

71 R 50 STORES PURCHASE COMMITTEE.

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REPORT

OF THE

STORES PURCHASE COMMITTEE

VOLUME I.



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REPORT OF THE STORES PURCHASE COMMITTEE (1919-1920.)

VOLUME I.

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ANNEXURE I.

1. The Stores Committee has been created to enquire into the following matters :—

- (a) What measures are required to enable the departments of the Government of India and Local Governments to obtain their requirements as far as possible, in India, and what central and local agencies for purchase and inspection should be constituted.
- (b) What should be the relations of such agencies with one another and with the Stores Department of the India Office (or such other purchasing organization in England as may hereafter take the place of that department).
- (c) What modifications of the Stores Rules will the scheme recommended by the Committee necessitate.

It is not intended that the Committee should deal with the supply of food and forage, but the supply of all other kinds of Government stores comes within its purview.

2. Previous to the war, the supply of Government stores was governed by the Stores Rules of 1913 (*vide* Annexure II). These rules, broadly speaking, laid down the classes of stores which should be purchased (a) in the United Kingdom or (b) in India. The restrictions in these rules applied only to the purchase in India of imported stores, and to purchase from England. The purchase of Indian-manufactured stores is limited only by the general financial powers of the purchasing officer, which are not dealt with in the rules, provided that "the quality of the articles is suitable and the price not unfavourable." With certain exceptions, all stores from the United Kingdom were purchased through the Director-General of Stores, India Office, London. No similar purchase agency existed in India and, for the most part, officers were left to make their own arrangements for procuring stores which should be purchased in India. The result was that officers tended to neglect the spirit of the rules and to obtain the bulk of their requirements through the Director-General of Stores, irrespective of whether they fell under class (a) or class (b) mentioned above. The Resolution constituting the Stores Committee explains the effects on Indian industries.

3. Centralised purchase in India existed only in the case of medical stores (which were supplied from the Medical Stores Depôts at Calcutta, Bombay, Madras, Lahore and Rangoon) and of stationery (which was supplied by the Controller of Printing, Stationery and Stamps, and by the Stationery Departments in Madras and Bombay for those provinces). There were also special rules* regulating the construction of ships for Government.

4. The railways, both company and Government, had of course elaborated schemes for local purchase and maintenance of stocks, but these schemes were devised solely to meet the needs of the individual railways concerned.

5. At the present time, the restrictions laid down by the Stores Rules on purchases in India of imported stores (*vide* paragraph 2 *supra*) are not strictly observed. During the war, it was found necessary to utilise to the fullest extent stocks of imported stores and, for this purpose, the embargo on local purchase of imported stores was removed, and has not yet been completely restored. It is important to remember this in considering the operations of the Indian Munitions Board.

6. It will help the witnesses, in considering the comparative advantages of central and local agencies for the supply of Government stores if some concrete examples or draft schemes illustrating different types of proposals are laid before them.

A.—THE INDUSTRIAL COMMISSION'S PROPOSALS.

"197. Without anticipating the Committee's conclusions as to how individual classes of stores should be treated our own consideration of the question leads us to the view, that the general nature of the future organization should be on the following lines. There should be an Imperial Department of Stores and provincial agencies which should form part of the provincial Departments of Industries. This would set free individual officers from the responsibility for the local purchase of most classes of stores, and provide for expert purchase and inspection. The Imperial Department of Stores should have at its head a Controller-General of Stores, with his headquarters at Calcutta; it would purchase and inspect stores, and deal with indents received from provincial Directors of Industries. In each provincial Department of Industries, there should be a Stores branch, for the control of which, in the major provinces at any rate, an experienced officer would be required, who should be responsible for local purchases, and should utilise the staff of the department, as far as possible, for inspecting and testing the goods supplied through him.

All indents for stores required by provincial officers should come to the Director of Industries in the first instance. He would examine them and arrange for the local purchase and inspection of those items which could suitably be dealt with in this way. The Director of Industries would receive information, as explained below, from the Controller-General of Stores, which would enable him to form an opinion as to the possibility of obtaining more favourable tenders for such articles from another province, and it might be considered advisable in such cases for him to arrange for purchase and inspection through the local Director of such province. The balance of the indents would be forwarded to the Controller-General of Stores, who would again examine them and issue orders for the purchase of the remaining items which, in his opinion, could be advantageously obtained in India. He would, as we have already indicated, in some cases, enter into running contracts, in pursuance of which Directors of Industries would be able to purchase from contracting firms without further reference to him. In certain cases it would be best for him to effect purchases himself, whether under running contracts or as isolated transactions, where the articles could not conveniently be dealt with by provincial agency. Experience of local and imperial sources of supply would soon show what are the respective capacities of these for meeting orders; and, in practice, no delay would be involved in deciding what items would have to be obtained through the buying agency in England, which must, for some time to come, continue to be the Stores Department of the India Office. All railway indents, which are at present sent to the Stores Department of the India Office, would be passed through the Controller-General of Stores, who would deal with them in the same way as with other indents. Orders on the firms of any province,

APPENDIX I—continued.

whether from another provincial Department of Industries or from the Controller-General of Stores, would ordinarily go through the local Director of Industries, though, where centralised purchase is necessary, it would be in some cases desirable for the Controller-General of Stores to deal with local firms direct. Under this system the manufacturers of each province would be given the opportunity of supplying their own Local Governments, so far as they were able to do so, as well as those of other provinces in which similar manufactures have not been established. With the Controller-General of Stores would rest the responsibility of deciding whether indents are to be transmitted to London or local manufacture undertaken. Only in the case of heavy machinery and constructional iron work is there likely to be any difficulty in coming to a decision. In these cases much depends on the designs and specifications, and very highly-specialised experience is required to ensure satisfactory results. This has hitherto been obtained in London through the agency of the consulting engineers employed by the India Office, and a similar technical agency will have to be created in India, if full advantage is to be taken of the increasing capacity of the country to turn out heavy work. The annual report of the Controller-General should include a classified statement of the articles obtained in India and abroad and the prices paid.

198. Inspection of local purchases would be carried out by the staffs of the local Departments of Industries, where they include suitable experts. But the range of Government requirements is so wide and involves the expenditure of such large sums, that the experts required for the assistance of provincial industries will be quite inadequate to inspect all the articles purchased locally; moreover, to require them to do so, would, in some cases, cause delay and interfere with their ordinary work. The urgent necessity of securing economy and efficiency in the expenditure of the vast sums of money spent on the purchase of Government stores requires a very efficient and reliable staff of imperial inspectors, including a varied range of specialists, and we wish to point out that, though this staff may appear at first to be expensive, the cost of its maintenance will be small compared with the risks involved in purchasing stores without expert check. The activities of these officers would form one of the most valuable sources of industrial intelligence, and if, therefore, they are organised by an enlightened departmental head and are exchanged from time to time with officers employed under Local Governments in the encouragement of local industries, there is no doubt that the entertainment of this staff will be a real economy, both directly in the saving of money on purchases, and indirectly in the development of new industries. We contemplate that an arrangement will grow up of a kind that would prevent undue interference with the provincial directors in the purchase of local products and that consequently, while the right to inspect may exist, it will be exercised with judicious discretion and not in officious detail.

