The Advisory Committee's draft stipulates in Article 22 that all these measures of control shall be applied to peronine (benzylmorphine) and all other substances to which the Health Committee may have drawn the Council's attention as being capable of commercial conversion into drugs coming within the scope of the Geneva Convention. It exempts all others from the formality of an import certificate.

The Committee felt that it could not at the moment enter into the details of the measures of control to be applied to these various substances. It therefore confined itself in the draft resolution given below to requesting that these various substances should be

submitted to some control, without specifying its means or extent.

Resolution 8.

"The Health Committee

- "Considers that all derivatives of morphine not coming under the Geneva Convention should be subject to the measures of control provided in Article 6 of that Convention regarding their manufacture, import, export and wholesale distribution, and in Articles 12, 13 and 18, which regulate the application of the system of certificates.'

This resolution was accepted by 10 votes, one member abstaining.

The Secretariat further asked the Health Committee to nominate a certain number of experts for the Opium Committee's forthcoming Conference. We propose that you should carry out this suggestion, leaving the Chairman of the Committee to take the necessary steps.

Finally, we must mention a paper which Dr. P. Wolff, editor of the Berlin Deutsche medizinische Wochenschrift, has laid before the Committee — a study of the different methods of treatment of drug addicts. Its author has reached certain conclusions which he desires should be considered by a committee of experts. This question is of such interest that your Committee proposes that you should give effect to his suggestion by adopting the following resolution:

Resolution 9.

"The Health Committee,

"In view of the report by Dr. P. Wolff, which suggests the constitution of a Commission for the study of the treatment of drug addicts;

"And considering that the work of that Commission would aim at bringing to light the satisfactory results of modern methods of treating drug addicts, thus favouring the popularising of these methods in all the countries concerned:

" Decides:

- "(1) To set up that Commission, entrusting to its President the nomination of the members;
- "(2) To request the Commission, as its first task, to draw up a programme of work, to be submitted to the Health Committee at an early session.

ANNEX 12.

REPORT OF THE COMMISSION FOR THE STUDY OF THE REPORT AND BUDGET OF THE EASTERN BUREAU.

Rapporteur: Dr. JITTA, Chairman.

[Translation.]

The Commission met on May 6th, 1931, at 5.30 p.m. The following members were present: Sir George Buchanan, Major-General Graham, Dr. Lutrario, Dr. Miyajima, M. Velghe, Dr. Wu Lien-teh. The following also attended the meeting: Professor Schüffner.

The Commission adopted without observations the 1932 budget proposed by the Director of the Eastern Bureau and then commented on the various parts of the Director's report (document C.95.M.35.1931.III).

As regards broadcasting, Sir George Buchanan said he had no objection to the broadcasting in clear of the Epidemiological Bulletin by the Singapore Bureau, if the health administrations desired. He did not consider it necessarily advantageous for the general public. General Graham said that broadcasting in clear would be in French for the French stations and in English for the British or Netherlands stations. M. Velghe was not opposed to broadcasting in clear in the East but did not wish it to constitute a precedent for adoption in Europe.

Sir George Buchanan having stated that he did not see any point in vessels notifying the Singapore Bureau, instead of their port of destination, of infectious cases on board, General Graham said that, at present, vessels notified neither their port of destination nor the Eastern Bureau, and that the latter received this information from the health authorities of the countries or ports aware of the presence of infection in the vessels. Moreover, not all ports were equipped for receiving communications from vessels.

The Commission associated itself with General Graham's expression of satisfaction at hearing that three Eastern countries had prohibited the importation of yellow-fever virus. He emphasised once more the very grave danger which the Eastern countries ran from the importation of virus, either for experimental purposes or as a result of accidents, which would be more numerous with the development of air traffic. The results of the experimental transmission carried out at Amsterdam by M. Schüffner, M. Snijders, M. Swellengrebel, and M. Dinger showed how real the danger was.

In connection with the anti-cholera investigations and vaccinations at Shanghai, Dr. Wu Lien-teh said they hoped to vaccinate one million people in the district of Shanghai in 1931, or about 35 per cent of the population. The number of thousand millions of vibrios per cubic centimetre of vaccine had been increased from two to four. These investigations and vaccinations had now been extended by the National Chinese Quarantine Service to Amoy and Swatow. The investigations showed the importance from the point of view of cholera of Ningpo, which was an endemic centre, twenty-four hours' journey from Shanghai. There was now a quarantine hospital at Amoy and Swatow. The Commission was pleased with the apparently satisfactory results of vaccination at Shanghai and the protection against cholera of pilgrims to Mecca in 1930.

With regard to the eastern quarantine stations, Sir George Buchanan expressed satisfaction that the documentation received by the Eastern Bureau would be placed at the International Office's disposal for its Maritime Health Year-Book and hoped that the plans of the stations could be lent to the Office, if desired, for the same purpose.

With regard to the new work to be undertaken by the Eastern Bureau, General Graham said that the Advisory Council did not consider the proposal of the Health Committee concerning the enquiries to be undertaken into the value of rice as a food sufficiently definite to allow of a resolution being passed. Sir George Buchanan said that a Conference for the study of vitamins would be held in June in London, on the occasion of the session of the Permanent Standardisation Committee, and it was possible that this Conference might propose investigations necessitating the co-operation of the Advisory Council and oriental research workers and would submit to the Council the concrete proposals it regarded as necessary.

With regard to the *staff* of the Eastern Bureau, the Commission expressed its deep gratitude to Dr. Gautier for his excellent work at Singapore and entirely associated itself with Resolution 5 of the Advisory Council on this subject. It further thanked the retiring Chairman, Dr. Van Lonkhuyzen, his predecessor, General Graham, and Dr. Hoops, who had done such valuable work for the Bureau ever since its formation.

ANNEX 13.

REPORT OF THE PRESIDENT OF THE SUB-COMMISSION ON PRISON REFORM.

1. After the Howard League for Penal Reform had laid before the League of Nations in May 1929 the proposal that measures should be taken for the improvement of prison administration, and that a draft international convention on the treatment of prisoners should be prepared, the Council of the League of Nations adopted a report in January 1930, which contains the following resolution:

"In view of the fact that the improvement of penal administration is at present occupying the attention of many of the peoples of the world and that there are certain international aspects of the question, the Council requests the Assembly to place the question on its agenda with the object of deciding the best way in which the League of Nations can co-operate with the International Prison Commission and other interested organisations in their efforts to assist in the reform of prisons in accordance with modern economic, social and health standards."

Furthermore, the League of Nations instructed the Secretary General to ask the International Prison Commission at Berne and the Howard League for Penal Reform to state the main aspects of the problem which might usefully form the subject of international measures.

As a result, the International Prison Commission submitted the "Rules for the Treatment of Prisoners", and the Howard League for Penal Reform a memorandum.

At the request of the League of Nations, the Secretary-General then asked the Health Committee in July 1930 to state its views on these two reports. For this purpose, a subcommission has been set up at the sixteenth session of the Committee.

2. Dr. Woker, chief medical officer of the prisons in Germany, has been requested by the President to submit a report on this subject.

The report (document C.H.1001) is actually under consideration by the Health Committee, which will wish to congratulate the Dr. Woker on his remarkable work.

- 3. The Sub-Commission has formed the following conclusions on Dr. Woker's report:
- (1) Each prison must have in its service a medical officer trained in general medicine and with a knowledge of psychiatry, so that:
 - (i) In addition to the treatment of ordinary diseases,
 - (ii) Infectious diseases may be combated and prevented, especially:
 - (a) Venereal disease:
 - (b) Tuberculosis, if necessary, in tuberculosis wards:
 - (iii) Attention may be paid to the treatment of mentally abnormal prisoners, either
 - (a) In special psychopathic departments, or
 - (b) In special observation departments for mentally defective prisoners.
- (2) Attention should be paid to the bodily care of the prisoners and the general rules for the hygiene of dwellings must be complied with in the prison establishments.
- (3) The food of the prisoners must be in accordance with modern dietetics, and must be sufficient from the point of view of calories and general food values.
- (4) In order to maintain their health, adult prisoners require daily exercise in the open air of at least half an hour: in the case of persons kept in prison for more than six months and young persons, exercise in the open air should be increased to at least one hour, and importance should be attached to physical exercises.
 - (5) In prison work, the general health rules for workers should be complied with.

- 4. At the same time the Commission is of the opinion that certain observations should be made on the following proposal:
 - "Women in the sixth month of pregnancy, or later, should not be admitted to prison, and persons suffering from acute infectious diseases, such as small-pox, scarlet-fever, measles, German measles, etc. should only be admitted after they have been completely cured, unless the seriousness of their offence in exceptional cases makes this impossible."

It appears to the Sub-Commission that it is sufficient to mention that pregnant women and contagious patients in prison should receive all care that the case requires.

5. The Sub-Commission considers that it is difficult to give its opinion definitely in the two memoranda submitted to it before taking note of the replies from the Governments which have been consulted. It would thus be preferable to postpone all decisions on this matter until the Sub-Commission is in possession of the above-mentioned information. The Sub-Commission invites the Health Committee to obtain the necessary information.

DRAFT RESOLUTION.

The Health Committee,

Having taken note of the Report of the Chairman of the Sub-Committee for study of the Reform of Penal Administration:

Requests the Medical Director to obtain further information as indicated in the above report, and

Asks the Sub-Committee to continue its work with a view to presenting a final report before the next Assembly of the League of Nations.

ANNEX 14. Official No.: C.280.M.131,1931.III. (C.H.1022.)

REPORT OF THE HEALTH COMMITTEE ON THE WORK OF ITS SEVENTEENTH SESSION.

(Geneva, May 4th to May 8th, 1931.)

The Session opened on Monday, May 4th, 1931.

1.

LIBERIAN GOVERNMENT'S REQUEST FOR THE COLLABORATION OF THE LEAGUE OF NATIONS.

The Committee set up by the Council at its sixty-second session to consider the problems raised by the request for assistance presented by the Liberian Government adopted, in February 1931, resolutions providing for the despatch to Liberia of experts in colonial administration, finance and health matters, to study the present situation on the spot and to present a report on the practical lines along which this assistance should proceed. The Committee invited the Health Committee to nominate the expert in health matters.

An urgent decision being required, the designation of the expert was referred to the Bureau of the Health Committee which decided, on March 26th, 1931, to nominate Dr. M. D. Mackenzie.

The Health Committee approves this nomination.

II.

REPORT OF LEPROSY COMMISSION.

The Chairman of the Bangkok session of the Leprosy Commission (December 8th to 12th, 1930) and the Secretary of the Commission gave an account of the work which had been accomplished and described the Conference convened at Manila by the Leonard Wood Memorial for the Eradication of Leprosy, (January 8th to 23rd, 1931).

The following resolution was adopted:

"The Health Committee,
"Accepts the report of the Leprosy Commission on the 'Principles of the Prophylaxis of Leprosy' (document C.H.970);
"Approves the programme of work described in the Medical Director's report

(Chapter IV a, paragraph III); and

"Emphasises the particular interest of researches on the chemotherapy, early diagnosis and decrease of leprosy in certain countries, including existing foci in Europe."

III.

NOMINATION OF A NEW MEMBER.

The Health Committee proposes that Doctor Giuseppe Bastianelli, Professor of Internal Pathology at the University of Rome, should be appointed to the vacancy existing in the Health Committee.

IV.

WORK OF THE PREPARATORY COMMITTEE FOR THE EUROPEAN CONFERENCE ON RURAL HYGIENE.

The Chairman of the Preparatory Committee for the European Conference on Rura Hygiene reported on the work accomplished by the Committee which had been convened on three occasions.

In October 1930 it made proposals concerning the provisional agenda of the Conference

(document C.H. 926).

In December 1930 a report was issued on the subjects to be included within the three items on the provisional agenda (document C.H. 952).

The Committee also decided to convene three groups of experts to prepare reports on

these items.

The group of experts on the first item met in April 1931 (document C.H. 996). The experts for the second item met in October 1930 (document C.H. 947) and in April 1931 and the third group of experts would meet in May.

The reports prepared by these experts would serve as a basis for the work of the

Conference.

At its session in May 1931, the Preparatory Committee decided that the rules of procedure of the Assembly should apply in general to the Rural Hygiene Conference, and proposed that the members of the Preparatory Committee should have the privilege of being heard at the Conference.

The Health Committee approves the report of the Chairman of the Preparatory

Committee.

V.

COLLABORATION WITH THE NATIONAL GOVERNMENT OF THE REPUBLIC OF CHINA IN HEALTH MATTERS.

Α.

Study of Chinese Pharmacological Products.

The Health Committee, in view of the proposal of Dr. J. Heng Liu and Dr. Miyajima that a Commission should be appointed for the study of Chinese pharmacological products (documents C.H. 1005 and C.H. 1008), approves this proposal and decides that the Commission should be composed of representatives of the national Commissions already set up for the purpose in China and Japan, together with experts from India.

The Committee decides to invite experts from America and Europe to join the Commission, leaving their selection to its Bureau.

It is understood that this Commission will in due course draw up a general programme of study for submission to the Health Committee, which will, in particular, comprise work to be undertaken in connection with the Institutes represented on the national Commissions.

Report by Professor Knud Faber on Medical Education in China.

1. In conformity with the plan of collaboration in health matters between the League of Nations and the Government of the Republic of China, the Minister of Education, in December 1929, requested the Health Organisation to nominate an expert to co-operate with the National Commission on Medical Education, set up jointly by the Ministries of Education and Health to study medical education in China.

Accordingly, Dr. Knud Faber, Professor of Medicine at Copenhagen University, was requested to visit the medical schools in China and to take part with the National Commission in the consideration of a model programme of medical education.

The report, prepared by Professor Faber as a result of his studies — September to December 1930 (document C.H.961) — has been considered by the Health Committee, together with the following documents submitted for the information of the members of the Committee:

- (a) Note by the Medical Director concerning the Report prepared by Professor Knud Faber on Medical Schools in China (document C.H.977);
- (b) Analysis of Comments made by Experts in China on the Report, and Reply of Professor Faber to these Comments (document C.H.1009):
- (c) Minutes of an Unofficial Meeting held in Shanghai on March 2nd, 1931, to discuss Professor Faber's Report (document C.H.1010).
- 2. The Health Committee desires to express its appreciation of Professor Faber's able report and of the valuable information and impartial, well-considered conclusions contained therein, which were highly esteemed by the Chinese authorities and experts. For the moment, the Committee believes it necessary to limit its conclusions to those stated in the present report.
- 3. The Medical Director's note supplies the Health Committee with information on the general position of the medical profession in China and on the health policy of the Chinese Government, which envisages the creation of institutions staffed with technically qualified personnel, supported by those organised bodies already in existence, in order to carry out a programme of public health protection, with necessarily limited objectives, to extend over three years.

This note also defines the functions of the "Basic Model School" proposed by Professor Faber, the need for which was recognised by the Chinese Government.

The Health Committee approves this note, which indicates the characteristics of the Chinese health policy. It congratulates the Chinese Government upon the efforts which it is making to safeguard the public health, and trusts that complete success may attend the operation of the programme.

4. Political, economic, financial and social conditions compel the Chinese Government to undertake a restricted programme with limited objectives both as regards the geographical area and the character of the health work undertaken.

It is impossible at present to undertake the study of the whole problem of public health protection, or for the time being to train large numbers of physicians.

With this particular aspect of the problem in mind, three essential points stand out in Professor Faber's report — the necessity for:

- (1) Setting up a central authority to centralise, co-ordinate, supervise and direct the work of medical education and practice;
- (2) Imparting an essentially practical character to medical education, in which clinical training (both therapeutic and preventive), should predominate;
- (3) To determine by trial the kind of school which experience shows to be best suited as a model, to provide China with physicians qualified to carry out its health policy.
- 5. The Health Committee considers that the Chinese Government will find in Professor Faber's report as well as in the Medical Director's note, which accompany the present report, the elements which are required for the organisation and functioning of the Basic Model School at Nanking the creation of this school being the first step in the reform of medical education.
- 6. The Health Committee expresses its preference for a single type of model school at which a minimum standard training would be given to a single type of physician, provided that the tendency to simplify the studies has no detrimental effect upon the scientific character which the training should possess.

On the other hand, the Committee realises the need for creating a corps of specialist physicians who have received additional training, as well as a corps of medical assistants.

It also recognises the need of a thorough secondary education (graduation from a senior middle school) before admission to the medical school.

In regard to the languages in which the training should be given, the Health Committee

agrees that the decision rests solely with the Chinese Government.

7. The Health Committee is willing, in this question, to furnish the Chinese Government with information and to arrange for technical studies which the latter may deem advisable.