There is always a natural reluctance on the part of local purchasing officers to undertake the responsibility for quality. This feeling has, in fact, been one of the reasons why they have indented on the Stores Department instead of obtaining their requirements in India. We feel sure, therefore, that provincial purchasing officers will welcome the intervention of an imperial inspecting staff.

As we have stated above, we consider that one great advantage of the inspecting staff would be the transmission of information from one province to another regarding sources of production and improvements in manufacture, thus enabling each province to learn by the experience of others and facilitating more uniform progress in all parts of India. We propose that the Controller-General of Stores should work in close contact with the Director of Commercial and Industrial Intelligence. The arrangements for securing this object will be explained in Chapter XXII.

For the purposes of their estimate the Industrial Commission were constrained to conceive a centralised agency only and the following paragraphs set forth their proposals:—

347. The purchasing would be carried out by the following staff:—

(a) One Deputy Controller, with three Assistant Controllers, dealing with the following groups:—

- | | |
|--|----------------------------|
| 1. Electrical and mechanical appliances, hardware, implements and metals | One Assistant Controller. |
| 2. Railway materials | Two Assistant Controllers. |

(b) One Deputy Controller, with three Assistant Controllers, dealing with:—

- | | |
|------------------------------------|---------------------------|
| 1. Textiles | One Assistant Controller. |
| 2. Leather and articles of leather | Ditto. |
| 3. Miscellaneous articles | Ditto. |

(c) One Deputy Controller, with one Assistant Controller, dealing with oils, paints, varnishes and chemicals.

It should, however, be possible to effect a considerable degree of delegation to provincial departments, especially in respect of certain types of machinery and tools, textiles, miscellaneous articles, oils and paints. The work of the above staff would consist mainly of fixing contracts; casual purchases could probably be best effected in most cases by the provincial Directors. In addition a Supervisor of Stores contracts, who should unite business and legal experience, would be required, to ensure contracts being drawn in due form and containing the proper provisions needed to secure the interests of Governments.

348. The senior inspecting officer should each possess expert knowledge regarding a particular class of materials. In all we anticipate that six inspectors and 20 assistants will be required. This staff should be under a separate Deputy Controller (Inspection), to ensure their independence of the purchasing branch.

Table "A" gives details as to the superior staff and clerical and subordinate establishment which, we think it would be necessary to employ. It will be seen that the total estimated cost of the department amounts to Rs. 8,56,000.

349. Associated with this Stores Department would be the present Government Testing House at Alipora. It would necessarily require extension, both as regards personnel and laboratory accommodation. Fees are now charged for tests and, if this system be continued, the Testing House and its establishment should be self-supporting.

350. We assume that the Controller-General, in addition to his general supervising functions, would be responsible for the transmission to the India Office of all indents which cannot be complied with in India. We have provided for the equipment of the Imperial Stores Department with a full staff of experts; but it will be for the Committee whose appointment we have proposed to say to what extent the work of this department should be decentralised. As suggested in Chapter XII, the Controller-General of Stores should arrange for the centralised purchase of certain articles, such as the products of Indian iron and cement works, which require inspection by highly-qualified experts;

APPENDIX I—continued.

he might also make running contracts for the supply of classes of goods which are required on a large scale, such as certain kinds of textiles and oils, and the local Directors of Industries would make their purchases under these contracts. By this means competition between provincial Governments would be avoided, and manufacturers would be placed in a more favourable position for dealing with Government orders. The provincial Departments of Industries would be equipped with a purchasing and inspecting staff capable of dealing with a fair proportion of the local engineering and miscellaneous manufactures.

The Provincial Stores Departments would have to deal with indents the value of which would be roughly proportional to the provincial revenues. The work of Provincial Stores Departments would not be confined to the purchase of stores required locally. Excepting stores purchased by the Controller-General, all supplies required by provinces should be purchased by the stores agency of the province in which they are produced. The volume of business handled by these departments would, therefore, depend to some extent on the manufacturing capacity of the province.

351. Our present estimate involves an annual cost of eight and half lakhs of rupees and we think that purchases are not likely to fall short of 4½ crores, and may considerably exceed that figure. The resulting incidence is thus less than two per cent. and, though decentralisation, if efficiency is to be maintained, is bound to add to the cost of purchase, some increase is possible without raising the incidence to an unduly high figure."

TABLE A.

		Monthly.		Yearly.	
		R		R	
Purchase	Controller-General (R2,750—3,000)	2,916½		..	
	Deputy Controller	1,750		..	
	Ditto	1,500		..	
	Ditto	1,500		..	
	Ditto	1,500		..	
Purchase	Railway Materials (2)	Seven Assistant Controllers, R800—1,200. (Average R1,000)		7,000	
	Textiles				
	Chemicals and Oils				
	Machinery				
	Leather				
	Miscellaneous				
	Inspection	Six Inspectors, R800—1,200. (Average R1,000)		6,000	
		20 Assistant Inspectors, R450—700. (Average R600)		12,000	
		Supervisor of Stores Contracts		1,500	
		TOTAL		35,666½	
		Travelling allowance		7,250	
				42,916½	
		Say R43,000		5,16,000	
		Establishment		2,50,000	
		Office rent, contingencies and depôt expenses		90,000	
		TOTAL		8,56,000	

B.—THE INDIAN MUNITIONS BOARD.

The primary object for which the Indian Munitions Board was formed was to arrange supplies from India to the armies overseas (and in India) without unduly inflating local prices and thereby relieve the strain on British manufacturers and shipping. In course of development and to prevent competitive purchasing, the Board undertook supplies also to Government departments and railways, which chose to invoke its assistance or were compelled to do so in order to obtain controlled materials. It did not supply food and forage nor medical stores. In dealing with demands for stationery it made use of the existing machinery controlled by the Controller of Printing, Stationery and Stamps.

It was an important function of the Board to prevent demands being placed on the United Kingdom for stores which were procurable in India, whether of indigenous or English manufacture. This necessitated temporary relaxations of the Stores Rules which prescribe that imported articles must be purchased through the Director-General of Stores.

The Board was thus on the one hand a centralised purchasing agency for the Army, willing also to undertake purchase for civil departments, but not interfering with the localised purchases of these latter, except where such purchases might enter into serious competition with the Board's purchases; on the other hand, it controlled all demands on the United Kingdom and eliminated those which could be supplied in India so as to conserve materials, labour and freight in the United Kingdom and to encourage the development of Indian manufactures.

It should be added that as the organisation was evolved under war conditions, it was necessarily imperfect. In particular, it lacked sufficient expert staff; it was unable to maintain a proper record of prices; and it had no specialised organisation for inspection.

APPENDIX I—continued.

I.—Purchase of stores and utilization of Indian Resources.

The Indian Munitions Board was organised in the following Branches for the purposes of supply of stores and control of indents :—

1. Home indents.—Scrutinised indents on the Director-General of Stores as explained above.
2. Indents distribution.—Distributed all demands among appropriate supplying branches. The Controller also dealt with certain special cases of supply, e.g., pig iron and cement.
3. Timber supplies.—Dealt with supplies of timber and forest produce.
4. Textiles.—Supplied cotton, wool, silk goods and Army boots.
5. Jute manufactures (Calcutta).—Arranged supplies of jute fabrics.
6. Munitions Manufacture.—Arranged supplies of articles which required to be specially manufactured, especially ordnance stores not produced in Government factories.
7. Electrical and Mechanical (Calcutta).
8. Oils and Paints.
9. Hardware and Metals (Calcutta).
10. Miscellaneous Stores (Calcutta).

} The names are self-explanatory.

Each Branch consisted of a Controller at headquarters (Simla or Calcutta) with Deputy and Assistant Controllers at the various centres which afforded facilities for purchase.

II.—Stock.

At first, purchases for stock were avoided. Later, as sources of supplies became depleted, it was found necessary to open depôts and to stock stores in anticipation of urgent demands.

III.—Inspection.

Rails and steel from Tatas were inspected by the Metallurgical Inspector, Sakchi. Tests and analyses were made at the Government Test House, Alipore. Ordnance stores were inspected by the already existing Inspectors under the Director, Ordnance Inspection. It was the intention of the Board to create a separate inspection branch, but this intention was never carried into effect; and supplying officers had generally to undertake inspection themselves. It was never settled as a general principle to what extent inspection should be the function of the consuming department or should be undertaken by the purchasing agency.

IV.—Information.

The Controller, Industrial Intelligence, collected and disseminated information to the Branches. Records of prices paid for various articles were maintained in and published by the Accounts Branch; but it would be found impossible to publish these in time to serve as a guide for making fresh contracts. Generally it may be said that no uniform system of record was evolved and that Controllers were left to make their own arrangements.

C.—SCHEME FOR A STORES ORGANIZATION PREPARED BY MR. A. C. COURBOUGH, CONTROLLER (HOME INDENTS AND PRIORITY), INDIAN MUNITIONS BOARD, FOR THE USE OF THE INDIAN INDUSTRIAL COMMISSION.

(Note on the establishment required to control the purchase of engineering plant, materials and stores after the war.)

In arriving at an estimate of the cost of a Government Purchasing Department, it is necessary in the first place to consider the broad lines regulating the operations of such a Department.

There is at present no similar organisation either in India or in the United Kingdom, which one could take as a guide in the formation of the proposed new Department. In India, the Public Works Department, the Railways and other large purchasers of engineering materials and stores have organizations of various kinds which deal with the obtaining of stores either by purchase in India or by purchase through the Director-General of Stores, India Office. In the India Office, the Director-General of Stores has a large branch dealing with the purchase of materials required by all Government Departments in India. He has under his control purchasing officers, inspecting officers, shipping officers and also officers in charge of materials stored prior to shipment. The proposed new Department would combine the duties both of the purchasing officers in India and of those under the direction of the Director-General of Stores. It would, however, have duties of a considerably wider and more general character.

It is assumed in dealing with this question that the present restrictions on the purchase of machinery in India from representatives of British manufacturing concerns will be abolished. On this assumption, the duties of the Government Purchasing Department will consist not only in the purchase of Indian manufactures, imported hardware and consumable stores generally, but in the purchase of plant and machinery to meet the ever-increasing needs of India.

The work of the proposed Purchasing Department will, therefore, consist of :—

- (1) the purchase of materials manufactured in India from indigenous products;
- (2) the purchase of materials manufactured in India from imported raw material;
- (3) the purchase of materials from stock in India, such materials having been imported from Great Britain, other parts of the British Empire or foreign countries;
- (4) the placing of contracts in India with representatives of British manufacturing firms for engineering plant and materials or stores manufactured or sold by these firms;

APPENDIX I—continued.

- (5) the administration of the rules under which purchases are permitted by officers in the service of Government, together with the preparation of proposals for such amendments to these rules as may be required from time to time;
- (6) the control of the storing of imported materials in anticipation of demands and the subsequent distribution of these materials as required;
- (7) the control of the inspection of all materials purchased on Government account, whether imported or manufactured in India;
- (8) the control of such factories as are owned or administered by Government and produce articles for use by other Departments of Government;
- (9) the control, to whatever extent may be required of private factories producing materials for Government use; and
- (10) the preparation of suggestions for the development of industries directly connected with mechanical engineering or allied work, including the placing of contracts with private firms to meet estimated demands from various Government Departments.

In considering the operations of the proposed new Department, it is well at first to consider what immediate changes it will involve. The most important and most vital of these changes is the alteration of procedure so far as the India Office is concerned. The practice existing at present and regularised by the Stores Rules requires that all purchases of materials not available from stock in India or exceeding certain fixed amounts in total value shall be purchased through the Director-General of Stores at the India Office. This procedure necessitates the compilation of hundreds of indents yearly in India, the transmission of these indents to the Director-General of Stores, lengthy correspondence in many instances in regard to the character of the material required in fulfilment of these indents, still more lengthy delays in the execution of the contracts, a complete system of inspection of the material in the makers' works or before delivery from Home and arrangements for shipment by Government of materials so purchased. The new procedure would eliminate in a short time the greater part of the work of the Stores Department of the India Office. In spite of the drawback which India has hitherto possessed from the British manufacturers' point of view in that Government under existing rules could never become a supporter of British enterprise in India, many British engineering firms have established themselves in India, and are equipped with competent trained staffs capable of preparing estimates, advising on engineering problems and undertaking the erection, testing and putting into working order the plant which they supply. With the adoption of the proposed new procedure, not only would the operation of such locally established British firms be supported, but other firms at present unrepresented in India would find it to their advantage to set up offices in the centres where Government purchases were being made.

The second important alteration which the new procedure would involve is the setting up of Government stores of a general and comprehensive character. Hitherto, not only each Department of Government, but practically each indenting officer has had to arrange for the storage of the materials which he required for the carrying on of the work under his charge. State Railways have each their own large Store Depôts. The Public Works Department has innumerable stores, large and small, all over the country. The Army Department (Ordnance Factories, Supply and Transport Branch, etc.) have their own stores scattered all over India. In all these stores, many articles in common daily use are found stocked in quantities, large and small. Moreover, many of these articles are imported. The time taken for the receipt of a consignment after the indent is prepared is so long that large stocks of certain consumable stores are necessary.

The consequence of the multiplication of small store depôts and the time taken to meet demands is that the total quantity of any particular article held in stock in all the various depôts throughout the country is proportionately very great compared with the annual consumption. The new procedure proposed of holding stocks of consumable stores, whether imported or manufactured in India, at convenient depôts for distribution throughout India, would obviate the above mentioned excessive accumulation. Imported articles would naturally be stocked in the main ports, Calcutta, Bombay, Madras or Rangoon. Manufactured articles would mainly be stocked in depôts near the place of manufacture. By the adoption of such a system, the total amount of State money outstanding at any particular time in the shape of consumable stores would be greatly reduced. Moreover, there would be an equally efficient gain in the rapidity with which any article in connection with works in progress could be provided.

In regard to the personnel necessary for carrying on the work of the above outline Department, the attached sheet shows in graphic form the scheme of control. Under the direction of a Controller-General with a Deputy and an Assistant, would be three Controllers, one in charge of stores, the second in charge of purchases and the third in charge of the work of inspection and intelligence. The duties of the first named are sufficiently definite to make long explanation unnecessary. He would be responsible for the stocks of material held in the Government Central Depôts and would also be kept informed of the stocks of materials held in departmental or provincial depôts under the more direct control of other indenting officers. He would be responsible for maintaining the stocks in the Central Depôts up to a level sufficient to meet requirements of all indenting officers, who have authority to draw on the Central Stores or their supplies.