In this connection, the Committee reminds the Chinese Government that it is itself now undertaking a study of medical education, and, consequently, will follow the progess of the experiment at Nanking, the results of which may be of value to other countries, with special interest.

Moreover, the Health Committee hopes that its studies on medical education may lead

very shortly to the formulation of practical conclusions on the subject generally.

VI.

COLLABORATION WITH THE GOVERNMENT OF BOLIVIA.

The Health Committee received the report of the representatives of the Health Organisation sent to Bolivia. Dr. Bilbao, Director-General of Public Health and official delegate of Bolivia, laid before the Committee a letter outlining a plan for the reorganisation of the health services of Bolivia and requesting the further collaboration of the Health Organisation in its development.

The Health Committee adopted the following resolution:

"The Health Committee,

- "Having considered the report of the representatives of the Health Organisation sent to Bolivia and the enclosed letters from the Bolivian Government, together with the proposals of the Bolivian delegate requesting the continued collaboration of the Health Organisation:
- "Decides to extend to the Government of Bolivia the services of the Health Organisation along the lines indicated in the letter of the Bolivian delegate.
 - "(1) Assistance in the training abroad of a certain number of public health officers, who would constitute the cadre of the new public health service of

"(2) The collaboration of the Health Organisation in studies regarding the distribution of diseases in the tropical and sub-tropical regions of Bolivia;

"(3) Consultative assistance in the development of the plan of reorganisation

proposed;
"(4) In the event of the Bolivian Government deciding on the study of local resources in respect of cinchona bark, the assistance of the Health Committee, through its Malaria Commission, in the carrying out of the necessary studies."

VII.

REPORT OF THE MEDICAL DIRECTOR AND BUDGETARY ESTIMATES FOR 1932.

The Health Committee approves the report of the Medical Director on the work of the Health Organisation since its sixteenth session (document C.H.967).

The Committee,

Having taken note of the budget estimates of the Health Section for the year 1932 and heard the explanations of its Bureau and its Medical Director as to responsibilities incurred by the execution of decisions previously taken with the Assembly's approval:

In order to comply with the recommendations made, accepts the proposed reductions

for 1932 in regard to:

Item I (4). General printing and documentation;

Item II (6). Miscellaneous enquiries, printing, publications and documentation, cables and telegrams for the enquiries;

Accepts also the proposed reduction in the credit provided for the Committee's sessions (Item I (1)), since the special circumstances in the League's activities in 1932 will not permit the holding of the two sessions which have taken place each year since the Committee first began, but only on the understanding that the appropriation will be brought up again to its former figure for 1933;

But considers that it is is impossible to accept a reduction in other items without reducing the activity of the Health Organisation, impeding the work of its various services and jeopardising the results anticipated from the activities undertaken in several countries.

VIII.

SEROLOGICAL CONFERENCE AT MONTEVIDEO.

The Institute for the Prevention of Syphilis of Uruguay, organised at Montevideo in September 1930 a Laboratory Conference on the Serodiagnosis of Syphilis, similar to the Conferences convened by the Health Organisation at Copenhagen in 1924 and 1928. On the invitation of the Government of Uruguay, Professor Jadassohn was designated by the Health Committee to preside over this Conference.

The Conference adopted a resolution recognising the great value of the results obtained and recommending that the Health Organisation should "invite the Montevideo Institute for the Prevention of Syphilis to continue the work of the Conference on the serodiagnosis of syphilis and to co-ordinate, in collaboration with the Danish State Serum Institute which acts as the central laboratory of the Health Organisation — and with the League of Nations Secretariat, comparative studies on this subject by the various South American serological laboratories."

The following resolution was adopted:

"The Health Committee,

"Desires to express to the Government of Uruguay, to the Institute for the Prevention of Syphilis at Montevideo, and to Professor José Scoseria, Chairman of the Organising Committee, its congratulations on the success of this first Laboratory Conference in South America;

Expresses its thanks to Professor Jadassohn for the manner in which he carried

out the task entrusted to him; and

"Approves the suggestions contained in the resolution of the Conference."

IX.

MINUTES OF THE HEALTH COMMITTEE.

The Committee, while desirous of leaving all reasonable latitude to the Secretariat in matters of detail concerning the presentation and arrangement of the printed Minutes of its sessions, nevertheless considers it essential that these Minutes should continue to be prepared and published on the general lines which have hitherto been followed. In particular, the Minutes should continue to record the views expressed by individual members, and indicate on what days and under what circumstances reported observations were made, or particular resolutions adopted.

X.

EASTERN BUREAU AT SINGAPORE.

The Committee for the Study of the Budget and Report of the Eastern Bureau presented the following resolution to the Health Committee for its adoption:

"The Health Committee:

"Approves the report of the Director of the Eastern Bureau in Singapore and the

1932 budget estimates for this Bureau;

"It endorses the resolution adopted by the Advisory Council at its session of December 1930, concerning the danger which would attach to the importation of the yellow fever virus into countries of the East. It notes with satisfaction the fact that three of these countries have already enacted legislation prohibiting the importation

of this virus, with a view to experimental purposes;

"It desires to join the Advisory Council in the expression of its gratitude to Dr. Gautier for the valuable services he has rendered to the cause of public health in the East during the four years of his directorship of the Eastern Bureau. It desires also to extend its thanks to the members of the Advisory Council, and particularly its former Chairmen Major-General Graham and Dr. van Lonkhuyzen, and to Dr. Hoops, who has been a friend and supporter of the Eastern Bureau since its creation."

XI.

REPORT OF THE OPIUM COMMISSION.

The Health Committee approves the Report of the Opium Commission (document C.H. 1023(1)) and adoptes the following resolutions:

"A.

"The Health Committee,
"Decides to communicate to the Office international d'Hygiène publique, for
opinion and report, the observations of the British Government concerning anti-opium
tablets given in the Siamese List and the sterilised solutions of morphine, eucodal and
atropine on the German List, such preparations having been conditionally exempted
by a decision of the Health Committee dated October 7th, 1930.

"В.

" The Health Committee,

"Decides to communicate to the Office international d'Hygiène publique, for opinion and report, the French Government's proposal that, on the basis of preparations individually exempted hitherto owing to their containing a substance which precludes abuse, it should be agreed that all new preparations containing the same substance in proportions at least as great relatively to their narcotic content should, without further formality, be considered exempted.

" C.

"The Health Committee,

"Considers that preparations containing acedicone (acetylodemethylodihydrothebaine) should be brought under the provisions of the Convention whatever their acedicone content.

"It also considers that the salts of acedicone should be brought under the

Convention in pursuance of the provisions of Article 10 of that Convention.

"D.

"The Health Committee,

"Having noted the opinion of the Legal Adviser of the Secretariat, according to which the Health Committee has no authority to delegate a part of its powers to a

Commission,

"Retracts the decision taken on October 31st, 1928, and decides that the preliminary opinion of the Opium Commission, instead of being transmitted direct to the Council after receiving the approval of the President of the Health Committee, shall, in future, be circulated first for submission to all the members of the Committee. Should one of these members raise any objections to this preliminary opinion of the Opium Commission and maintain such objections after explanations furnished by the Chairman of the Commission, the preliminary opinion would be brought up before the Committee.

" E.

"The Health Committee,

"Accepts the programme of research (document C.H.975) drawn up by the Commission of Experts set up to devise a standard method of ascertaining the morphine content of raw opium.

"F.

"The Health Committee,

"Considers that it should be represented on the competent body contemplated by Article 3 (paragraph 2) of the Draft Convention on the Limitation of the Manufacture of Narcotic Drugs, this body having the task of examining the estimates supplied by the various Governments of their requirements in the matter of narcotic drugs, and of establishing such estimates, where necessary, for countries which have not furnished an estimate. The representation of the Committee on that body should, moreover, be adequate to enable it to exercise upon its deliberations an influence commensurate with the importance of the tasks with which that body is entrusted.

"G.

"The Health Committee,

"Considers, as regards the products the manufacture of which should be limited, that the Convention ought to include a provision whereby any products which may subsequently be pronounced habit-forming, may by application of Article 10 of the Geneva Convention, be subjected to limitation.

"H.

"The Health Committee,

"Considers that all derivatives of morphine not coming under the Geneva Convention should be subject to the measures of control provided in Article 6 of that Convention regarding their manufacture, import, export and wholesale distribution, and in Articles 12, 13 and 18, which regulate the application of the system of certificates.

"I..

"The Health Committee,
"In view of the report by Dr. P. Wolff, which suggests the constitution of a Commission for the study of the treatment of drug addicts,

"And considering that the work of that Commission would aim at bringing to light the satisfactory results of modern methods of treating drug addicts, thus favouring the popularising of these methods in all the countries concerned,

" Decides:

- "(1) To set up that Commission, entrusting to its President the nomination of the members;
- "(2) To request the Commission, as its first task, to draw up a programme of work, to be submitted to the Health Committee at an early session.

XII.

Work of the Malaria Commission.

The Health Committee approves the report of the Chairman of the Malaria Commission and adopts the following resolutions:

" A.

"The Health Committee,

"Notes the conclusions of the sub-committee of pharmacological and chemical experts on the new preparation 'Totaquina' (document C.H. Malaria 167);

"Requests the Medical Director to arrange, with the Permanent Standards Commission, for the study of the chemical and biological methods of control of this preparation to be continued.

"These conclusions will be included in the Report to be forwarded to the sanitary administrations concerned, which will deal with the researches carried out under the auspices of the Malaria Commission in regard to the secondary alkaloids and mixtures of the alkaloids of Cinchona.

"Expresses the hope that the technical collaboration of the Malaria Commission and of its sub-committees may be made available to the Government of Bolivia in view of the organisation of the anti-malaria campaign contemplated in that country.

"C.

- " The Health Committee is gratified to learn that the first Malaria Course has now been organised at the new School of Hygiene in Athens and will begin in May 1931.
- "The Committee has followed with much interest the development of the Anti-Malaria Campaign in Greece which followed the principles and methods set out by the Malaria Commission of the League of Nations.
- "The Health Committee, noting that the Malaria Division of the Athens Centre has adopted the programme of work and of practical research elaborated by the Malaria Commission, would welcome the collaboration of this Division in the study of the problems suggested at the Conference of June 1928; the solution of these problems being related to local epidemiological conditions.

"D.

"The Health Committee is of the opinion that the researches into problems of international interest should be continued according to the programme adopted."

XIII.

REFORM OF PENAL ADMINISTRATION.

The Health Committee,

Takes note of the Report of the Chairman of the Sub-Committee for the study of the Reform of the Penal Administration (document C.H.1024).

Requests the Medical Director to obtain further documentation as indicated in the above report,

And invites the Sub-Committee to continue its work in order to present a final report before the next Assembly of the League of Nations."

XIV.

PREPARATORY PROCEDURE TO BE FOLLOWED IN DRAWING UP GENERAL CONVENTIONS CONCLUDED UNDER THE AUSPICES OF THE LEAGUE OF NATIONS.

The Assembly in 1930 referred to the Technical Organisations certain rules regarding the preparatory procedure for drawing up general conventions, with a view to "enabling the Assembly, at its next session, to consider whether changes should be made therein as a result of any suggestions which may be made".

The Health Committee, after having studied these regulations, adopts the following resolution:

"The Health Committee,

"States that it has no objection to raise to the rules of procedure in question, which it considers to be of a nature to facilitate the ratification of international conventions, even if they may involve some delay."

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Abbreviations

$$\label{eq:Committee} \begin{split} \text{Cttee} = & \text{Committee. Memo} = & \text{Memorandum. Int.} = & \text{International. Para.} = & \text{Paragraph.} \\ & \text{Prof.} = & \text{Professor. Resol.} = & \text{Resolution.} \end{split}$$

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Gerieva, December 1931.

LEAGUE OF NATIONS

HEALTH COMMITTEE

MINUTES

OF THE

EIGHTEENTH SESSION

Held in Paris on October 12th and 13th, 1931.

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List of Members.

The following members were present at the session:

Dr. Th. Madsen, Director of the State Serum Institute of Denmark (President).

M. O. Velghe, President of the Comité permanent de l'Office international d'Hygiène publique; Honorary Secretary-General of the Ministry of the Interior and of Health; Member-Secretary of the Conseil supérieur d'hygiène publique of Belgium (Vice-President ex officio).

Dame Janet CAMPBELL, Senior Medical Officer at the English Ministry of Health (Vice-President).

Dr. J. Cantacuzène, Minister for Labour, Social Welfare and Health, Professor of Bacteriology and Director of the Institute of Experimental Medicine, Bucharest (Vice-President).

Professor Jules Bordet, Director of the Pasteur Institute of Brabant, Brussels.

Sir George Buchanan, Senior Medical Officer, English Ministry of Health.

Dr. H. CARRIÈRE, Director of the Swiss Federal Public Health Service.

Dr. Witold Снорzко, former Polish Minister of Health; Director of the Polish State School of Hygiene.

Dr. C. Hamel, President of the "Reichsgesundheitsamt" of Germany.

Professor J. Jadassohn, former Director of the Dermatological Clinic of Breslau University.

Dr. N. M. JITTA, President of the Public Health Council of the Netherlands.

Professor Ricardo Jorge, Technical President of the Conseil supérieur d'hygiène of Portugal.

Dr. A. LUTRARIO, former Director-General of Public Health at the Ministry of the Interior of Italy.

Dr. G. PITTALUGA, Professor of Parasitology at the Faculty of Medicine, and Director of the School of Hygiene, University of Madrid.

Dr. M. TSURUMI, Representative of the Central Sanitary Bureau, Ministry of the Interior, Japan. Paris Embassy.

Dr. BOUDREAU, acting for the Medical Director.

The following members were absent:

Dr. G. Bastianelli, Professor of Internal Pathology at the University of Rome.

Professor Léon Bernard, President of the Conseil supérieur d'hygiène publique of France, Professor of Clinical Tuberculosis at the Faculty of Medicine of Paris.

Professor Carlos Chagas, Director of the Oswaldo Cruz Institute, Rio de Janeiro.

Surgeon-General H. S. Cumming, Director-General of the United States Public Health Service.

Dr. J. G. Fitzgerald, Professor of Hygiene and Preventive Medicine, Director of the School of Hygiene and Connaught Laboratories, University of Toronto (Canada).

General J. D. Graham, Indian Medical Service, Public Health Commissioner with the Government of India, New-Delhi.

Dr. J. Heng Liu, Minister of Health of the National Government of the Republic of China, Nanking.

Dr. M. MIYAJIMA, Professor of Preventive Medicine at the Kitasato Institute, Tokio. Professor José Scoséria, President of the Principal Council of Health, Uruguay.

Dr. A. Stampar, Former Inspector-General of Public Health at the Ministry of Social Welfare and Public Health, Belgrade.

The following also attended the sessions of the Committee:

Dr. M. G. Abt, Director of the Office international d'Hygiène publique, Paris. Colonel Russell, former Director of Public Health, Madras, British India.

Dr. P. Woringer, Head of the Children's Clinic at Strasbourg Faculty of Medicine, Secretary of the Editorial Staff of the Revue française de pédiatrie.

1. Opening of the Session.

The President, in declaring the eighteenth session of the Health Committee open, regretted the absence of the following members: Dr. Bastianelli, Professor Chagas, Surgeon-General Cumming, Professor Fitzgerald, Dr. J. Heng Liu, Dr. Scoséria, Dr. Stampar.

He announced that Professor Léon Bernard Could not attend the Meeting of October 12th, 1931 (morning)

first meeting. He welcomed Colonel Russell, who replaced General Graham.

2. Tribute to the Memory of Dr. Raynaud.

The President. — Since our last meeting we have had the great Meeting of October 12th, 1931 misfortune to lose one of our most valued members, Dr. Lucien

(morning) Dr. Raynaud was a man who combined extensive scientific knowledge with a wide experience as the responsible head of a large public health administration. He commanded to a high degree the two-fold experience called for by most of the subjects with which we have to deal, and his frequent contributions to our proceedings were both shrewd and illuminating.

The beautiful country for whose health administration he was responsible presents all the features which call for a Medical Director with a modern outlook, one thoroughly versed in the most varied questions. Algeria is a sub-tropical country, where diseases peculiar to both temperate and hot climates prevail. Some of its inhabitants still live in primitive conditions and need to be protected against infectious diseases and trained in practical sanitation. Smallpox, typhus, leprosy, typhoid fever and malaria prevail, and it was mainly Dr. Raynaud's efforts which freed Algeria of plague and cholera. The long coastline was equipped by our colleague with quarantine services, of which he had a special knowledge.

Dr. L. Raynaud was thus pre-eminently an epidemiologist, and, as the scientist and the administrator combined in him and reinforced one another, it was a pleasure to apply to him, well knowing that ample and accurate information would be received. Our Epidemiological Service is indebted to him for many fruitful suggestions.