The duties of the Controller of Purchases would comprise the supervision and scrutiny of all indents prepared by Government officers throughout India. All indents for the purchase abroad of imported articles either through the Director-General of Stores, India Office, or direct manufacturers abroad would pass through his hands. He would be responsible for advising the Controller-General regarding the deletion of any articles proposed to be purchased abroad for which a suitable Indian substitute could be obtained. He would be responsible for providing the Controller-General with summaries of the purchases of imported articles, so that the position in regard to the future manufacture in India of suitable substitutes might be gauged.

Other Deputy Controllers would be appointed to supervise the purchasing in India of certain specialised classes of material. It is suggested that in the first instance four such Deputies should severally have under their control the purchase of (1) plant and machinery, (2) oils and paints, (3) hardware and metals, and (4) miscellaneous stores. These officers would have under them assistants located in various centres of industry, who would arrange the details of contracts and supervise the arrangements for the transport of materials purchased by them to indenting officers or to the various Central Stores Depôts.

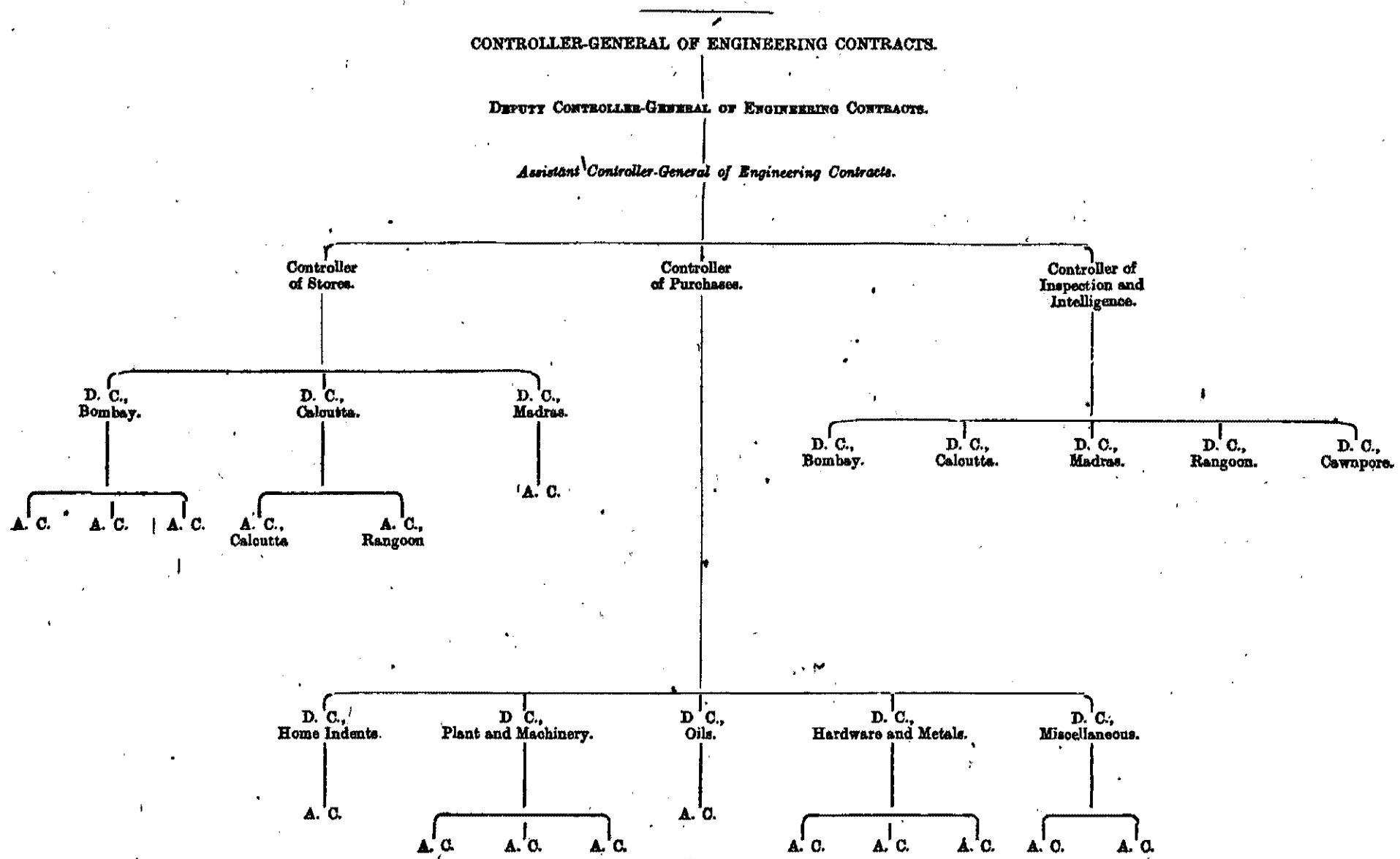
The Controller of Inspection and Intelligence would be responsible to the Controller-General for the inspection of all materials purchased on Government account. He would have Deputies with headquarters in the various manufacturing centres, who would be constantly in touch with the manufacturing activities of the country. It would be the duty of these officers not only to report on the position of work in progress, but on the development of industries generally and on the possibilities of the extension of manufacturing facilities in their responsible districts.

APPENDIX I—continued.

In regard to the cost of the proposed establishment, the following figures are submitted as a rough estimate :—

	R	R
Controller-General	4,000	..
Deputy Controller-General	2,000	..
Assistant „ „	1,200	..
Subordinate staff	..	3,000
Controller, Stores	2,000	..
3 Deputy Controllers, Stores	4,500	..
6 Assistant „ „	4,800	..
Subordinate staff	..	15,000
Controller, Purchases	2,000	..
5 Deputy Controllers, Purchases	7,500	..
10 Assistant „ „	8,000	..
Subordinate staff	..	15,000
Controller, Inspection and Intelligence	2,000	..
5 Deputy Controllers, Inspection and Intelligence	7,500	..
Subordinate staff	..	5,000
Total	45,500	38,000
	88,000	
GRAND TOTAL	83,500	

DIAGRAM ILLUSTRATING MR. COUBROUGH'S SCHEME.



APPENDIX I—continued.

D.—EXTRACT FROM A NOTE BY MR. D. L. MCPHERSON, CONTROLLER (MUNITIONS MANUFACTURES), INDIAN MUNITIONS BOARD, ON THE PROPOSED GOVERNMENT STORES ORGANIZATION.

8. *The degree of control which may be given to Local Governments.*—Presumably, whatever provincial control is granted to Local Governments, the executive exercise of it will be vested in the Directors of Industries. As far as I understand the situation, it is agreed that an Imperial purchasing organization is the only one which can be established in India for the many reasons given in the Industrial Commission's Report including those of economy of public funds and efficiency in making purchases and the means thereby secured of building up the industrial development of India.

On the other hand, Local Governments do not wish to be directed as to how their internal requirements are to be dealt with, and the wish is that they shall retain a certain measure of control over their own affairs, particularly as regards local purchases.

The only solution, to my mind, is that of attaching purchasing officers belonging to an Imperial organization to the staffs of Directors of Industries in each province, whose duties shall be those of purchasing within those provinces only at the request of the Director of Industries or under the orders of the Controller-General of Stores. In all establishment and administrative matters, these purchasing officers shall be under the control of the Director of Industries in each province, but apart from the grant of certain freedom of action, they shall be responsible to the Controller-General of Stores in all executive matter.

The main effect of this proposal is that, in each province, an Imperial officer shall exist who will purchase the products of, or imports into, that province only. These purchases would be made against demands received from officers within that province through the Director of Industries; as well as against those coming to him from the Controller-General for other parts of India for stores obtainable only in that province.

It may be said that this does not enable the Director of Industries to entirely control all purchases being made within his province; but on the other hand, he entirely controls purchases made for his own provincial officers, in stores obtainable within his province. He is also thus provided at his right hand with a unit of an organization which is in a position to meet his demands for stores unobtainable within his province either from other parts of India or from the Director-General of Stores. He is independent of the good will of another Director.

9. *Inspection.*—Purchases cannot be made anywhere without inspection, or guarantee of quality. The solution of this problem is, therefore, in my opinion, more dependent upon the correct consolidation of arrangements for inspection than those for purchase. In the event of each Director arranging for the purchase of certain stores in a foreign province, he is entirely dependent on the interest taken in his purchases by the inspecting officer in that province. No standard specification of quality can thus really be worked to, nor, do the means exist for the direction of industries along universal lines as to quality, etc., applicable to the whole of India.

It seems obvious, therefore, for these and many other reasons touched upon in the Industrial Commission's Report, that the inspection of purchases on behalf of Government Departments must be in the hands of an entirely Imperial organization which it will be found, I have no doubt, in course of time, will become the chief bureau of information on which the Industries Department will be enabled to tackle the whole of the four categories of stores referred to in paragraph 2.

In other words only one Department of Government shall be responsible to all provincial Directors, and through them to indentors, for the quality of stores being supplied and for the details already referred to in this note connected with specifications, etc.

In addition, therefore, to the appointment of a purchasing officer attached to each Director, I would add that of an inspecting officer of similar standing and direction and having equal responsibilities; both under the one Imperial organization headed by the Controller-General of Stores. The measure of control by Local Governments in the work of both these officers will be the same, with the added advantage that the inspecting officer in each province will be provided with details as to type, quality, pattern, etc., of all work being inspected by the Imperial Organization throughout India which it will be seen will be of immense importance to Directors in their efforts. It would not be possible for this to be obtained with anything but an Imperial Inspection branch.

10. With this proposed solution in view, we may now consider briefly the functions which will have to be performed by Directors in developing industries and the manner in which this solution may be said to fit in with the desire for provincial control. Broadly speaking, these functions will be three-fold:—

- (a) to enlarge, even-up, consolidate, or standardise those industries already established,
- (b) to initiate or encourage the wholesale production of articles not fully established and only partly attempted, and,
- (c) to originate the production by private or Government pioneering, of articles which cannot at present be made, in India, but are vital to the needs of the country in the obvious necessity for it to become independent of imports.

It will be observed that these functions, though exercised parochially, must, however, conform to a universal policy; such that Directors and their work in all provinces shall proceed along certain fixed lines. This will be laid down by the Government of India through whatever organization is created. In other words there must be the free exchange of ideas, methods, results, and so on, between provincial Directors.

But, as development and results must cease, or chaos result, if production is not according to certain standards or specifications, laid down by those responsible for inspection, to suit consumers, obviously, this must be created and rigidly adhered to. Similarly, purchases cannot be made unless the stores conform to the standards, etc., laid down.

Again, as consumers' requirements can be more or less the same all over India for the same class of stores, e.g., engineers in Madras and Lahore can use the same class of piping for the same work—a stage can be reached where one specification will suit a store used in all provinces, particularly as regards ordinarily imported stores of standard design.

It will hence be recognised that, in course of time when standards and specifications are drawn up and approved and drawings have been filed, the necessity for the supply of multifarious details by consumers or Directors at time of indent will more or less cease. Therefore applying this generally, the necessity for control over such specifications by a provincial Director will cease and he will, in fact, welcome the provision made for his officers by one in touch with such details in other provinces. Hence, as the results from the detailed performance of the above functions by

APPENDIX I—continued.

Directors are entirely dependent in each province upon the efficiency and completeness of the Inspection branch of the Imperial organization, the purchasing branch becomes, *ipso facto*, as it were, an engine deriving its power from the Director of Industries, and its lubrication from the Inspection branch. The one is useless without the other two.

Finally, applying this rather apt simile, in the solution proposed, we have an engine up to the required capacity made by an experienced firm (who have supplied similar engines to other provinces and who stock the necessary "spares"—a point of great importance in this connection) supplied to a Director who has full local knowledge as to working conditions and what he will must produce. In performing the above functions, as to the results from his mill, he controls the valves giving the power—inlet in, say, air or petrol. He can increase or decrease both power and speed or both at his mill, but his first consideration, before his engine will work, must be that his lubrication is correct and assured. The lubrication, it may be noted, has also been tested and proved by the same firm who made the engine to be the best for the purpose, and the only anxiety on this account which a Director need have is as regards supply—the quality is assured.

I think, therefore, it may be safely assumed that very full measure of control over their own affairs is thus assured to Local Governments consistent with efficiency of purchase and of inspection.

11. *Proposals for the Imperial Organization.*—We may now proceed to the detailed consideration of the appointments proposed in this as shown in Diagram "A". The designations given against the posts are self-explanatory but in the case of three, some further explanation is necessary.

The Inspector-General of Stores will be entirely responsible for drawing up, registering and issue to Chief Inspectors of Stores in the provinces of all specifications and drawings for the correct sealing and approval of samples and the supply of all particulars necessary to guide manufacture to Directors of Industries or to control purchase to purchasing officers.

Under the administrative control of this officer and executive control of the Chief Inspectors of Stores in Bengal and Bombay, two Test Houses are proposed in which physical tests, chemical analyses, and experiments, etc., are carried out.

It will be seen that Receipt, Inspection and Despatch Depôts are proposed for each province, and these are shown as under the Chief Inspectors. The object of this is manifold but chiefly so that:—

- (a) there can be no tampering with supplies once accepted;
- (b) bills can be signed in token of receipt of goods at once;
- (c) the industrial Department Advisers can examine and report on supplies to the Director in the case of disputes;
- (d) samples, specifications, drawings, etc., can be made and maintained for issue to all concerned;
- (e) the purchasing branch officers can settle disputes with suppliers to the spot; and
- (f) direct despatch by Government officers and not by firms or contractors can be made *after* acceptance to all consumers enabling standard forms and methods covering despatches to be adopted throughout India, allowing also the "pooling" consignments and thus a saving in wagons.

The Assistant Inspectors in these depôts, who carry out the actual inspection, will be appointed with regard to their technical training and suitability for the work to be inspected. For example, electrical stores will be inspected by the Assistant who has had training in this branch of engineering, and it will also be preferable if his appointment is made with the concurrence of the Electrical Engineer Adviser in each province, and so on for the various classes of stores. The Depôts would for purposes of inspection, thus be suitably divided up into sections.