His wide experience made him a particularly valuable collaborator at a time when questions of colonial medicine and hygiene are coming more and more to the front, and he will be greatly missed in our future work.

He combined high technical qualifications with an extremely sympathetic personality, and when the Malaria Commission held its Conference at Algiers many of us felt, in the intimate atmosphere of his home and work, the peculiar attraction of the man.

His health, unfortunately, had for some time past been affected. The disease, whose progress had made us more and more apprehensive, prevented him from taking part in our meetings as often as we would have wished and as he himself would have desired. It grieves us to-day to see his place empty, but he will at any rate never be forgotten. I feel sure I am voicing the unanimous sentiments of the Health Committee in expressing the deep regret we feel at the loss of Dr. Lucien Raynaud.

3. Adoption of the Agenda.

The agenda was adopted (see Annex I).

4. New Members of the Health Committee.

The President announced that Dr. Lasnet had been elected a member of the Health Committee by the Office international d'Hygiène Meeting of October 12th, 1931 publique in place of the late Dr. Raynaud. (morning)

He also announced that, in agreement with the Bureau, he wished to propose that a Turkish member should be added to the Committee. Meeting of Such an addition would be particularly important in regard to questions October 13th, 1931 concerning the International Opium Convention. It was proposed to appoint Professor Hussa Mettin Bey, Under-Secretary of State for (morning)

Health in the Turkish Government.

Dr. CARRIÈRE believed that, apart from all other considerations, in view of the important rôle the Health Committee would have to play in regard to narcotic drugs and the interest of the Turkish Government in this matter, the Health Committee should include an expert from Turkey, and he welcomed the President's proposal.

The proposal was adopted.

5. Decisions of the Council and of the Assembly.

Meeting of were those dealing with the floods which had devastated certain Chinese October 12th, 1931

Dr. Boudreau pointed out that the most important of these decisions which had devastated certain Chinese provinces.

(morning)

He stressed the importance of the Council's decision which "requests the Health Organisation to act on the request of the National Health Administration of China by co-ordinating the campaign against epidemics, urges all Governments to give effect, as far as possible, to the requests received through the Secretariat for assistance in combating these epidemics". The Committee should also note the generous offers made by Denmark, France, the Netherlands, Poland and Spain. According to information from the Medical Director, assistance in the form of medical and sanitary personnel and supplies would be specially needed during the coming year.

M. Velche asked how the co-ordination referred to in the Council's resolution was to be realised. Probably Dr. Rajchman, who was in China, would deal with the matter. He thought, however, that the Committee should give its views on the plan of collaboration adopted. It was not the first time it had undertaken such work.

Dr. Boudreau pointed out that the incidents in question had occurred during the Assembly session and the information available was still incomplete. The Government of China had set up a National Flood Relief Commission, with headquarters at Shanghai, and had asked the Secretary-General to nominate a director for these headquarters, stressing the necessity of a knowledge both of League methods and of conditions in the Near East. Sir John Hope Simpson, a former Indian civil servant and Commissioner of the League of Nations for the settlement of refugees in Greece, had been appointed. Dr. J. Heng Liu was a member of the National Flood Commission, and was carrying on active measures of anti-epidemic control.

The plan of work would be to divide the flooded areas into districts, each in charge of an expert, and to trace and diagnose illnesses by means of travelling laboratories, to arrange hospital accommodation for the sick, and large-scale vaccination of the population against the prevalent diseases. In order to prepare for the more serious epidemic conditions likely to prevail next year, it was essential to perfect the organisation in the districts as rapidly as possible. The diseases prevailing at present were amæbic and bacillary dysentery, malaria and smallpox. Plague had not yet appeared, and there was no great increase of cholera so far. The Secretary-General had approved of the mission to China of two members of the Health Section — Dr. Ciuca and Dr. Huang, who had accompanied Sir John Hope Simpson.

M. Velche thought he could infer that relief organisation in China was being conducted on proper lines. He wondered, however, whether the League mission would not have to rely on Geneva next year for advice or assistance. It would therefore be a pity if the Health Committee did not meet next year. To obviate this inconvenience, he suggested that the Health Section should send to the members of the Committee notes keeping them constantly in touch with everything affecting the Organisation. Generous support would only be forthcoming if wide publicity were given in Europe to the work done in China.

Sir George Buchanan concurred. The threat of epidemics was serious, and he felt sure that all countries would make a point of supporting the mission which was combating them. It would obviously be difficult at present to get Governments to make special money contributions for the medical work, but there seemed a better prospect of response to specific requests that technical staff should be lent or medical material should be supplied. For this purpose, it seemed very important that the representatives of the League on the spot should be as specific as possible in regard to their requirements. It would be better to put a particular proposition before any given country than merely to ask for its assistance at large. He hoped in this connection that periodical information about the medical position in China would be supplied as fully as possible to the members of the Committee. If the loan of medical personnel was in question, it would seem essential to know in the first instance whether their expenses could be paid out of funds available in China.

Dr. Tsurumi said that, since the floods had been reported, the whole of Japan had expressed its deep sympathy with China and had also sent large sums of money, staff, provisions, etc. Fresh expressions of sympathy had been conveyed by the Japanese delegation at the Second Committee. Diplomatic relations between China and Japan were in a rather delicate stage, but he was convinced that the Japanese nation would continue to assist China if the Nanking Government did not object.

Dr. Boudreau said he had received instructions from the Medical Director concerning the periodic bulletin to the Health Committee and could assure the members that it would contain all relevant information.

M. Velghe was satisfied with Dr. Boudreau's explanations, and added that the Office international d'Hygiène publique at Paris, which was part of the Health Organisation, would be prepared to discuss any question submitted to it.

It might, nevertheless, be advisable to allow for emergencies and to authorise the Bureau to apply, if necessary, to the Secretary-General for the credits needed to carry on the work of the mission sent to China by the Health Organisation.

The President noted that the Committee approved the decisions taken by the Council and the Assembly regarding China. The fact that members of the Health Section were in that country would certainly enable the work of the Health Organisation to be carried out in the best possible conditions. He trusted also that the members of the Committee would try to get their respective Governments to send supplies and personnel to China.

The following draft resolution was adopted:

" In view of the resolution of the Council inviting the Health Organisation to comply with the request of the National Health Administration of China to co-ordinate the efforts made to combat epidemics which threaten to follow the floods in the Yangtze Valley,

"The Health Committee,

- "(1) Decides to comply with the Council's request;
- "(2) Instructs the Medical Director to take the necessary measures and requests him to keep the members of the Committee regularly informed of the established necessities of the case as well as of action taken.
- "(3) Should the funds allocated to the Health Organisation for the purpose of this co-ordination prove inadequate, the Health Committee authorises its Bureau to make suitable representations to the Council and Assembly of the League with a view to securing supplementary provision."

6. Opium Commission.

Dr. H. Carrière commented briefly on the decisions of the Permanent Meeling of October 12th, 1931 Committee of the Office international d'Hygiène publique contained in his report to the Health Committee (Annex II). (morning)

The following draft resolutions were adopted by the Committee:

- "The Health Committee,
- "1. Notes that none of the preparations which the Estonian Government proposed to exempt from the provisions of the Convention comes, by virtue of its composition, under the control of the Convention."
- "2. Decides to postpone any decision on the two preparations having a basis of opium alkaloids and alkaloids of ipecacuanha which the Swiss Government proposed to exempt from the provisions of the Convention until it has more complete information on the emetic properties of emetin."
- "3. Decides that the 'anti-opium' pills appearing in the list submitted by the Siamese Government should be exempted from the provisions of the Convention. It expresses the hope that this preparation will not be presented to the public under the name of 'anti-opium pills'; such an appellation, suggesting as it does a property which this preparation does not in fact possess, is calculated to increase its consumption."
- " 4. Decides that the sterilised solutions of eucodal and atropine proposed by the German Government should be exempted from the operation of the Convention."
- "5. Decides that the sterilised solutions of morphine and atropine in 1.1 c.c. ampoules, proposed by the German Government, should be exempted from the provisions of the Convention since, in practice, the putting up of the solution into ampoules precludes recovery of the narcotic drug, owing to the resultant increase of price and especially to the complications which would be entailed in the process of recovery."
- "6. Having considered the proposal of the French Government that, when a preparation has been given the benefit of Article 8 of the 1925 International Opium Convention on the ground that it contains a denaturant in given proportions, all preparations containing the same narcotic and the same substance (denaturant) in the same proportions should, *ipso facto*, be exempted from the provisions of the Convention. no matter what other (non-narcotic) substances enter into their composition:

- " Considers that this proposal cannot be accepted for the following reasons:
- "(1) That other substances might be introduced into the composition of such preparations, in addition to the denaturant, which would counteract the latter and consequently destroy its effect;
- "(2) That, in order to determine precisely the possibilities of recovering the narcotic, it is essential to possess full information as to the composition of a preparation of which it forms a part."
- "7. The Health Committee recommends that any of the narcotic substances enumerated in Article I, paragraph 2, Group I, of the Convention for the Limitation of the Manufacture of Narcotic Drugs, which are not already covered by the 1925 International Opium Convention, be brought under the provisions of that Convention in conformity with the provisions of Article 10."
- "8. The Health Committee considers that perkaine (hydrochloride of the di-ethylethylene-diamide of a-butyl-oxy-cinchoninic acid) is not a habit-forming narcotic drug and that hence there is no reason to bring it under the 1925 Convention."

7. Malaria Commission.

Dr. Lutrario described the considerable amount of work done by this Meeting of Commission, whose efforts had recently been concentrated more October 12th, 1931 particularly on therapeutics owing to the serious disproportion between the quantity of quinine available and the number of malarial patients to be treated. The study made on the Committee's recommendation of secondary alkaloids had given important technical results. The use of such alkaloids, when isolated, would, however, be expensive, and attention had therefore been directed to their source — quinetum. The impression was that the product was more dangerous to the patient than the disease itself. Research had since been carried out in the United States of America, in Italy and India, which showed that quinetum had the same curative value as quinine. The Commission consequently thought it should take up the standardisation of preparations of quinetum. It suggested the use of "totaquina", while stressing the necessity for controlling preparations, as the failures experienced in the original researches were due to differences in preparing identical products.

The investigations of the amount of quinine needed was also being continued. A description was given of the theoretical courses in malariology held during the year in various countries, particularly Germany, Spain, Yugoslavia and Italy. Eleven individual scholar-

ships had been awarded for entire courses and three for practical training courses.

The Commission had also received interesting reports on international research regarding various aspects of malaria, and had been kept informed of Colonel James' recent researches on malario-therapy in general paralysis and the use of plasmoquine in the prevention of malaria. He also recalled Professor Schüffner's experiments with plasmoquine-quinine in the prevention of malaria relapses, and Professor Marchoux's researches on the factors which might influence the fecundity of gametes.

Dr. Jitta explained the interesting results secured by the use of plasmoquine and quinoplasmine and mentioned cases of relapsing malaria after using these substances. The 1930 and 1931 results had been specially favourable, whereas in 1929 relapses had been rather frequent.

Arrangements should be made to standardise sulphate of quinine, for which the requirements of the various national pharmacopæias differed very widely. If this were done, the article could be supplied more cheaply.

Dr. Lutrario agreed that an attempt should be made to standardise sulphate of quinine. Replying to Dr. Jitta, he said there was a difference between "totaquina" and quinetum. The former contained 70 per cent of alkaloids, including at least 15 per cent of quinine, but not more than 20 per cent amorphous alkaloids, 5 per cent mineral substances and 5 per cent water. The composition of totaquina might, therefore, be taken as constant. It was highly advisable that all research on this subject should be reported to the Commission as well as the results of investigations into the characteristics of the deltas of certain rivers.

Professor Pittaluga said the report on the delta of the Ebro was finished and would not be expensive to publish.

Sir George Buchanan stressed the advisability for maintaining the Malaria Commission, although the large number of members was a handicap. In view of the importance of the question, the work of research co-ordination should be continued by a small committee of malariologists and administrative officials.

Dr. Lutrario admitted that the Malaria Commission contained fifty-four members. It might be necessary to cut down this number, but it might also be useful in practice to establish a liaison with the administrative officials, as suggested by Sir George.

Dr. Boudreau thought it would not be opportune to add any more members to the Malaria Commission. Liaison between it and the Health Committee was sufficiently ensured by those members who belonged to both the bodies. It had been stated that the work of this Commission was described in League publications which were not easily available to scientists. The latter, of course, were essentially specialists and only bought publications which directly interested them. Health Organisation publications might be made more interesting if they were grouped into one periodical and thus reached a wider public.

Professor Bordet believed that subscribers could be found for these publications among public bodies if they were not made too bulky. Attention should be paid to the question of size. League publications were issued in very varying sizes and were, therefore, difficult to classify and keep.

8. Programme of Work of the International School of Advanced Health Studies at Paris.

Meeting of October 12th, 1931 (morning)

The President reminded the Committee that the Paris School of Hygiene had, through the Secretary-General, asked the Committee to discuss the programme of study submitted to it. He thought the question need not be submitted to the Plenary Committee, but be discussed merely by the Sub-Committee, as no decision on the point had to be taken.

The Sub-Committee consisted of Professor Léon Bernard (Chairman), Dame Janet Campbell and Professor Bordet, Professor Pittaluga, Professor Madsen and Professor FITZGERALD, the latter at present absent.

Agreed.

9. Questions resulting from the European Conference on Rural Hygiene.

Professor Pittaluga reported on the proceedings of the European Conference on Rural Hygiene held at Geneva from June 29th to July 7th, 1931, under his chairmanship.

Meeling of Oclober 12th, 1931 (afternoon) He recalled that the report of the Conference had been submitted to the Council before the Health Committee could discuss it. This, however, in no way predetermined the action which the Health Committee might take on the technical conclusions adopted by the Conference, but it somewhat restricted the scope of the discussion in the Committee. The Assembly and the Council referred to the Health Committee certain recommendations made by the Conference (see paragraph 3, section I, page 1, of document C.473.M.202.1931.III) — namely, the first and second recommendations adopted by its Fourth Committee under the chairmanship of Dr. Chodzko.

The other recommendations were not referred back to the Health Committee, but adopted by the Assembly and the Council; they referred to the framing of study programmes and the suggestions made at a meeting of directors of schools of hygiene regarding future work.

The Conference discussed three subjects — medical assistance, sanitation and the organisation of health services in rural districts. It was interesting to note that the Conference was attended, not only by some thirty representatives of European countries, but also by observers from countries outside Europe who showed great interest in the discussions.

The work done by the Conference might be regarded under three aspects. There were, first, the technical recommendations made in the booklet published by the Health Organisation (document C.473.M.202.1931.III,Vol.I); secondly, the collaboration achieved between experts on very different subjects — doctors, engineers, social insurance specialists, representatives of agricultural organisations, public health officials, etc.; and, finally, the possible consequences of the Conference. The latter formed the subject of suggestions for questions to be studied which the Fourth Committee submitted after consulting the directors of schools of hygiens of schools of hygiene.

The technical conclusions adopted by the Conference took the form of recommendations on the guiding principles for the organisation of medical assistance, health services and sanitation in rural districts. They were adopted after exhaustive discussion in the three Committees.

The most important result of the Conference, perhaps, was the co-operation established between various specialists who had hitherto had no opportunity of meeting to discuss problems of common interest, previosuly studied with great care by the Health Organisation. Hygienists, doctors, agriculturists, sociologists, directors of large agricultural associations and

insurance funds and representatives of major organisations dealing with agriculture, such as the International Institute of Agriculture, Rome, and the International Labour Office, had thus been enabled to make a joint study of questions and to give joint expression to opinions which had hitherto had only a sporadic existence.

The distribution of work among the three Committees contributed to a better realisation of the requirements which the technical sanitation of the countryside would involve. It was notified, for instance, that the question of the cost of such work would need immediate

concrete investigation.

At Dr. Chodzko's suggestion, a fourth Committee was formed to revise the texts issued by the other Committees and to draw up a programme for the technical study of the most urgent problems. The Health Section invited the directors of European schools of hygiene and similar institutes, most of whom were present in Geneva, to meet and put the finishing touches to the programme.

The subjects which this meeting suggested, and the Conference agreed, should be studied were:

- The question of milk in rural districts, its supply and its actual production by technical or experimental methods, considered more particularly as a carrier of infectious diseases;
 - Diseases originated by water, more particularly typhoid; (2)
 - (3) Manure and flies as carriers of infection;
 - The cost of health services and, generally speaking, of sanitary equipment;
 - (5)The expert examination of drinking-water and sewage.