The Deputy Controllers-General for manufactures and purchases. The intention is to split up indents such that one officer deals with stores which have to be ordered for manufacture and with running contracts, i.e., those which are not immediately available for purchase, keeping such apart from those which can be purchased at once. It will be seen that the first appointment (stores manufactures) will be that which will form the link between the Controller-General and the Directors of Industries in dealing with categories (ii) and (iii) of paragraph 2, which is also referred to as the link required in paragraphs 4 and 5.

The Ordnance or Military Liaison officer.—This appointment is, I consider, of great importance. Ordnance factories, as at present constituted, cannot meet the demands of the Army even in peace times. The Supply and Transport Directorate will doubtless be debarred from obtaining many of their requirements from petty contractors usually paying middle-men's profits—as at present. Other branches of the Army will probably have to fall in line. Private sources of supply will, therefore, have to be recruited by the Industries Department to meet both peace time and war requirements. At present, no war reserve in such exists. It is presumed that it is not the intention of Government to equip Ordnance Factories and Arsenals, so as to make them independent of "outside" assistance to maintain an Army in the Field. The object of this appointment, therefore, is that all Army demands should be received by the Controller-General of Stores through this officer in peace times, and secondly, that he may be able to build up a war reserve of manufactures and sources of supply of stores which can be set in motion by the proper authorities in the event of war.

12. *Proposals for the Provincial Organisation.*—It is impossible to consider this without entering into details of the probable provincial industries' organization. Reference is invited to Diagram "B".

It will be seen that I have departed from many of the proposals contained in the Report of the Industrial Commission. It appears to have been the intention that in many directions Directors of Industries should make their own purchases and that the Engineers and other experts attached to the staff of the Director should be employed on this work in addition to their normal functions as Advisers. I am entirely against this.

If industries are to be properly organised and developed, this can only be done by officers qualified to tackle the problems created by the various classes of industries to be developed. It may not be so at the commencement but after a time, it will be found, I believe, that the time of such officers will be fully taken up in concentrating their whole energies on the details connected with the industries, of which they are in charge. They will have no time to argue with contractors, regarding tenders, contracts, shortage of supplies, details of delivery, arguments with inspectors, losses of railway receipts and other such items of everyday correspondence between purchasing officers, contractors, consignees, etc. That is, a specialist or expert should not be required to buy anything, and I think this will be borne out by the experience of those who have been through it during this war. He should, I consider however, be used to the fullest capacity in helping to draw up specifications, indicating sources of supply, guiding purchasing officers in drawing up the technical details of contracts, assisting the Director in matters connected with his charge, undertaking consulting work for firms wishing to develop factories, and so on. That is, work for which he is specially

APPENDIX I—continued.

qualified. These remarks apply to the whole of the first five appointments shown in Diagram "B" under the Deputy Director.

My proposal, therefore, is that neither the Director nor any of his staff shall purchase anything. Their functions should be development and that only, and, for many years I consider they will have all their time taken up in this pursuit. The purchasing of the results of their work may be well left in the hands of an experienced Stores officer having knowledge of the local market and good business capacity.

To make my meaning clearer, we may now consider:—

13. *Methods of working between the purchasing and Industries' branches.* To commence with, one need not consider urgent demands in peace time. Normally, there should be no such thing, but the organization should be elastic enough to cope with such demands when they arise. We may, therefore, consider the matter where demands are in the nature of forecasts over periods. I suggest that indents should ordinarily be received quarterly for completion by the end of the following quarter. That is, indents, which it may be stipulated have to be in the hands of the purchasing officer by the 1st April, shall be for stores to be supplied by the end of June covering the indentor's estimated consumption from July to the end of September.

Indents will be sent direct by indentors to the Director of Industries within a date to be fixed by him. These will then be examined and the following essential action taken:—

- (a) Items which cannot be obtained in that Circle either by purchase or manufacture will be transferred direct to the Controller-General, the local purchasing officer being advised.
- (b) Items which can be manufactured in that Circle, whether ordinarily imported or not; the Director's Adviser or Advisers, in charge of the industries concerned, will receive and transfer these to the purchasing officer indicating against the items the firm or firms who should be dealt with, and a maxima and minima price, wherever possible, to be paid. Also any other information likely to be of service to the purchasing officer in dealing with the demands and to avoid a return reference.
- (c) If it is known or thought as a result of the periodic exchange of information between Directors that items which can be manufactured in that province can also possibly be obtained cheaper or better in any other province these shall be transferred to the Controller-General giving such suggestions and advising the local purchasing officer. These will be dealt with in the Controller-General's office by the Deputy Controller-General (Stores manufactures).
- (d) Items which can be purchased within that province will be at once transferred to the local purchasing officer, advices being sent to the Controller-General, the Inspector-General of Stores, and the local Chief Inspector of Stores.
- (e) Items which it is necessary to import and which cannot be manufactured in India should be dealt with only by the Director's Advisers in the first instance. From the nature of the items, they will know if suitable substitutes exist or can be produced. They should, therefore, carry on the initial correspondence with indentors, and on completion of such, transfer the items either to the Controller-General for import—with advice to the local purchasing officer—in the event of failure to satisfy the indentor or, alternatively, to the local purchasing officer, indicating full details of the suitable substitute which will be accepted, from where obtainable, price, etc., and
- (f) In all cases, and irrespective of what action is necessary as above on items, fresh consolidated indent shall be made out in the office of the Director of Industries and submitted to those officers indicated by the dates fixed.

The above describes generally the work which will be performed by the channel through which indentors are put in touch with sources of supply, and, as that is an organization entirely under the orders of a Local Government, a close examination of the details of actions suggested will indicate, I think, that a greater measure of control over their own affairs could hardly be given to, or required by, Local Governments.

Also, from the way in which the Local Advisors or experts are put in touch with the demands requiring their knowledge and advice, on which their subsequent actions regarding development will be based, and, as the original indents are always on record in their own branch, the reasons for my suggestion above, that provincial Advisors and experts should do no purchasing, will, I think, be apparent. Again, the time of these Advisors is not taken up in examining items on indents which are irrelevant to their particular charge, as it will be seen, such do not come to them from the Director. It may be as well to cite one example. An indent may be received for 100 gallons of cylinder oil, 100 pairs of Army Boots, 100 electric switches, and 100 taps, wrenches, etc. Each item will be transferred by the Director's office to the experts concerned if direct purchase is not possible, if import is necessary, etc., etc. The oil expert will not see the item for electric switches, and similarly, the Industrial Engineer Adviser will not see the item for Army Boots.

If the Leather Expert is, however, to spend his time calling for tenders, examining samples fixing contracts, and so on, his expert knowledge is not being turned to proper account. If he controls his charge correctly, he should at once be able to indicate, against the item for boots, the firms to be dealt with, maxima and minima prices, and all other such details and let the purchasing officer do the remainder. The same remarks apply equally to the other items.

14. *Action on indents by the purchasing organization.* The Controller-General will receive actual indents from Directors of Industries. Some of the items will be for import, some for manufacture, and some for purchase in provinces other than those from which indents are received. He will also receive copies of direct purchases ordered by Directors in each province on the purchasing officer. Several items will be of the same class and many to similar specification.