Reports would be made on these questions, and it was suggested that the various schools of hygiene and health organisations should be asked to study them in the various parts of the

It was understood that these studies, which would require a certain time, would have the support of the Health Organisation and of the institutions responsible for the respective study. The arrangements which the various schools and the Health Organisation proposed to make on this subject would be known later. There was, thus, already a body of studies which would form a connection between that European Conference on Rural Hygiene and any future Conference on the same subject.

Although this was the first occasion on which such a Conference was held attended by specialists professing different methods, principles and convictions, the Committee's decisions were adopted unanimously, although discussions were sometimes very animated. These discussions demonstrated the value of the Conference, and a unanimous wish was expressed that another such conference should be held in the near future. It would, however, be difficult to confine it again to European States only, for it should be realised that the Conference had evoked very keen interest in several extra-European countries. Very careful preparation should therefore precede such a meeting, which it was calculated could not be held before five years at the earliest. Advantage would be taken of the interval to carry out some of the work proposed in the resolutions of the first Conference.

Dr. Lutrario had been in close touch with the Conference, both as a member of the Health Committee and of the Italian delegation. The question had been raised whether such a Conference should terminate by adopting a Convention or mere recommendations. It was thought better merely to adopt recommendations, as States might hesitate to commit themselves. The Conference had been the means of collecting very exhaustive information on rural hygiene, and had enabled health authorities from all over the world to collaborate direct. The opinions expressed at the Conference, sometimes on highly controversial questions had been remarkably well reproduced in the volume of Recommendations, compiled by the Secretariat.

Dr. Chodzko had attended the Fifth Committee of the Assembly and wished to emphasise the great interest taken by extra-European States in the Conference on Rural Hygiene, and their wish that another such conference should be held which they could attend. In the Fifth Committee, the question had also been raised of collaboration between medical men, sociologists and economists. The League of Nations should undertake to co-ordinate the work done in those two spheres, and in his opinion the Health Committee might ultimately submit interesting suggestions on the point.

Dr. Tsurumi said that the discussions held and recommendations adopted at the Conference, which he had attended as an observer, would undoubtedly contribute to improving the wellbeing of the countryside, not merely from the standpoint of rural hygiene, but in a social and economic sense also. The principles which the Conference had laid down would be applied in extra-European countries, where there was a growing need for improved conditions of rural hygiene. He hoped, therefore, that, despite the obstacles mentioned by Professor Pittaluga and Dr. Lutrario, a second conference would be held to which countries in other continents would be invited.

Dr. Boudreau said this was the first time the results of a Governmental Conference had been brought directly before the Health Committee. The resolutions adopted by that Conference should, therefore, be noted, and arrangements made to cary them out. One of the questions to be studied by the Committee was how best to train health visitors and sanitary engineers. He thought the Committee would agree to ask the Medical Director to submit a report on this subject.

Professor Pittaluga recalled that, as Dr. Lutrario had remarked, the Conference had not culminated in a convention obligatory on the signatory States, because its purpose was not administrative but technical. The question now was how, in the interval before a second Conference on Rural Hygiene met, progressive and effective application could be given in each country to the results of the Conference, either through health administrations or public corporations, and how this application could be followed up. No request could be made for official information to be sent to the Secretariat, but the hope might be expressed that the recommendations adopted by the Conference might lead to laws being enacted which would give them practical effect, and the Health Section could also ascertain to what extent and by what official measures the methods advocated at the Conference had been applied in the various countries. A collection of documents might also be made which, though without official significance, would, as emanating from Government representatives at the Conference, enable an idea to be formed of the reception given to the recommendations of the Conference. documents might form a third volume of the Proceedings of the Conference, of which the first contained the Recommendations and the second the Minutes.

Replying to Dr. Chodzko's question regarding the possibility of a second conference and its composition, he might state that no decision had yet been taken, but it was already clear that invitations could not be confined to European States only. It would be for

the Health Committee to make suggestions in the matter.

Sir George Buchanan questioned whether the procedure suggested by Professor Pittaluga of asking delegates what effect their countries had given to the recommendations of the Conference would be acceptable to Governments or particularly fruitful. The object of the Conference had been rather to exchange information and arrive at certain general principles than to make administrative recommendations.

In regard to the suggestion that the second conference should be held five years hence, he thought that a definite decision had better be postponed for a year or two. He had considerable doubts about the extension of the invitation to all countries of the world. Even in the case of the continent of Europe, it was difficult to concentrate on particular questions of rural hygiene which require international effort for their solution. For many countries— India, for example— "hygiene" means "rural hygiene" and the suggestion really amounted to a world conference on hygiene at large.

He was glad to note that the various questions which it was proposed should be studied (page 3 of document C.H.1066) were apparently to be studied by schools of hygiene, so that there would be no additional burden on the Health Organisation. Could the Health Organisation, perhaps, contribute to the cost of such studies, and had allowance been made in the budget for this item?

Dr. Boudreau replied that the studies undertaken would entail additional expenditure for the Health Organisation, when it had to co-ordinate the work.

Professor PITTALUGA explained that it had never occurred to him to fix the date of a second conference. He had merely voiced the suggestions made at the Conference itself.

It would be the duty of the Committee to decide the question in due course.

Replying to Sir George Buchanan's objection regarding the advisability of applying to Governments, he explained that no decision on this point need be taken for the moment. Members of the Committee would doubtless leave it to the Bureau to discover the most practical way of following up the execution of the recommendations made by the Conference. He would only ask the Committee to give a decision on the principle involved.

The Committee adopted the following draft resolution:

- " The Health Committee,
- " Having taken note of the report of the European Conference on Rural Hygiene:
- " Recognises the technical value of the results obtained by the Conference;
- "Tenders its thanks to the directors of schools of hygiene and similar institutions who have agreed to undertake certain enquiries proposed by the Conference under the auspices of the League's Health Organisation;
- "Requests the Medical Director to report to the Committee at a later session on the programme of instruction and methods of training of health visitors and sanitary engineers in the different countries."

10 a). Report of the Permanent Commission on Biological Standardisation (Meeting held in London, June 1931.)

Meeling of October 12th, 1931 (afternoon) The President described the meeting held in London in June by the Permanent Commission on Biological Standardisation and commented on its report (document C.H.1056(1)).

(afternoon) In the first place, there were really three Conferences meeting simultaneously—the Permanent Commission on Biological Standardisation, the Conference on Vitamin Standards, and the Conference of Experts on Immunisation against Scarlet Fever and Diphtheria.

The Permanent Commission on Biological Standardisation had decided to adopt the official standard unit of the United States of America for gas-gangrene (perfringens) antitoxin. He pointed out that the United States Government had recently altered its standard unit to correspond with the international standard preparations and units, particularly those relating to diphtheria and tetanus.

Gas-gangrene (vibrion septique) antitoxin had also been studied. It was proposed to try and standardise it, and there would probably be no great difficulty in adopting a standard preparation and unit as in the case of the perfringens antitoxin.

The Commission had definitely accepted the standard tuberculin after having ascertained that the standard preparations used in London, at the Pasteur Institute, Paris, and in Frankfort and in Copenhagen were equivalent.

In this connection it was announced that the experiments of Kolle had proved that a distinction should be made between the cutaneous action and the toxic action produced by injections made on tuberculous animals. In the case of some tuberculins, these two factors did not have identical effects. As the standard preparation was found satisfactory in both aspects, it was agreed that the relation between these two properties in all standard preparations made in future should be kept identical.

The Commission had also adopted recommendations for the testing of toxins to be used for the Schick test, and a standard preparation was defined.

Views differed in regard to the principles adopted in Great Britain and the United States, experiment having shown that the toxins used varied. It was therefore thought necessary to define the standard toxins. It was recommended that the combining power for antitoxin as well as the toxicity of the preparation should be taken into account.

The Commission recommended that the possibilities should be explored of obtaining for international acceptance a standard preparation of diphtheria prophylactic, and of defining in terms of this standard a unit of immunising potency for international acceptance. The Ramon anatoxin was subjected to exhaustive examination, but no agreement had yet been arrived at on the methods to be used for determining its activity. A programme of work was therefore proposed for the study of this question.

It should be borne in mind that, in cases of serious diphtheria, the serum had given excellent results in some clinics, but the results had been less favourable in others. A questionnaire was therefore drawn up for despatch to public health administrations, and the Commission recommended that the information should be collected at Geneva regarding cases of diphteria which had ended fatally in spite of treatment by serum.

As regards scarlet fever, little progress had been made, and the Commission therefore considered that, for the moment, they should merely encourage further investigations, as immunisation against scarlet fever was still in the experimental stage.

The Commission also took the view that, at the moment, it could not take any effective action towards improving the standardisation of anti-meningococcus or anti-pneumococcus serum.

The Commission received a request for the standardisation of biological products for veterinary use, and the suggestion was made that, with appropriate veterinary advice, it should promote studies relating to the standardisation of products the use of which affects human as well as veterinary therapeutics.

It was objected that, hitherto, the Commission had never dealt with veterinary questions, which explained why the field of research was confined to products affecting human as well as veterinary therapeutics — anti-tetanus serum and tuberculin and such diseases as undulant fever, anthrax and swine erysipelas. An application was made to the Office international des Epizooties for their assistance in research work relating to sera affecting both therapeutics, and it was agreed to confine research to such questions.

The Commission considered that the moment had come to undertake the standardisation of sex hormones, and Dr. Dale had suggested convening a small committee of experts on the subject. There was a risk that, as in the case of vitamins, the greatest confusion might shortly arise in this sphere if national health authorities were left to take their own measures in standardisation questions.

All the members of the Commission unanimously agreed that the standardisation of totaquina was outside the scope of their activities, and that it would be better for a special committee to study this question and certain others which had been submitted to the Standardisation Commission referring to chemical and pharmaceutical preparations. This led to the Commission's altering its title, which would now read "Permanent Commission on Biological Standardisation".

10 b) Report of the Conference on Vitamin Standards (Meeting held in London, June 1931).

The President described the work done by this Conference, held in London from June 17th to 20th, 1931, and briefly commented on the report (document C.H.1055(1)). The Conference was a striking success, Meeting of Oclober 12lh, 1931 (afternoon) and the Committee would doubtless wish to tender special thanks to Professor Mellanby, the Chairman, Dr. Dale, and the London School of Hygiene and Tropical Medicine, and particularly to Professor Jameson, who had organised the meeting.

The Conference recommended that carotene be accepted as an international provisional standard of reference for Vitamin A, and that a selected sample of cod-liver oil be held in view

as a possible secondary standard.

The Conference also recommended that the standard solution of irradiated ergosterol at present issued from the National Institute for Medical Research, London, should be adopted as international Vitamin D standard for the next two years.

It further recommended the adoption, as international standard, of the absorption product of the anti-neuritic Vitamin B prepared in the Medical Laboratory, Batavia, Java,

by the method of Seidell, as described by Jansen and Donath.

And, finally, for the anti-scorbutic Vitamin C, the Conference recommended the adoption. as international standard, of the fresh juice of the lemon.

The Committee adopted the following draft resolution:

"The Health Committee,

- " Adopts the report on the meeting of the Permanent Commission on Biological Standardisation held in London in June 1931;
- "Tenders its thanks to the experts who took part in the work and to the London School of Hygiene and Tropical Medicine for the facilities so generously afforded to the Commission.

11. Report of the Conference of Experts on Immunisation against Scarlet Fever and Diphtheria (document C.H.1057).

The President read the resolutions adopted by the Conference October 12th, 1931 (document C.H.1057, pages 4 and 5) which had been submitted to the Standardisation Commission. (afternoon)

Sir George Buchanan thought that the resolutions of the Experts Conference were reasonable and useful. He did not consider the Committee was adopting them in the same sense as the findings of the Permanent Commission on Biological Standardisation. The latter, when adopted, constituted definite recommendations by the Health Committee to the administrations concerned. In the present instance, the Committee was only presenting the

administrations with the views of the experts.

He thought that some modifications were required in the text of the report (document C.H. 1059), which summarised the data on which the resolutions were founded and explained the position generally. He referred particularly to the opening statements prepared by the Secretariat to the effect that the prevalence of, and mortality from, diphtheria showed a worldwide tendency to increase. In this connection the many pitfalls of interpretation of notification statistics relating to diphtheria must be kept in mind, as well as the great differences in practice in diagnosing diphtheria. The tables given had consequently to be read with the greatest caution, and he doubted whether it was wise to give them such prominence in the report. He pointed out, also, that, in practice, the insistence on three prophylactic inoculations creates a good deal of difficulty, and he considered the resolution on this subject too positive.

Finally, he would suggest adding to the report an explanation of the terms used, as the report was intended for the public at large, for whom many of the scientific expressions

would be unintelligible.

Dr. TSURUMI pointed out the differences of opinion held regarding the Dick test. Dr. Andov's researches gave grounds for affirming the existence of two streptococcic toxins a specific thermolabile toxin and a non-specific thermostabile toxin containing nucleoprotein. The former, which was used in the Dick test, enabled the predisposition of the organism to be estimated. Dr. Andov had published his communication, and it was to be hoped that it would be considered with all the appropriate care due to an international enquiry on the

Dr. Chodzko urged that the report should mention the desirability of vaccinating children in the spring. He also pointed out that statistics had their value. Hitherto, there had been no data from which comparisons of the annual mortality could be made. Such comparisons were highly interesting if, as was claimed, the danger of diphtheria was increasing.

The President agreed with Sir George Buchanan that changes should be made in the introduction. He, too, had observed in his own country that mortality did not increase in spite of the greater morbidity, and he believed that the result was due to the use of diphtheria prophylactics, since the present wave of diphtheria could not be regarded as a slight epidemic.

The Conference had urged three injections of ordinary vaccine, but members were unanimous in considering that more powerful anatoxins should be found which would make fewer injections necessary.

He agreed that it would be useful to advocate immunisation in the spring, although it

was generally done in the autumn, when the epidemic appeared.

He also thanked Dr. Tsurumi for his communication, and felt sure that, in future, due account would be taken of the researches carried out by Dr. Andov and by Japanese scientists.

Dr. Boudreau said the report could be modified to conform with the views expressed. As suggested by the President, he would be perfectly willing to examine with Sir George Buchanan the changes required.

The report, subject to such modifications, was adopted.

The Committee adopted the following draft resolution:

" The Health Committee,

- "Approves the reports of the experts on immunisation against scarlet fever and diphtheria (documents C.H.1057 and 1059);
- "Desires to express its appreciation to the experts who took part in the work and its gratitude to the London School of Hygiene and Tropical Medicine for the facilities so generously afforded to the Conference.

12. Studies to be undertaken regarding Physical Education.

The President observed that, at the spring session, at which Professor Meeting of October 12th, 1931 Ottolenghi was not present, his report had been circulated to the Committee, which had thought it better not to extend the scope of this (afternoon) investigation too far and to give it a strictly scientific character. The organisation of centres in various parts of the world was impossible. For the moment, therefore, investigations should be confined to muscular fatigue, on which specially interesting suggestions had been made in spite of the difficulty experienced in finding human subjects for experiment.

Dr. Lutrario had drawn up a note on physical education and its position in the various countries, which he would circulate later to members of the Committee. An interesting feature was the collaboration proposed between organisations for physical education and the International Educational Cinematographic Institute.

The Committee adopted the following draft resolution:

- " The Health Committee,
- "On consideration of the recommendations concerning the study of physical education put forward by the experts who met at Copenhagen in January 1931;
- " Accepts the proposal presented by its President to undertake, with the assistance of competent experts, laboratory investigations into the physiology and effects of extreme muscular fatigue.'

13. Draft Memorandum by the Reporting Committee for Maternal Welfare and Hygiene of Infants and Children of Pre-School Age.

Meeting of October 13th, 1931 (morning)

Dame Janet CAMPBELL, commenting on the report, stated that the Reporting Committee had based its work on the results of the enquiries into infant mortality, and on the extensive information elsewhere available. It had tried to trace the general outlines of a plan for combating material and infant mortality and had laid down the maior principle. ing maternal and infant mortality and had laid down the major principles of an organisation which could be adapted to special conditions.

In the case of infant mortality, there were three main dangers to be combated — those due to obstetric and developmental causes, including still-births, the dangers of nutrition and of respiratory diseases. The first occurred in almost identical proportions in all countries and the mortality remained almost stationary. The second was comparatively infrequent in countries where the mortality was low, and the same was true to a less extent of respiratory diseases. The Reporting Committee recommended concentrating special attention on the first group. It stressed the close connection between maternal mortality and the morbidity of expectant mothers and women in child-birth, and had investigated the connections between early infant mortality and maternal morbidity.

The Committee had, further, studied the question of the health of children of pre-school age — that is, from 2 to 6 years. In many countries, such children were not under special supervision, and could hardly be systematically supervised, as there was no control, such as

that furnished by infant welfare centres or school medical inspections. The Committee had been fortunate in having the assistance of Dr. Woringer in this connection.

The report was divided into three chapters — maternal welfare, infant hygiene, and hygiene of children of pre-school age.

Special study had been devoted to maternal welfare in various countries, but less attention had been directed to it than to infant mortality. It was found that the risks were almost identical in all countries — viz., the risk of puerperal infection, the obstetric risk and the various diseases arising during pregnancy.

Economic and social conditions bearing on maternal mortality were fatigue, insanitary accommodation and inadequate hygiene. The campaign for maternal welfare would entail a number of legislative measures guaranteeing relief and rest for the mother before and during confinement. The draft Washington Convention might serve as an example of such legislation. Some countries paid a nursing allowance to mothers breast-feeding their infants and arranged medical examinations for expectant mothers and assistance to women in child-birth. Pregnant women should be given facilities for obtaining medical advice and treatment. Pre-natal supervision should be in the hands of doctors and midwives. It had, however, been realised how difficult it was in all countries to persuade women to take advantage of the opportunities afforded them for obtaining such medical assistance, or to consult doctors or to submit to special supervision before confinement. It was a question of educating public opinion as well as midwives and doctors as to the need for maternal welfare. The latter should be encouraged to give their advice voluntary and to persuade expectant mothers to accept it. One secret of preventing maternal mortality lay in organising pre-natal supervision, thus preventing many cases of toxemia, eclampsia, and all the difficulties arising out of the disproportion between the size of the feetus and that of the maternal pelvis. Provision should therefore be made for a sufficient number of hospitals, maternity homes and qualified midwives, and for social relief to expectant mothers. Attention would also have to be devoted to welfare work on behalf of unmarried mothers and steps taken to re-educate public opinion on this subject. The chapter concluded with a reference to the questions of abortion and birth control.

Chapter 2 dealt with infant hygiene. An exhaustive study had already been made of the question of infant mortality. The danger due to obstetric causes had been studied in conjunction with still-birth and early infant mortality. This study had gone hand in hand with that of infant welfare during the first year of life. The congenital risk was mainly obstetric in origin and closely connected with the morbidity of the mother. The remedies were therefore the same as those advocated for the mother.

The welfare of children of pre-school age was entirely fresh ground, and some suggested solutions were controversial. Several countries had initiated some welfare work for children of pre-school age. The period under examination was much longer than that which had hitherto been investigated, as it extended from the age of 1 year up to 5 or 6. The period was one of rapid growth, during which the child was exposed to all the diseases peculiar to child-hood, particularly infectious diseases and those caused by unsatisfactory living conditions. The problem was thus one both of mortality and morbidity. The latter might be solved by general health measures, which again meant the training of the mother in child management, together with a physical upbringing of the child favourable to his physiological development. The mortality of children of pre-school age was mainly due to medical causes, the greatest number of deaths being from infectious diseases, followed by affections of the respiratory organs, tuberculosis, accidents, gastric complaints and, to a small degree, other troubles. There could be no hope of abolishing infectious diseases during childhood, but an attempt might be made to postpone their incidence, as it had been found that the death rate decreased as the child grew older.

The report dealt with the mental as well as the physical health of the child. This was a sphere in which comparatively little action had been taken, and rather more space therefore was devoted to this problem, as opinion was still divided on what should be done. An attempt, however, had been made to define the ideal treatment, not only for abnormal, but also for normal children.

A scheme of reform on the lines laid down in the report would involve rather heavy expenditure. But definite results could be obtained at much less cost by extending the infant welfare organisation. The chief measures included regular supervision by health visitors, medical supervision at welfare centres, also the organisation of nursery schools and kindergartens and homes for children living in bad hygienic conditions.

The Committee had also considered the training of nurses and midwives, and had urged that obstetrics and pediatrics should be given a larger place in the curriculum of medical schools. As regards health visitors, the Committee found that much of the success of the campaign against infant mortality depended on their capacity, and considered that visiting nurses should hold a general diploma which implied a good all-round training in public health work.

In conclusion, the report stressed the close relations between the organisation of maternal and child welfare and the other branches of modern public health with which it formed a single service. In organising a health service, whether central or local, account should, therefore, be taken of the need for close collaboration between these various branches. Such co-ordination was simple enough in urban centres, but might be difficult in the country. Accordingly, the scheme advocated by the Conference on Rural Hygiene seemed to be the best which could be put into practice at present.

The Committee's report was to a large extent a preliminary report. The study of many

questions had been postponed until favourable circumstances presented themselves.

Sir George Buchanan drew attention to some conclusions of the report which he had already mentioned to Dame Janet Campbell. The expression of opinion about the methods by which infectious diseases should be dealt with, especially those on page 10, would in many cases be difficult to accept administratively, and it was not desirable that a report of this kind should lay down what countries ought to do in this respect by legislation. He did not think the Committee would be well advised, in speaking of notification, disinfection, vaccination, and other prophylactic measures, to insist too strongly on legislative compulsion or even to represent it as theoretically the best method of securing the results desired.

Professor PITTALUGA announced that maternity insurance had been introduced into Spain. The Special National Institute had asked the National School of Health, of which he was in charge, to select two inspectors who would be attached to this Maternity Insurance Department. That, he thought, was a welcome attempt to connect social insurance with health services.

Dr. Jadassohn was gratified to note that, in the part of the report dealing with syphilis, the great importance of this disease had been duly appreciated. Fresh congenital syphilis was much rarer than it had been some years ago, and had decreased in many countries where fresh acquired syphilis had also become less frequent. Latent syphilis in women, which was the principal source of congenital syphilis, was more difficult to trace, and the only practical method was to make a serological test before child-birth or at the moment of confinement. This was frequently done in clinics and hospitals, but should be resorted to more often. The question had been discussed a year ago at the "Reichsgesundheitsamt" and the suggestion made that all pregnant women should be compulsorily examined. Such general action was, he thought, unnecessary, but the test should certainly be made much more frequently. It was easier to diagnose the disease at the moment of birth by testing the blood of the placenta, which was very suitable for this purpose.

He had the impression also that insufficient importance had been attached to syphilis

He had the impression also that insufficient importance had been attached to syphilis acquired at school. School doctors' attention should be drawn to the necessity of making a serological test of suspected children, particularly as this might lead to the discovery of a

whole family needing treatment for syphilis.

Professor von Hahn, of Berlin, had suggested an international enquiry, and he wondered

whether this should now be undertaken.

He noted the reference to the keen controversies regarding the effect of syphilis on mental diseases of children. A meeting might perhaps be held on this question, and here again serological tests of expectant mothers would prevent the most frequent cases.

The objection that pre-natal treatment was ineffective was, he thought, a mistake. He advocated widespread publicity being given to the prophylactic value of this treatment, and that stress should be laid on the fact that congenital syphilis was a disease which could easily be avoided.

The President announced that he had conducted a similar enquiry in Denmark, by means of the register of venereal diseases, with excellent results, as he had been able to follow up 90 per cent of the cases.

Dr. Lutrario, referring to the paragraph on page 51 dealing with physical education, reading: "The question of physical education should be of extreme interest to all doctors and nurses responsible for the rearing of children of pre-school age", said that, in Italy, radical steps had been taken to promote maternal and child welfare. A great national institution had just started work and was already giving very valuable results. He intended to draw up a note on the subject for the Committee's use. He was glad to see that this paragraph laid down the fundamental principle that physical exercise should aim, among other things, at developing the breathing capacity of children. He agreed with the Danish expert, Captain Müller, that an increased breathing capacity helps to develop a child's intellectual faculties. He also drew attention to the sentence warning persons responsible for the physical training of children against overtiring their pupils. There was a tendency sometimes to overdo the exercises which children had to perform, thus inducing enlargement of the heart and predisposing them to cardiac troubles. It had been remarked that a 100-metre race raised the pulse to 70, a 200-metre race to 190, and a 400-metre race to 200. It had also

been observed that teachers of physical education had usually rather stereotyped views, and had not received an adequate professional education. Italy was therefore trying to remedy this defect by opening special courses for them. Some thousand teachers of physical training had already taken these courses.

The President said that the choice of physical exercises to increase the breathing capacity had given rise to acute controversy, and he would advocate modifying the relevant phrase in the report until the authorities were unanimous on the point.

Professor Cantacuzène, with reference to the paragraph on page 44 dealing with tuberculosis, was sorry to see no mention made of the incontestable results which had been secured by the use of anti-tuberculosis vaccine in the countries where such vaccination was practised on a large scale. There was no need to recommend a special method for compulsory application, but attention should be drawn to the results obtained on which there was universal agreement. The effect of Calmette's BCG on mortality, from whatever cause, during early childhood was obvious. The mortality of children from sundry causes was two, three or four times greater in the case of unvaccinated than in the case of vaccinated patients, and the decreased mortality from tuberculosis among vaccinated children was considerable. In Roumania, where the mortality in infected families was 25 per cent, the mortality of vaccinated children had fallen to 1.4 or 2 per cent. Personally, he believed that the problem of vaccination against tuberculosis was solved since BCG vaccination entailed a considerable decrease in general mortality as well as in tuberculosis mortality in infected families.

Professor JITTA thought that insufficient reference had been made in the report to smallpox. He would like attention to be drawn to the great advantage of vaccination in the two first years, especially as infants supported vaccination much more easily than others.

Sir George Buchanan considered that the following sentence on page 55 should be deleted: "The very rare cases of post-vaccinal encephalitis constitute an infinitely smaller risk than a smallpox epidemic", seeing that there had been a rather large number of cases of post-vaccinal encephalitis. He would prefer the wording: "Post-vaccinal encephalitis hardly ever occurs in cases of infant vaccination".

In the chapter dealing with diphtheria (page 51), he would prefer, instead of mentioning Ramon's anatoxin, to say that "an anatoxin formed a completely harmless vaccine, etc."

Similarly, on page 52, it would be better to say nothing about compulsory vaccination before admission to day nurseries, kindergartens, etc., but merely to state that active propaganda should be conducted in favour of more extensive vaccination, etc.

On page 54, also, too much stress, he thought, was laid in the paragraph on whooping-cough on the isolation of patients suffering from this disease, as it was frequently rather difficult to arrange for such isolation.

The President also agreed that it would not be easy to prove the proportion of 98 per cent immunity said to have been positively obtained by the Ramon anatoxin. It was unfortunate, also, that nothing more definite could be said of the results obtained by vaccination against whooping-cough, as these results were still very controversial.

Professor Pittaluga thought that, as regards the Calmette (BCG) vaccine, Professor Cantacuzène would be satisfied with the paragraph "Campaign against Tuberculosis", on page 36 of the report. He might mention, in this connection, that experiments had been made at Barcelona, and it had been found that vaccination with BCG gave incontestable results, both as regards general mortality and the specific mortality of children living in an infected environment.

Professor Bordet mentioned that, in Belgium, vaccination with BCG, very carefully applied, had given satisfactory results. He thought the occurrences at Lubeck were due to extraneous causes and should not perplex experimenters. Medical men were becoming more and more favourable to BCG vaccination, although no propaganda had been made. He trusted that experiments would also be made in England, as he thought those responsible for the national health would feel extremely sorry if it were proved later that this vaccine was effective and would have been the means of saving human lives.

Sir George Buchanan mentioned that he had lately contributed some observations to the Permanent Committee of the Office international d'Hygiene publique on the observations made in England regarding BCG vaccine and the present English attitude in regard to it, which was very far from being indifferent. He would be glad to send a copy to Professor Bordet.

Dame Janet CAMPBELL thanked the members of the Committee for their remarks on the report, and said it would be quite easy to make allowance for them in the final publication.

The Committee adopted the following draft resolution:

"The Health Committee,

"Having examined the draft report of the Reporting Committee on Maternal Welfare and the Hygiene of Infants and Children of Pre-School Age:

"Considers that this report embodies fundamental principles by which health administrations may usefully be guided in their efforts to prevent maternal and infant mortality;

" And adopts the report."

The President, on behalf of the Committee, thanked Dame Janet Campbell and the Committee of Experts for their remarkable work.

14. Report on Health Questions arising out of the League of Nations Mission to Liberia.

Meeting of October 13th, 1931 (morning)

Dr. Mackenzie explained some of the medical aspects of the recent League of Nations mission to Liberia. The medical and health questions would form a part of a general report which the mission would present to the Council in January.

The principal health reforms required in Liberia were the creation of hospitals and a public health service, the establishment of measures for the control of yellow fever particularly, and other infectious diseases, the appointment of a medical officer of health for the city of Monrovia and the organisation of medical work in the interior.

Professor Pittaluga observed that the situation in Liberia appeared to have changed little since he visited it some twenty years ago. The harbour of Monrovia, fortunately, was closed by a bar, which prevented vessels from coming alongside, but it was quite possible for a plague-infected rat to be conveyed to land in a native canoe.

Bearing in mind the fact that the stegomya mosquito occurs all along the Mediterranean coast, the lack of control of yellow fever in Liberia and the possible introduction of plague constituted an international danger. The Health Committee should therefore emphasise the conclusions of Dr. Mackenzie's report and urge the Council to keep the Health Organisation acquainted with the proposed medical work in Liberia with a view to subsequent action.

Dr. Boudreau pointed out that Dr. Mackenzie's statement explained the health recommendations which would be in the report of the mission to the Council. The Health Organisation of the League would be asked to help if the Council decided to adopt the experts' recommendations. He proposed the following draft resolution:

" The Health Committee,

"Having heard the statement of Dr. Mackenzie, the health expert sent to Liberia by the Council Committee to enquire into the measures necessary for the improvement of the health services:

"Approves the recommendations made by him and places its services at the Council's disposal for any assistance which the Council may require in connection with the execution of these recommendations."

The draft resolution was adopted.

15. Cancer.

Meeting of October 13th, 1931

Sir George Buchanan (Rapporteur) said that, while he had been in communication with members of the former Cancer Commission and of

October 13th, 1931 its Sub-Commissions, the time had not yet seemed ripe for getting together a special meeting of a Reporting Committee on the subject. He took the occasion to refer to the necessity of maintaining interest in the international system of collecting data regarding the results of radium treatment of cancer of the uterus. This he hoped would be stimulated by some expert visits which were being arranged by the Secretariat to some of the principal Institutes in Europe. He trusted that members of the Health Committee would give any assistance possible in the matter.

Sir George added that he had been asked to act as Rapporteur on the question of rheumatism, but had suggested that Professor Jitta should do this instead. He trusted Professor Jitta would be able to do so.

Professor JITTA said that he was still quite prepared to act as Rapporteur on the question of rheumatism. He had discussed the subject already with the Medical Director, who was to make suggestions regarding a plan of action.

16. Leprosy: Communication of Dr. Tsurumi.

Meeting of
October 13th, 1931
(morning)

Dr. Tsurumi pointed out that, at the Committee's last session, he had announced the formation in Japan of an association for the prevention of leprosy. This body had now been functioning for some time and its programme of work for the year was as follows: (1) propaganda; (2) enquiries and researches; (3) protection; (4) relief; (5) creation

The appropriations for this work amounted to 41,680 yen (\$20,840). For propaganda purposes, films had already been made depicting the Tokio and Aomori leprosaria as they at present existed, and it was intended to make films of four other leper establishments.

The association had also, on August 20th last, sent a questionnaire to the leprosaria, medical faculties, schools of medicine and prefects. The question put to the medical faculties and schools of medicine was: "Are there any bodies or individuals engaged in leprosy research?" If so, the association asked for information on the subjects of the researches and the theses dealing with the question, the names of persons carrying out the researches and the approximate cost of such work, to which the association proposed to contribute.

The question put to prefects was: "Are there any children in a leper family who need to be reared away from their family?" Information was desired as to the names of such children, the date of birth and the reasons why they should be segregated. It also asked for the name of the person responsible for the welfare of such children, as the association was prepared to make an annual payment of 120 yen per person.

The association further aimed at setting up leper centres in leprosaria for persons suspected of being lepers and for lepers who, for special reasons, could not be treated at home, or admitted to leprosaria for lack of beds.

The enquiry would cost 8,000 yen (\$4,000). Half of this amount was for general research and the other for special research on the subject of chaulmoogra oil. An amount of 5,580 yen (\$2,790) was allocated for the creation of centres.

17. Administrative Questions.

(a) Appointment of Vice-Presidents for 1932.

Professor Cantacuzène, on Dame Janet Campbell's and his own behalf, thanked the Committee for the confidence shown in electing them Vice-Presidents. As the Bureau, however, during the coming year would have heavier duties than in the previous year, it was important that the Vice-Presidents should be able to meet easily. Accordingly, he proposed the appointment of Professor Léon Bernard, Dr. Hamel and Dr. Tsurumi.

This proposal was adopted.