If purchase of the same item is being arranged in more than one province, he will use his discretion (being guided by price, delivery, etc.), whether to cancel one and increase the other, or allow such to proceed. In the case of indents received for items not purchasable in one or more provinces—say, jute canvas—but being purchased in another—say, Bengal—he would be in a position to order the sum of the indents to be purchased in that province by the purchasing officer concerned.

In all these cases, a date factor must be adhered to in order to permit of "pooling" of items to be arranged and, also, it is important that advice of such action should be given to the Inspector-General of Stores, who will advise his provincial Chief Inspector to expect calls for information and inspection, etc.

APPENDIX I—continued.

In the case of articles to be manufactured in any other part of India than the province from which the demand arises, somewhat similar action will be taken except that the indents will go to the Directors of Industries for production, the purchasing officer and the Chief Inspector of Stores being advised. The action to be taken on stores for import has already been dealt with in paragraph 3.

Provincial purchasing officers will thus receive indents for direct purchase only, of items which he knows can be obtained in his Circle both from his Director and added quantities of the same item from the Controller-General. He will receive these by a certain date on which he will know that, normally, further demands need not be expected for three months. He will have ample time to watch the market and buy when most favourable.

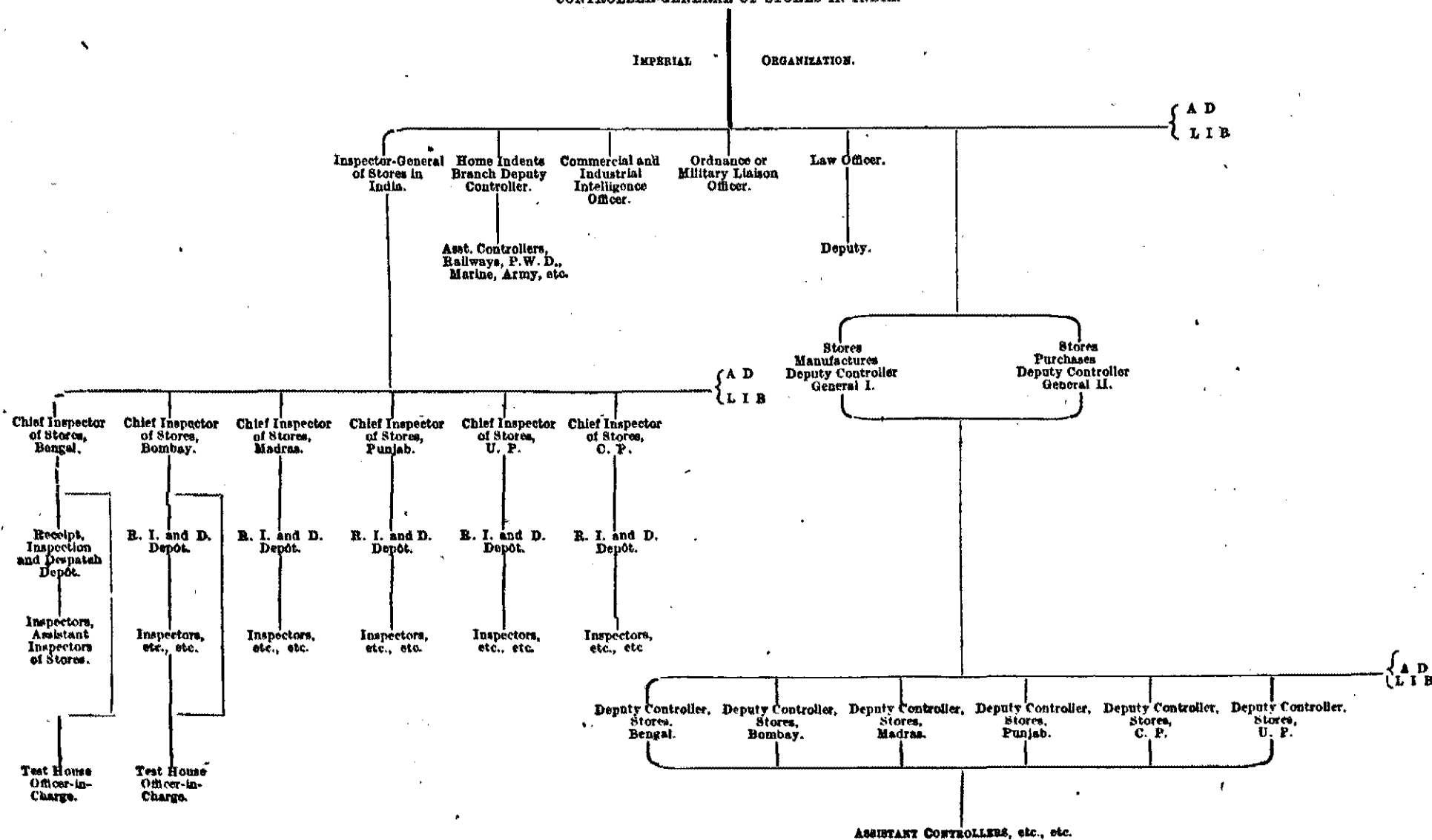
He will be given full information by the Director of Industries enabling him to place out orders for manufactures, his function being the formalities only at the commencement, and the work of watching deliveries and subsequent completion and despatch.

In all cases, copies of his contracts and details of supply will be given to his *vis a vis* the Chief Inspector of Stores on whose shoulders will rest the receipt inspection and despatch into and from his Depot.

MR. McPHERSON'S SCHEME.

DIAGRAM "A."

CONTROLLER-GENERAL OF STORES IN INDIA.