(b) Sessions of the Committee and Budget of the Health Organisation for 1932.

The President explained that reasons of economy had led the Secretary-General to ask for the session to be considerably shortened, of (morning) and emphasised that this decision was in no way due to lack of appreciation for the work done by the Health Organisation. The speeches made by several delegates at the last Assembly had, on the contrary, shown that the results achieved were highly appreciated.

For the same reasons, the budget had been seriously reduced.

Dr. Boudreau observed that, at its last session, the Health Committee had, on the proposal of the Supervisory Commission, agreed to the cancellation of one of its annual meetings in 1932, owing to the rather special circumstances created by the convening of the Disarmament Conference. In such exceptional circumstances, the Committee had agreed, but it had been clearly specified that it should not be taken as a precedent for the future.

When the twelfth Assembly considered the financial position of the League it found that a number of countries had been unable to pay their contributions for the current year, and the League was thus, for the first time in its history, threatened with a deficit. The Assembly therefore asked the Council and the Governing Body of the International Labour Office to cancel or adjourn the meetings proposed during the latter months of 1931. The Health Organisation had been asked whether this session of the Health Committee could be cancelled, and, as this had proved impossible, the strictest economy was required in its conduct. When the Supervisory Commission was examining the Health Organisation's budget for 1932, the Secretary-General had stressed the importance of the rôle played by the Health Committee.

The League budget for 1932 was swollen by the appropriations made for the Disarmament Conference. As compared with 31½ million francs in 1931, the 1932 budget amounted to 35½ million francs. Several countries felt they might be unable to pay the larger contributions involved, in view of the current economic and financial crisis. It was felt that, when national Governments were reducing their expenditure, that of the League should not be increased. Furthermore, it would be difficult to carry on the regular work of the League during the Disarmament Conference. There would be a shortage of space and personnel at Geneva, and secretarial staff, interpreters and précis-writers would not be available for work outside Geneva. The Assembly had therefore decided to make as large a total reduction in the League budget as possible, while admitting that for normal times the budget was perfectly appropriate, and could not be regarded as at all excessive.

As the staff was engaged on a contractual basis, the Assembly could not reduce salaries, so that, in the case of sections whose budgets consisted mainly of staff salaries, no serious reductions could be made. All sections had had their budgets reduced more or less proportionately, allowing for what had just been said regarding salaries. A cut of 277,930 francs had been made in the Health Organisation's budget. In the circumstances, it would be seen that the Health Organisation's budget had not been affected more seriously than that of the other

organisations.

The President thought the Committee were agreed that the cut made in the Health Organisation's budget should be regarded as purely temporary.

Sir George Buchanan said that those members of the Committee who, like himself, had followed the proceedings of the Second Committee of the Assembly would all be glad to testify to the great interest which had there been taken in the work of the Health Organisation. The diminution made in the budget was part of general League policy affecting all the technical organisations, and not directed with any special severity on the Health Organisation. The circumstance need not be taken too tragically, seeing that the cut had merely brought the allocation to the Health Organisation back to the million Swiss francs at which it was stabilised until recently. Moreover, additional funds were available for such special purposes as the work in China, and the money put at the disposal of the Health Organisation by the Rockefeller Foundation remained intact. No one could have done more than Dr. Boudreau to make clear the value and scope of the health work of the League and the importance of its receiving the fullest possible financial support.

Meeting of October 13th, 1931 (morning) M. Velghe submitted the budget as adjusted by the bureau. Members would recollect that an all-round reduction had already been made in the budget of the Health Organisation as compared with the previous year. The bureau had distributed the economies made in accordance with the needs of the Organisation's work. Commenting on the separate need out that the bureau had tried to arrange things so that there would be

budget items, he pointed out that the bureau had tried to arrange things so that there would be as little curtailment as possible of the Health Organisation's activities, either as regards its sub-committees or the investigations undertaken. There would be sufficient funds for the Singapore Bureau, providing rigid economy was practised, so that the Committee might be assured that 1932 would be a year of at least normal activity for the Health Organisation.

Professor Cantacuzene, while agreeing that the Health Organisation's budget had not been more heavily cut than that of other organisations, thought stress should be laid on the desirability in future of the Health Organisation's work being carried out as far as possible in its entirety. He therefore submitted the following motion:

- "The Health Committee,
- "Finding that the 1932 budget of the Health Organisation has been considerably reduced by the Assembly:
- "Takes note of the fact that this reduction is due to exceptional circumstances, but considers it of the highest importance to the work of the Health Organisation that the credits allotted in future should be sufficient to enable the Committee to carry out the work entrusted to it by the Council and Assembly of the League."
- M. Velche assured the Committee that the bureau, the Medical Director and several Members of the Assembly had all done their best to keep the budget at its original level and had failed only because there was no hope of getting the Assembly to adopt such a course. He agreed with Professor Cantacuzene that, when such severe cuts had been made in their budget, the logical procedure was to draw attention to the special importance of the Health Organisation's work. In Parliamentary debates, health budgets were commonly considered as an extravagance which could be cut down at will. It should, therefore, be emphasised that health expenditure was not so much a form of public relief as an insurance premium, and that the economic depression was no justification for surrendering the insurance.

Professor Cantacuzène's proposal was adopted.

(c) Continuation of Work in the Interval between the Two Sessions of the Committee.

Meeting of Committee's next session. Such an interruption might seriously affect the Health Organisation's work. The bureau must, therefore, have rather wider powers to enable it to keep in touch with members and take the decisions necessary for the successful completion of investigations still pending in the long interval which must elapse between the two sessions. In submitting the following resolution, therefore, it was understood that the Secretariat would keep Members of the Committee informed of the bureau's meetings and send them the agenda of, and decisions taken at, such meetings:

- " The Health Committee,
- " In view of the fact that it is contemplated that a period of approximately one year will elapse before the next session:
- "Authorises its bureau to take any action which may be required to carry on the study of questions which are now under investigation in pursuance of resolutions already adopted by the Committee, or which may hereafter be communicated to the Health Committee by decisions of the Council of the League of Nations."

Dr. JITTA, in supporting the proposal, urged that members of the Committee should be given sufficiently long notice of any specially important question.

Sir George Buchanan said that, according to the Constitution, in the interval between sessions the President was responsible for carrying on the Committee's work in consultation with the bureau and any members to whom he saw fit to apply. He considered that this provision should be enough to meet the present circumstances, but would not oppose the present resolution, seeing that it had been worked out between the Medical Director and the bureau before the departure of the former, and that the temporary additional authority given to the bureau was considered advantageous. He trusted that, when the bureau met in ordinary circumstances under the terms of this resolution, the members of the Health Committee would have been informed of the fact in advance, and so have had the opportunity of directing attention to any work of the Health Organisation which they thought required attention. He would like to be assured also that the resolution did not interfere with the preparation and distribution of the annual report at the normal time. He also pointed out that Article 3 of the Rules of Procedure regarding cases of emergency authorised the convening of the Health Committee at the request of seven of its members. Although this article had never been put into effect, it should be understood that it is not abrogated by the resolution now submitted.

The resolution was adopted.

(d) Publication of the Technical Reports of the Health Organisation.

Sir George Buchanan said that he had already been asked whether the report on immunisation against scarlet fever and diphtheria could be oclober 12th, 1931 (afternoon) (afternoon) (afternoon)

The President thought the question was important. It might be inadvisable to wait for all the reports to be submitted to the Committee before publishing. There was no objection to publishing documents of a strictly technical nature, but a report on administrative questions such as that now being discussed was an entirely different matter. Did the Committee agree that technical reports might be published before they were approved by the Health Committee, seeing that such approval was usually purely formal?

M. Velghe thought that, when the Health Committee asked experts to investigate a technical question, it was embarrassing for it approve their report, since the technical qualifications of members of the Committee might be questioned. Generally speaking, therefore, the Committee should merely take note of scientific reports, and in the present case publication need not be held up until the report had been submitted to the Committee. In his view, not merely was there no objection to publication, but it was even a duty. It would be a pity to keep their light under a bushel. When important scientific work had been done it was the duty of the Health Organisation to publish it on the responsibility of the scientists concerned. It was for the general public, whether men of science or administrators, to draw their own conclusions from such report. The Health Committee was in no way committed so long as it had not drawn any conclusions itself, particularly as regards whether administrations should give effect to a particular measure. The Committee, for instance, took note of the report on diphtheria, but did not decide whether populations should be invited

to submit to anti-diphtheria vaccination. The position would be different if there was a resolution of the Health Committee containing a recommendation to Governments. In such case there would have to be a discussion followed by a vote.

Professor Bordet concurred. In this connection he wished to comment on the way in which documents on the work of the Health Organisation were published. These publications were very numerous, and he felt the selection should be more drastic, so as to make the volume less cumbersome. Could the Health Committee not arrange to issue a short bulletin describing its work?

Sir George Buchanan thought that there were often circumstances in which it would be desirable to publish an expert report without waiting for its formal submission to the Health Committee. There was, however, the difficulty that experts had a habit of giving their views on administrative or other questions outside their particular expert province. It was, moreover, often difficult to dissociate the scientific from the administrative aspect of their studies. The case might be met by publishing the report clearly as a signed report of the experts to the Health Committee, adding a note or preface in a standard form to the effect that the Health Committee had not yet examined the report.

Professor Cantacuzène supported Professor Bordet's remarks. Some of the investigations made under the auspices of the Health Committee led to results which generally remained unknown, and yet it would be extremely valuable if they were made accessible to the medical world generally, if only to provoke discussion. In addition, therefore, to the selection which Professor Bordet suggested, steps should be taken to make the reports more widely known to the medical world generally.

Sir George Buchanan recalled in this connection the suggestion made at the preceding meeting by Dr. Boudreau regarding the publication of reports in medical periodicals. This would ensure the publicity desired by Professor Bordet and Professor Cantacuzène and cost nothing.

Dr. Boudreau remarked that, at the Committee's last session, the Medical Director had read a note on the publication of a quarterly bulletin, and had hoped at this session to make definite proposals on the point. From enquiries made in the medical world it had been found that the ordinary medical practitioner found it very difficult to keep abreast of the work done by the Health Committee. Very often he could not get the Committee's publications, the cost of which was sometimes rather high, so that the idea had been mooted of publishing certain committees' reports in scientific journals with the statement that these experts had met under the auspices of the League of Nations. The advantage of the suggestion was that it did not involve any extra cost.

The President noted that the Committee were agreed on the form of publication suggested for work done under the Health Committee's auspices. The experts themselves would bear entire responsibility for the scientific work done; and the Health Committee would only be committed where it had passed a formal resolution.

(e) Invitations to the Health Committee.

Mecting of October 13th, 1931 (morning) Dr. Boudreau said the following invitations had been received by the Health Committee:

The International Association for the Prevention of Blindness asked that a delegate of the Health Organisation should attend its General Assembly to be held in Paris on November 14th.

The International Congress for Urban Hygiene and Sanitary Engineering, to be held at Lyons on March 7th, 1932, wished to have a member of the Health Committee on its Committee of Honour.

The International Congress for Mediterranean Health, to be held at Marseilles on September 20th, 1932, wished to have the patronage of the Health Organisation.

The Executive Committee of the Second International Congress on Tropical Medicine announced that it would meet at Amsterdam in September 1932.

He proposed that the Committee should leave it to the President to decide how it would be represented at these meetings.

The proposal was adopted.

ANNEX I.

AGENDA

- 1. Decisions of the Assembly and Council.
- 2. Report on Health Questions arising out of the League of Nations Mission to Liberia.
- 3. Questions resulting from the European Conference on Rural Hygiene.
- 4. Report of the Opium Commission of the Health Organisation.
- 5. Report of the Permanent Commission on Biological Standardisation (Meeting held in London, June 1931).
- 6. Report of the Experts on Immunisation against Scarlet Fever and Diphtheria (Meeting held in London, June 1931).
- 7. Draft Memorandum of the Reporting Committee on Maternal Welfare, Infant Hygiene and Hygiene of the Child of Pre-School Age.
- 8. Elections of Officers for 1932 and Nominations. Proposals of the Bureau.

ANNEX II.

APPLICATION OF ARTICLES 8 AND 10 OF THE 1925 INTERNATIONAL OPIUM CONVENTION.

REPORT OF THE OPIUM COMMITTEE TO THE EIGHTEENTH SESSION OF THE HEALTH COMMITTEE.

The Health Committee is in possession of two reports adopted by the Permanent Committee of the Office international d'Hygiène publique at its sessions in May and October 1931 (see document C.H.1067, Annexes, or Minutes of the Office international d'Hygiène publique of May and October 1931), and has to give a final decision regarding the following questions:

- 1. Should the preparations proposed by the Estonian Government be exempt from the operation of the Convention?
- 2. Should ipecopan compressed tablets and ampoules be exempt from the operation of the Convention, as the Swiss Government proposes?
- 3. Should the provisions of the Convention not be applicable to the anti-opium pills appearing on the exemption list prepared by the Siamese Government, or to the sterilised solutions of eucodal and atropine, or morphine and atropine, which the German Government asks should be given the benefit of Article 8 of the Convention?
- 4. Should the French Government's proposal regarding a modification of the procedure instituted by Article 8 of the Convention be adopted?
- 5. What effect should the Health Committee give to the resolution in which the Conference for the Limitation of the Manufacture of Narcotic Drugs expressed the hope that any of the narcotic substances enumerated in Article 1, paragraph 2, group I, of the Convention framed by it, which were not already covered by the 1925 International Opium Convention, would be brought under the provisions of the latter Convention by means of the procedure laid down in Article 10 thereof?
- 6. Should perkaine be brought under the provisions of the 1925 Opium Convention, as the Government of India proposes?

Question No. 1.

The list of preparations which the Estonian Government¹ proposed to exempt from the operation of the Convention was referred to the Permanent Committee of the Office international d'Hygiène publique in accordance with the procedure laid down by Article 8 of the 1925 International Opium Convention, and examined by the Permanent Committee at its session in May 1930. The Permanent Committee of the Office found that none of these preparations actually comes under the terms of the Convention, the morphine content being in all cases less than 0.2%, the limit below which the provisions of the Convention do not

apply.
Your Opium Committee agrees with this conclusion and proposes that you should adopt it.

Question No. 2.

In January 1930, the Swiss Government proposed that ipecopan compressed tablets and

ampoules² should be exempt from the operation of the Convention.

The Committee of Experts and the Permanent Committee of the Office international d'Hygiène publique examined these two preparations on several occasions and, at its session in October 1931, the Permanent Committee expressed the view that the experimental work so far carried out on emetin is insufficient and that, in the present state of our knowledge, the emetic dose of emetin cannot be determined with sufficient certainty.

The Committee consequently proposes not to give these two preparations the benefit of Article 8, and the Opium Committee agrees with this proposal.

Question No. 3.

Members of the Health Committee will doubtless remember that three preparations proposed respectively by the German³ and Siamese⁴ Governments were exempted from the provisions of the Convention by the Health Committee at its sixteenth session (October 1930).

	1 Th	nis list includes the following prepa	rati	ons	; ;																			
	(1)	Guttæ Thielemanni:																						
		Tincturæ Nucis vomicæ																						1
		Tincturæ Opii crocatæ																						2
		Vini Ipecacuanhæ	•			•	• •		•	٠	• •	٠		٠	•		٠	٠	•		•	٠	٠	1 4
		Tincture Menthe piperite																						8
	(2)	Tincturæ Valerianæ æthereæ. Gullæ Inosemzovi:	•		•	•	• •		•	•	• •	•		•	•		•	•	•	•	•	٠	•	0
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		Tincturæ Valerianæ æthereæ.		•	•	•			•	•	• •	•	: :	•	•	: :	•	•	:	: :		:		180
		Liquor Hoffmanni		: :			: :			:	: :	·	: :	:	•	: :	Ċ	Ċ	:				Ċ	180
		Tincturæ Opii simplicis																		٠.				90
		Olei Menthæ piperitæ																						3.75
		Extracti Nucis vomicæ spirit	uos	i.,																				0.72
	·03'	Tincturæ Castorei Sibirici	•			٠			•					•								٠	٠	15
	(3)	Tinctura Opii Benzoica:																						
		Opii pulverati	•			•			•	•		•		٠	•		٠	٠	•	•		•	٠	1
		Olei Anisi	•	•	• •	٠	• •		•	•		•		•	•		•	•	٠	•	•	٠	•	$rac{1}{2}$
		Camphoræ	٠	• •	•	٠	•.•		•-	•		•		•	•		٠	•	•	•	• •	٠	•	4
		Spiritus Vini 70%	•		•	٠		• •	•	•		•	٠.	•	•		•	•	•	•	٠.	٠	•	192
	(4)	Guttæ anticholericæ Hermanni:	•	: :	•	٠			•	•		•		•	•	• •	•	•	•	•	٠.	•	٠	102
	ι -,	Tincturæ Nucum vomicarum.				_																		2
		Tincturæ Opu simplicis																						$\tilde{3}$
		Tincturæ Nucis Moschatæ																						4
		Tincturæ Valerianæ æthereæ.																						10
-		Olei Menthæ Piperitæ																						1
	(5)	Gullæ anticholericæ Pirogovi:																						
		Tincturæ Valerianæ æthereæ.																						12
		Tincturæ Nucum vomicarum.	• •				٠.		•	•				•	•		•	٠	٠			٠	•	6
		Tincturæ Opii crocatæ	•	•	•	•	• •	•	•	٠		•	٠.	٠	•		•	•	•	•		•	٠	6
		Ætheris acetici	•	• •		٠		•	•	•		•		٠	•		•	٠	•	•		٠	٠	6 3
		Olei Menthæ piperitæ	•	٠.		•			•	•	٠.	٠		•	•		•	•	•	•	• •	•	٠	2
	(6)	Gullæ Beliaevi:	•	•	• •	•		• •	•	•	• •	•		•	•	٠.	•	•	•	•	• •	•	•	2
	(-)	Tincturæ Absinthii composita	a																					8
		Essentiæ Menthæ piperitæ																						2
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The Health Committee's decision was, however, conditional in this sense, that the two preparations proposed by the German Government were admitted on condition that they should be only supplied in 1.1 c.c. ampoules, and that the preparation proposed by the Siamese Government should not be exempted from the provisions of the Convention unless the appellation "anti-opium" were suppressed.

The British Government having expressed doubts as to whether such conditional exemptions were legally permissible, the Legal Adviser to the Secretariat of the League of Nations was asked to give an opinion on the subject, and, at its session in May 1931, the Health Committee decided, in consideration of this opinion, to refer the question back to the

Permanent Committee of the Office for a further opinion and report.

According to the League Legal Adviser's opinion (see document C.H.976) the Health Committee's decisions should be based exclusively on the composition of the preparations considered regardless of the name or of the form in which they are put up. Article 8 only allows preparations containing narcotics to be exempted from the provisions of the Convention if they "cannot give rise to the drug habit on account of the medicaments with which the said drugs are compounded and which in practice preclude the recovery of the said drugs", and the Legal Adviser expressed the view that these two properties — namely, (1) that of not giving rise to the drug habit; (2) that of not lending themselves in practice to the recovery of the drug — depend solely upon the composition of the preparation concerned.

After further consideration of this matter, the Permanent Committee of the Office thought it necessary to distinguish between solutions of eucodal and those of morphine, combined in

each case with atropine.

As regards the former, it was agreed that they might be unconditionnally exempted from the provisions of the Convention, since it did not appear possible, in practice, to recover the eucodal they contained, and the Opium Committee proposes that you should adopt this

opinion.

As for solutions of morphine and atropine, the Permanent Committee of the Office considers that recovery of the morphine is very easy. The condition laid down by the Permanent Committee when it recommended exemption of this solution from the operation of the Convention — namely, that the solution should only be supplied to the trade in 1.1 c.c. ampoules — was designed to "preclude in practice" the recovery of morphine. The Permanent Committee is of opinion that the practical possibilities of recovery depend to some extent on the form in which the preparation is put up.

The price of the preparations in question depends, in fact, on the container rather than on its contents and this is what in practice precludes recovery. The Permanent Committee of the Office therefore adheres to its view; nevertheless, if the condition stipulated — i.e., the putting up of the preparation into 1.1 c.c. ampoules — should not be recognised as legal,

it recommends that this preparation should not be given the benefit of Article 8.

The Opium Committee considers that sterilised solutions of morphine and atropine in ampoules of 1.1 c.c., as proposed by the German Government, should be exempt from the operation of the Convention, as the cost of the ampoule would in practice preclude the recovery of the drug.

So far as concerns the anti-opium pills appearing on the Siamese Government's list, the Permanent Committee proposes to exempt these from the operation of the Convention and expresses the hope that the name "anti-opium" will be dropped, and the Opium Committee proposes that you should adopt this view.

Question No. 4.

In a letter dated March 18th, 1931, the French Government asked that, when a preparation had been given the benefit of Article 8 of the 1925 International Opium Convention on the ground that it contained another substance (dénaturant) in given proportions, all preparations containing the same narcotic and the same substance in the same proportions should, ipso facto, be exempted from the provisions of the Convention, no matter what other (non-narcotic) substances entered into their composition.

The Permanent Committee rejected this proposal for several reasons (see document C.H.1067, Annex II, and Minutes of the Office, session October 1931), of which we will merely

quote the first two, which will doubtless be regarded as conclusive:

- (1) It would be possible to introduce into the composition of these preparations, in addition to the *dénalurant*, other substances which would counteract the latter, thereby destroying its effect.
- (2) To gauge the exact possibilities of recovering a narcotic it is essential to have full information as to the composition of the preparation into which it enters.

The Opium Committee accordingly considers that you should reject this proposal.

Question No. 5.

The Conference for the Limitation of the Manufacture of Narcotic Drugs expressed the hope, in a special resolution, that any of the narcotic substances enumerated in Article 1, paragraph 2, group I, of the Convention which it framed, which were not already covered by the 1925 International Opium Convention, would be brought under the provisions of the latter convention by means of the procedure laid down in Article 10 thereof.

When this resolution was submitted to the President of the Health Committee, he referred it to the Office international d'Hygiène publique for an opinion and a report, in accordance with the expeditious procedure adopted by the Health Committee in matters relating to

Article 10.

The Permanent Committee of the Office has expressed the opinion that all the substances in question should be brought under the provisions of the 1925 Convention, and the Opium Committee proposes that you should adopt this view.

At the proposal of the Government of India, the Office internationale d'Hygiène publique has been asked to give its opinion as to the expediency of bringing perkaine (hydrochloride of the di-ethyl-ethylene-diamide of a-butyl-oxy-cinchoninic acid) under the 1925 Opium

In the view of the Permanent Committee of the Office, this substance is a local analgesic wholly unrelated to cocaine and engendering neither habituation nor addiction. The Opium Committee is therefore of opinion that there is no reason why it should be brought under the provisions of the Convention.

ANNEX III.

REPORT OF THE HEALTH COMMITTEE ON THE WORK OF ITS EIGHTEENTH SESSION.

I. LIBERIAN GOVERNMENT'S REQUEST FOR THE COLLABORATION OF THE LEAGUE OF NATIONS.

The Committee set up by the Council at its sixty-second session to consider the request for assistance presented by the Liberian Government decided, in February 1931, to dispatch to Liberia experts in administration, finance and hygiene to study the local situation and to present a report on the form which this assistance might take. The expert in hygiene, Dr. Mackenzie, was nominated by the Health Committee in May 1931 (document C.280.M.131, 1931.III). The experts visited Liberia from June 13th to July 26th, 1931. In regard to the report which the experts were asked to prepare, the Committee of the Council decided that "it will no doubt be necessary to consult the Financial Committee and the Health Committee respectively in regard to those parts of their report or reports which refer to those subjects document C.363.1931.VII, Annex I).

In view of the fact that the Committee of the Council would not meet to consider the report of the experts until after the present session of the Health Committee, and that the next session of the Health Committee would not be held until October 1932, the expert in hygiene was invited to present a statement to the present session describing the recommendations on health matters which would be included in the report of the experts to the Committee of

After hearing this statement, the following resolution was adopted:

- "The Health Committee,
- " Having heard the statement of Dr. Mackenzie, the health expert sent to Liberia by the Council Committee to enquire into the measures necessary for the improvement of the health services:
- " Approves the recommendations made by him and places its services at the Council's disposal for any assistance which the Council may require in connection with the execution of these recommendations.

II. Co-ordination of the Anti-Epidemic Campaign in the Flooded Regions of China.

Resolutions were adopted by the Assembly at its twelfth ordinary session inviting Governments to comply as fully as possible with all requests for assistance for the flooded regions in China, and asking them to take all possible measures for relief in collaboration with the League of Nations (documents A.42.1931 and A.60.1931.III).

The Council, on September 30th, at its sixty-fifth session, adopted two resolutions on the same subject (document C.624.1931.III). The second resolution invited the Health Organisation to comply with the request of the National Health Administration of China to co-ordinate the efforts to combat epidemics in the flooded regions and called the attention of Governments and the public to the need for contributions in money as well as for medical staff and supplies. The Secretary-General was authorised to receive such money contributions and to transmit them to the co-ordinating authority.

The following resolution was adopted:

" In view of the resolution of the Council inviting the Health Organisation to comply with the request of the National Health Administration of China to co-ordinate the efforts made to combat epidemics which threaten to follow the floods in the Yangtsze Valley,

" The Health Committee,

- "(1) Decides to comply with the Council's request;
- "(2) Instructs the Medical Director to take the necessary measures and requests him to keep the members of the Committee regularly informed of the established necessities of the case as well as of action taken.
- "(3) Should the funds allocated to the Health Organisation for the purpose of this co-ordination prove inadequate, the Health Committee authorises its bureau to make suitable representations to the Council and Assembly of the League with a view to securing supplementary provision.'

· III. PERMANENT COMMISSION ON BIOLOGICAL STANDARDISATION.

The Permanent Commission on Biological Standardisation met in London from June 17th to 23rd, 1931. On the basis of reports submitted by its sub-committee, the Commission adopted a new series of international standards for anti-gas-gangrene serum, tuberculin and vitamins. A programme of subsequent work was also adopted (document C.H.1056(1)). Having taken note of this report, the Health Committee adopted the following resolution:

" The Health Committee,

- "Adopts the report on the meeting of the Permanent Commission on Biological Standardisation held in London in June 1931;
- "Tenders its thanks to the experts who took part in the work and to the London School of Hygiene and Tropical Medicine for the facilities so generously afforded to the Commission.

IV. Immunisation against Scarlet Fever and Diphtheria.

During its fourteenth session, the Health Committee decided to enquire into the efficacy of active immunisation against scarlet fever and diphtheria. A first consultation of experts took place in Paris on July 4th, 1929, when a common plan of work was adopted. The results of the subsequent enquiries in various countries were presented to a group of experts which met in London from June 17th to 19th, 1931.

After taking note of the reports submitted by these experts (documents C.H.1057 and

1059), the Health Committee adopted the following resolution:

- "The Health Committee,
- "Approves the reports of the experts on immunisation against scarlet fever and diphtheria (documents C.H.1057 and 1059);
- " Desires to express its appreciation to the experts who took part in the work and its gratitude to the London School of Hygiene and Tropical Medicine for the facilities so generously afforded to the Conference.'

V. OPIUM COMMISSION.

A. Decisions of the Health Committee in view of Article 8 of the 1925 International Opium Convention of Geneva.

In accordance with the procedure laid down in Article 8 of the International Opium Convention signed at Geneva in 1925, lists of preparations which the Estonian, Swiss, German and Siamese Governments respectively proposed should be exempted from the operation of the Convention were referred by the Health Committee to the Permanent Committee of the

Office international d'Hygiène publique for opinion and report.

The Health Committee also referred to the Permanent Committee of the Office international d'Hygiène publique the proposal of the French Government that, when a preparation has been exempted under Article 8 from the operation of the 1925 Convention on the ground that it contains another substance (dénaturant) in given proportions, all preparations containing the same narcotic and the same substance in the same proportions should, ipso facto, be exempted from the provisions of the Convention, no matter what other non-narcotic substances entered into the composition of such preparations.

After considering the opinion and report of the Permanent Committee of the Office international d'Hygiène publique (document C.H.1067, Annex I) and on the proposal of its Opium Commission the Health Committee adopted the following resolutions:

The Health Committee,

"1. Notes that none of the preparations which the Estonian Government proposed to exempt from the provisions of the Convention comes, by virtue of its composition, under the control of the Convention."

- "2. Decides to postpone any decision on the two preparations having a basis of opium alkaloids and alkaloids of ipecacuanha which the Swiss Government proposed to exempt from the provisions of the Convention, until it has more complete information on the emetic properties of emetin."
- "3. Decides that the 'anti-opium' pills appearing in the list submitted by the Siamese Government should be exempted from the provisions of the Convention. It expresses the hope that this preparation will not be presented to the public under the name of 'anti-opium pills'; such an appellation, suggesting as it does a property which this preparation does not in fact possess, is calculated to increase its consumption."
- "4. Decides that the sterilised solutions of eucodal and atropine proposed by the German Government should be exempted from the operation of the Convention."
- "5. Decides that the sterilised solutions of morphine and atropine in 1.1 c.c. ampoules proposed by the German Government should be exempted from the provisions of the Convention since, in practice, the putting up of the solution into ampoules, precludes recovery of the narcotic drug, owing to the resultant increase of price and especially to the complications which would be entailed in the process of recovery."
- "6. Having considered the proposal of the French Government that, when a preparation has been given the benefit of Article 8 of the 1925 International Opium Convention on the ground that it contains a denaturant in given proportions all preparations containing the same narcotic and the same substance (dénaturant) in the same proportions should ipso facto be exempted from the provisions of the Convention, no matter what other (non-narcotic) substances enter into their composition:
 - " Considers that this proposal cannot be accepted for the following reasons:
 - "(1) That other substances might be introduced into the composition of such preparations, in addition to the denaturant, which would counteract the latter and consequently destroy its effect;
 - "(2) That in order to determine precisely the possibilities of recovering the narcotic, it is essential to possess full information as to the composition of a preparation of which it forms a part."

B. Decisions of the Health Committee in view of Article 10 of the 1925 International Opium Convention.

- (a) The Conference for the Limitation of the Manufacture of Narcotic Drugs expressed the hope that any of the narcotic substances enumerated in Article I, paragraph 2, group I, of the Convention which it drafted, which were not already covered by the 1925 International Opium Convention, would be brought under the control of the latter convention by means of the procedure laid down in Article 10.
- (b) The Government of India proposed that the expediency of bringing perkaine (hydrochloride of the di-ethyl-ethylene-diamide of a-butyl-oxy-cinchoninic acid) under the control of the Convention should be examined.

After having referred these questions for opinion and report to the Permanent Committee of the Office international d'Hygiène publique, the Health Committee adopted the following resolutions:

- " The Health Committee,
- "1. Recommends that any of the narcotic substances enumerated in Article I, paragraph 2, group I, of the Convention for the Limitation of the Manufacture of Narcotic Drugs, which are not already covered by the 1925 International Opium Convention, be brought under the provisions of that Convention in conformity with the provisions of Article 10;
- "2. Considers that perkaine (hydrochloride of the di-ethyl-ethylene-diamide of a-butyl-oxy-cinchoninic acid) is not a habit-forming narcotic drug and that hence there is no reason to bring it under the 1925 Convention."

VI. THE EUROPEAN CONFERENCE ON RURAL HYGIENE.

The European Conference on Rural Hygiene was held at Geneva from June 29th to July 7th, 1931. The report of the Conference, including its proposals for the international study of certain subjects under the auspices of the Health Organisation (document C.473.M.202. 1931.III) was approved by the Council on September 4th, at its sixty-fourth session, held at Geneva (C/64th Session/P.V.2(1)). The Council expressed its appreciation to the schools of hygiene and similar institutes which had offered to collaborate in this further international study, and approved the suggestion of its Rapporteur that, in due course, a second conference of wider scope might be convened for the consideration of rural hygiene problems throughout the world.

The Council referred to the Health Committee the proposal of the Conference that the Health Organisation should study the programme and methods of training of health visitors and sanitary engineers in the different countries.

After hearing the statement of Professor G. Pittaluga, President of the Conference, on the results of the Conference, the Health Committee adopted the following resolution:

- " The Health Committee,
- " Having taken note of the report of the European Conference on Rural Hygiene:
- " Recognises the technical value of the results obtained by the Conference;
- "Tenders its thanks to the directors of schools of hygiene and similar institutions who have agreed to undertake certain enquiries proposed by the Conference under the auspices of the League's Health Organisation;
- "Requests the Medical Director to report to the Committee at a later session on the programme of instruction and methods of training of health visitors and sanitary engineers in the different countries."

VII. MATERNAL WELFARE AND THE HYGIENE OF INFANTS AND CHILDREN OF PRE-School Age.

On the proposal of its President, the Health Committee, at its sixteenth session, (September 29th to October 7th, 1930), decided to set up a number of reporting committees to prepare technical statements which would constitute a declaration of the present state of practice and knowledge in the various field of public health. The statements were to be fully discussed by the Health Committee and, when adopted, would engage the technical authority of the Committee.

The Reporting Committee on National Welfare and Hygiene of Infants and Children of Pre-School Age presented a report on this subject to the Health Committee. After hearing the statement of Dame Janet Campbell, Chairman of the Reporting Committee, and discussing each chapter of the report, the Health Committee adopted the following resolution:

- " The Health Committee,
- "Having examined the draft report of the Reporting Committee on Maternal Welfare and the Hygiene of Infants and Children of Pre-school Age:
- "Considers that this report embodies fundamental principles by which health administrations may usefully be guided in their efforts to prevent maternal and infant mortality, and adopts the report."

VIII. PHYSICAL EDUCATION.

At its sixteenth session, the Health Committee decided to set up an expert group for the study of physical education under the chairmanship of Professor D. Ottolenghi The study of physical education had been proposed by the delegation of Czechoslovakia to the seventh ordinary session of the Assembly, and information had been collected by the Health Organisation on the progress of physical education in the different countries.

In January 1931, a consultation of experts was held at Copenhagen under the chairmanship of Professor Ottolenghi. After taking note of the experts' recommendations, the Health Committee, at its seventeenth session, requested the Medical Director to collect information

on the question of muscular fatigue in relation to exercise.

The President of the Health Committee, at its present session, explained that it would be possible to carry out such studies in certain laboratories which possessed unusual facilities for this work. Accordingly, the Health Committee adopted the following resolution:

- "The Health Committee,
- "On consideration of the recommendations concerning the study of physical education put forward by the experts who met at Copenhagen in January 1931:
- "Accepts the proposal presented by its President to undertake, with the assistance of competent experts, laboratory investigations into the physiology and effects of extreme muscular fatigue."

IX. BUDGET OF THE HEALTH ORGANISATION FOR 1932.

- "The Health Committee,
- "Finding that the 1932 budget of the Health Organisation has been considerably reduced by the Assembly:
- "Takes note of the fact that this reduction is due to exceptional circumstances, but considers it of the highest importance to the work of the Health Organisation that the credits allotted in future should be sufficient to enable the Committee to carry out the work entrusted to it by the Council and Assembly of the League."

X. Nomination of a New Member of the Health Committee.

The Health Committee proposes that Professor Hüsamettin Bey, Under-Secretary of State in the Ministry of Public Health and Social Welfare at Ankara, should be appointed a member of the Committee.

XI. CONSTITUTION OF THE BUREAU OF THE HEALTH COMMITTEE.

The Health Committee elected the following Vice-Presidents for 1932: Professor Léon Bernard; Dr. C. Hamel; Dr. M. Tsurumi.

These Vice-Presidents, together with M. O. Velghe, President of the Permanent Committee of the Office international d'Hygiène publique, who is Vice-President of the Health Committee ex officio, will constitute the bureau during 1932.

XII. MANDATE OF THE BUREAU.

- "The Health Committee,
- · "In view of the fact that it is contemplated that a period of approximately one year will elapse before the next session:
- "Authorises its bureau to take any action which may be required to carry on the study of questions which are now under investigation in pursuance of resolutions already adopted by the Committee, or which may hereafter be communicated to the Health Committee by decisions of the Council of the League of Nations."

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ABBREVIATIONS

$Cttee \equiv Committee.$	Perm. = Permanent.
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Geneva, September 17th, 1931.

LEAGUE OF NATIONS

WORK OF THE HEALTH ORGANISATION

REPORT OF THE SECOND COMMITTEE TO THE ASSEMBLY

Rapporteur: M. Zdeněk FIERLINGER (Czechoslovakia).

The reports submitted to the present Assembly on the work of the Health Organisation of the League of Nations — the Annual Report of the Health Organisation for 1930 (document A.7.1931.III), the Report of the Secretariat on the Work of the League of Nations since the Last Assembly (document A.6. and A.6(a).1931) and the Report of the Singapore Bureau — are so complete that I shall confine myself to a brief review of those activities which are particularly significant from the point of view of the interesting methods of international co-operation developed by this Organisation.

You will remember that these methods were eloquently described by the Rapporteur to the last Assembly, the delegate of the British Empire, who pointed out that the solution of the problems dealt with by the Health Organsiation involved three stages — first, study of the problem and collection of information; second, on the basis of this information, the formation of general conclusions; and, last, the period of action: response to the application of particular Governments for advice or assistance in their peculiar problems.

1. Since the last Assembly, the Health Organisation has developed one of its most important tasks — that of giving assistance to Governments asking for advice on the methods to be employed to solve general or special administrative and medical problems in public health. You will permit me, in this connection, to mention in the first place the co-operation which has been established with the Ministry of Public Health and Physical Education in my country with a view to a survey of the health conditions of certain districts. These investigations will, I hope, lead to recommendations which should make it possible to draw up a complete public health programme for Czechoslovakia.

As an important stage in the application of the plan of sanitary re-organisation adopted by the Greek Government as a result of the request for assistance which that Government had previously addressed to the League of Nations, the School of Hygiene — an integral part of the Athens Health Centre — was opened in March 1931. Satisfactory progress is also being made as regards other parts of the programme.

In Bulgaria, the campaign against certain infectious diseases conducted in several districts in co-operation with the Health Organisation has already begun to bear fruit, thanks to the creation of suitable institutions and to the efforts made in the field of medical assistance and public health.

At the request of the Roumanian Government, the Health Organisation co-operated in organising an enquiry into the causes and prevention of infant mortality on the lines of those already carried out with such excellent results, also under the auspices of the Health Organisation, in various countries of Europe and South America. The results of the enquiry at present in progress will be put into practical application in Roumania.

An expert was appointed by the Health Organisation to take part in the work of the mission sent to Liberia by the Council, in order to study the problems raised by the request for assistance submitted to the League of Nations by the Government of that country.

As a result of the report of the representatives of the Health Organisation who were sent to Bolivia at the request of the Government of that country, the Director-General of Public Health laid before the Health Committee a programme for the re-organisation of the Bolivian health services and asked the Health Organisation to co-operate in its application.

The Health Committee decided to assist the Bolivian Government in the training of a certain number of public health officers by co-operation in studies of disease conditions in certain tropical and sub-tropical regions and by advising the Government on the proposed plan of re-organisation. An expert of the Health Organisation will shortly leave for Bolivia to continue this collaboration.

The report on the enquiries into infant mortality undertaken in the Argentine Republic, Brazil, Chile and Uruguay was discussed at the Conference held at Lima in July 1930, and has been communicated to the health administrations of Latin-American countries, most of which were represented at this Conference. The results of the enquiry, which correspond to those obtained by similar enquiries in Europe, furnish valuable indications to the health administrations on the methods of combating the dangers which threaten early infancy.

The report of the Montevideo Conference held in September 1930, thanks to the generosity of the Government of Uruguay, and carried on with the assistance of the Health Organisation, also contains important conclusions on the value of the different methods for the serological diagnosis of syphilis. This information will be useful, not only to the South American authors of the diagnostic methods who took part in the practical work of the Conference, but also to all scientists working in this field. The Montevideo Conference recommended that this special serological work should be continued by all the South American countries and should be co-ordinated by the Health Organisation.

I am glad to inform the Assembly that the Brazilian Government has offered to create at Rio de Janeiro an International Centre for the study of leprosy which will be placed at the disposal of the League of Nations. The Council has accepted this offer and expressed its appreciation to Brazil for her generous action, which will be of very considerable assistance in carrying on the international studies planned by the Leprosy Commission.

The Assembly will recall the information given last year by the delegate of the British Empire regarding the progress of the work of reconstruction in China, for which the services of the Health Organisation were placed at the disposal of the Government of China.

Since that time, the assistance of other organisations of the League of Nations has been requested, and I venture to recapitulate the progress achieved in the field of hygiene. The organisation of the Central Field Health Station at Nanking to form the nucleus of the National Health Service provided for in the plan of re-organisation is being actively pursued and the station is already partly in operation. The first national hospital, also at Nanking, is already in full operation. The National Quarantine Service began to function more than a year ago in a number of ports. An expert appointed by the Health Organisation visited the Chinese medical shools and assisted the National Commission in drawing up a standard programme of teaching. His report, with the Health Committee's recommendations, which have been communicated to the Government of China, will permit of the organisation and operation of a first "model" school at Nanking.

The organisation of the campaign against cholera and smallpox in the Shanghai area is being effectively pursued. Moreover, in accordance with the usual practice, individual study grants have been awarded to the candidates for several posts in the new institutions provided for in the plan of sanitary re-organisation.

Our co-operation in the reconstruction of China, which began with health, has been extended to problems of intellectual co-operation, economics, and communications and transit.

I think I am expressing the feelings of all in voicing our admiration for the perseverance with which the Government of China, not dismayed by the disasters which have just occurred within its borders, continues to devote all its energy to the work of national reconstruction.

As the Assembly knows, the Director of the Chinese National Health Administration has requested the Health Organisation to take immediate steps to co-ordinate the action taken by the health services of China's neighbours in order to prevent the epidemics which threaten the flooded regions. We are sure that China's appeal will be favourably received, and we all hope that this action which is now in course of preparation will shortly prove its effectiveness.

The Second Committe was unanimous in approving the following proposal presented by the French delegation, and now asks that this draft resolution should be adopted by the Assembly.

"The Assembly,

- "Regarding the danger of the spread of epidemics and the loss of life as a result of the terrible disaster in the Yangtse valley, both as a humanitarian problem of the first magnitude and a matter of international concern,
- "Recalling the assistance rendered in similar circumstances by the Health Organisation through its Epidemic Commission in Poland and Greece in 1921 and 1923;
- "Convinced of the need to show clearly and concretely the sympathy of humanity for the victims of this appalling catastrophe;

"Invites all the States Members and non-members of the League of Nations, and particularly those in close contact with the Far East, to respond, so far as is in their power, to any request that may be made to take all possible measures for relief in the flooded areas of China, in co-operation with the League of Nations;

"Requests the Council to take the necessary steps to render the international co-operation effective."

The measures taken by the Governments who have asked for the Health Organisation's assistance must of course be based on technical conclusions resulting from the experience of numerous countries and constituting a survey of the present state of science and practice in public health. The new Health Committee, which met for the first time at the end of September 1930, initiated a new method of work which consists in the creation of reporting committees composed of a limited number of experts to formulate recommendations capable of being utilised, not only by such Governments, but by all administrations desirous of organising or re-organising their health services. These committees are responsible for drawing up a plan of action for the different branches of hygiene. Each subject will be dealt with in an essentially practical manner, and the plan will at the same time be capable of adjustment to the natural, social, economic, financial and technical resources of the different countries.

The recommendations contained in the reports of the Leprosy Commission drawn up at this Commission's meeting at Bangkok in December 1930 describe a series of prophylactic and curative methods of universal value, based on the principles I have just indicated and on scientific and practical experience acquired during the last thirty years. Similarly, the report on Schools of Hygiene drawn up as a result of the meetings of directors of schools of hygiene held at Paris and Dresden in 1930 provides guiding principles of this kind, of great value to Governments which, in their efforts towards reconstruction and progress, desire to train public health officials for this work.

The Assembly will certainly agree with me in expressing its appreciation of the methods which the Health Organisation has adopted in response to the desire of the last Assembly that the experience acquired by this Organisation should be placed to an increasing degree at the disposal of the States Members.

2. Among the permanent tasks of the Health Organisation, I should like, in the first place, to refer to the work which it has entrusted to its Eastern Bureau. The value of the Singapore Bureau, recognised by former Assemblies, is continuously increasing through technical improvements in the transmission of information on infectious diseases. This Bureau at present acts, not only as a centre for epidemiological intelligence, but also for co-ordinating research into problems peculiar to the countries situated within its field of action. I am sure that we all desire to see this action develop so that the Bureau may become, to an increasing extent, the general agent for the East of the health work of the League of Nations. The Epidemiological Intelligence Service of the Health Section of the League of Nations Secretariat also continues to develop the rapidity and value of its system of international notifications of epidemic diseases.

Another permanent task of the Health Organisation has been carried out through collective study tours, known as "interchanges", which provide an effective means of exchanging knowledge acquired by various countries in health matters. Tours of this kind are at present in progress in the United States of America for the study of questions concerning the Milk supply and the fumigation of ships. In this connection, may I draw your attention to the welcome offer of the French Government to establish in Paris an International School for Advanced Health Studies for the purpose of continuing and centralising, through a permanent institution open to all nations, the work already carried out in this field by the "interchanges" and by individual study scholarships?

The results of comparative studies of immunisation against diphtheria and scarlet fever undertaken in several countries were discussed at a meeting of experts (bacteriologists, clinicians and serologists) held in London this summer. This meeting adopted recommendations with regard to the best methods of vaccination and the most profitable way of applying them to combat effectively these diseases, which are a matter of concern for all health administrations. The Permanent Commission on Standardisation has again taken an important step forward. This Commission has, during the current year, adopted several new international standards for serological products and for a number of vitamins. These results are valuable, both from the scientific point of view and for the testing of the innumerable preparations on the market. The activities of this Commission furnish another striking example of the methods of international co-operation adopted by the Health Organisation. As a result of comparative studies, international standards are established and subsequently adopted by the national authorities for their own work. Studies made by the Malaria Commission in this connection have also led to the definition of a standard product of the total alkaloids of cinchona ("totaquina"), which is approximately as efficacious as quinine. The results of these studies should meet the

necessity to increase the supply of the active product and help to bring about a decrease in the cost of treatment.

I was particularly interested in the discussions of the European Conference on Rural Hygiene, which I was able to follow personally. The report of this Conference has just been adopted by the Council (document C.473.M.202.1931.III). The preparatory work and the discussions of this Conference, which was convened by the Council on the proposal of the Spanish Government, have made it possible to compare the experience of various countries in rural hygiene, which must be regarded as one of the most important factors in the development of agricultural districts. Interdependence of economic and social questions, as well as health factors, is, in fact, particularly evident in rural districts.

I was struck by the sincere spirit of co-operation shown by all those taking part in this Conference. This spirit made it possible to adopt the recommendations unanimously. thus giving them a moral force which will be a valuable support to the action of those national or local health administrations which wish to apply them. The recommendations are, in fact, a practical guide to effective and economical rural health administration. They deal with the guiding principles and suitable methods for ensuring effective medical assistance in rural districts, the organisation of rural health services, and the improvement of health conditions in such districts. While taking account of the necessity of adapting the measures advocated to local conditions, the Conference established a certain number of minimum standards and emphasised the praiseworthy tendency towards the rationalisation of health organisation.

For the first time in a Conference of such importance, those taking part included representatives of social welfare, health insurance, agricultural associations and the medical profession, as well as agriculturists, architects, hygienists and engineers. Three large international organisations dealing with the protection of rural populations, the Health Organisation of the League of Nations, the International Labour Office and the International Institute of Agriculture, co-operated closely in the preparation and work of the Conference. The Conference was attended by eighty-six delegates and experts from twenty-five European countries, and by eight observers from non-European States; indeed, the influence of the recommendations adopted extends far beyond Europe, and their value for overseas countries

was recognised by the observers delegated by those countries.

The Conference also put forward a certain number of interesting proposals for international studies in rural hygiene. These are to deal with the programme and methods to be adopted for the technical training of health visitors and sanitary engineers, the cost of medical services and health services in certain specially selected rural districts, the quality of milk in rural districts, the campaign against flies and typhoid fever, standardisation of methods for analysing and testing drinking water and sewage. The various European schools of hygiene and similar institutions whose directors met during the Conference will carry out most of these enquiries according to a uniform plan. This work will be co-ordinated by the Health Organisation, which, for this purpose, will keep in touch with the two other international organisations above mentioned, in order to profit by their co-operation and special competence.

I have spoken at some length on the results of the European Conference on Rural Hygiene, as I was anxious to draw particular attention to them. I am sure everyone will agree with me in recognising the value of the work accomplished and will be anxious for its scope to be increased, so that the rural populations of all countries may benefit by it in the

near future.

In conclusion, I have the honour to propose the following resolution:

- " The Assembly,
- "Having noted the reports on the work of the Health Organisatio. пе League of Nations since the last session:
- "Recognises with satisfaction the value of the methods of international cooperation employed by this Organisation;
- " Notes with satisfaction that the experience acquired by the Health Organisation is being made available to the States Members of the League to an ever-increasing
- "Expresses the hope that steps will be taken to give the widest and most rapid distribution to the information collected by the Health Organisation concerning the practical and scientific health work, carried out in the different countries, which is of international interest;
- "Views with interest the work accomplished on rural hygiene, and hopes that the task undertaken in this field will be extended so that the rural populations of all countries may benefit in the near future;
- "Approves the work carried out by the Health Organisation since the last session of the Assembly;
- "And congratulates that Organisation on the results obtained, which give fresh proof of the concentration of its efforts on definite tasks, and the universality of its work.