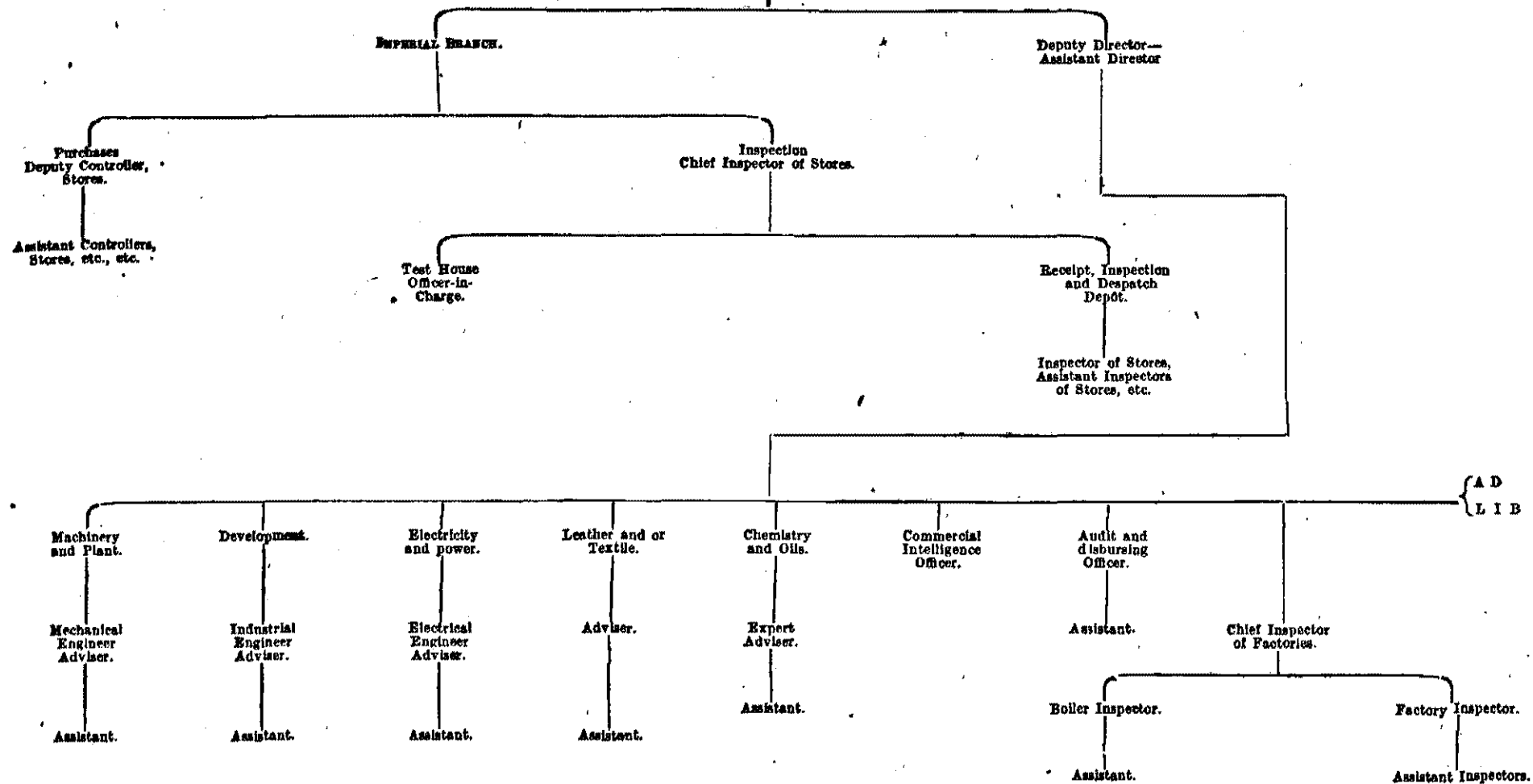


MR. McPHERSON'S SCHEME.

DIAGRAM "B."

DIRECTOR OF INDUSTRIES.

PROVINCIAL ORGANIZATION.



APPENDIX I—continued.

APPENDICES.

APPENDIX I—continued.

ANNEXURE II.

RULES FOR THE SUPPLY OF ARTICLES FOR THE PUBLIC SERVICE.

Subject to the provisions of the General Rules specified below, and to any instructions regarding specific articles which have been, or may be, issued by the Government of India from time to time (e.g., those relating to the supply of stationery), the following are the rules relating to the supply of articles required for the public service. These rules supersede all previous orders which are not explicitly continued.

RULE 1.—*Articles manufactured in India from Indian materials.*

All articles which are produced in India in the form of raw material, or are manufactured in India from materials produced in India, should, by preference, be purchased locally, provided that the quality is sufficiently good for the purpose, and the price not unfavourable.

RULE 2.—*Articles manufactured in India from imported materials.*

All articles manufactured in India from imported materials should, by preference, be purchased in India subject, however, to the following conditions:—

- (a) That a substantial part of the process of manufacture of the articles purchased has been performed in India.
- (b) That the price is as low as that at which articles of similar quality can be obtained through the India Office.
- (c) That the materials employed are subjected to such inspection and tests as may be prescribed by the Government of India.

Note.—The term “a substantial part of the process of manufacture” in clause (a) means that a substantial part of the preparation of the finished article must be performed in India, whether from raw materials or from component parts obtained in a finished state from other sources.

RULE 3.—*Articles which are not manufactured in India.*

Articles which are not manufactured in India should be obtained by indent upon the Store Department of the India Office, except in the following cases:—

- (a) When the articles are already in India at the time of order, and their price and quality are not unfavourable as compared with those at which similar articles could be obtained through the India Office, and the cost of the supply does not exceed the limits prescribed at the end of Rule 13.
- (b) In the case of important construction works let out on contract, articles not manufactured in India required for the construction of such works may be supplied by the contracting firm subject to the following conditions:—
 - (i) That the firm is approved by the Government of India and is included in the list of firms so approved—*vide* Schedule B, Appendix 30, P. W. D. Code, Volume III.
 - (ii) That the materials are subject to the current specifications and tests prescribed by the Government of India.

Note.—Articles of clothing and equipment of European manufacture required for the Burma Police Department may be procured for the present without the intervention of the India Office.

RULE 4.—*Articles which should be purchased in India.*

The following articles, whether manufactured or produced in India or not, should be purchased in India, provided that they comply with the current specifications, are of the requisite quality, and can be obtained at a not unfavourable price:—

- (a) Those of a perishable nature.
- (b) Explosives.
- (c) Block tin.
- (d) Wines and spirits and English bottled beer for the use of Government hospitals in India.
- (e) Kerosine oil.
- (f) Plant and materials for electric installations intended to take current from existing centres; and small electrical power and lighting plants of not more than 25 kilowatt capacity, which involve the provision of generators and cables for distribution, provided they comply with the current specifications and tests prescribed by the Store Department of the India Office.
- (g) Australian timber.
- (h) Australian copper.
- (i) Italian marble.
- (j) British Columbian timber.
- (k) Plant and materials for small gas installations the cost of which does not exceed R 15,000.
- (l) Cheap articles of common use required in small quantities only.
- (m) Such other classes of articles as may from time to time be prescribed by the Government of India. All such cases should be reported to the Secretary of State for his information.

RULE 5.—*Special purchases in India.*

When serious inconvenience to the public service would be caused by waiting to obtain an article from England through the Director-General of Stores, or when, owing to the greater promptitude of supply, an economy can be effected

APPENDIX I—continued.

by purchasing in India articles which, under the foregoing rules, should be obtained through the Store Department, the purchase may be made in India, subject to Rule 13, provided that the articles are already in India at the time of order; but in such cases, if the value of the articles exceeds Rs. 750, the sanctioning officer should place on record the reasons which make the local purchase desirable. This record shall be available for the inspection of the Examiner of Accounts or the Supervising Officer when required.

RULE 6.—*Inter-departmental purchases.*

Nothing in the rules is to be deemed to prohibit the purchase of stores of European manufacture by one Department or Railway from another.

RULE 7.—*Method of obtaining stores not purchased in India.*

All articles which, under the foregoing rules are not to be bought in India, should be obtained by indent on the Store Department of the India Office, except any which the Secretary of State may have specially authorised the Government of India or its officers to purchase direct outside India. Such purchase is at present permissible in the case of the following articles:—

- (i) Seeds.
- (ii) Cinchona bark.
- (iii) Articles for experimental or research purposes required by officers approved by the Government of India from time to time. A list of the officers thus approved is given in Appendix A.
- (iv) Excise instruments and apparatus required by Provincial Excise Departments for experimental or research purposes.
- (v) China, glass, cutlery, plate, crockery and perishable fabrics, including linen for residences which are furnished by Government.
- (vi) Australian timber.
- (vii) British Columbian timber.
- (viii) Australian lead.
- (ix) Such articles as Superintendents of Vaccine Depôts may require for the preparation of vaccine lymph (e.g., lanoline and glycerine).
- (x) Chemicals and scientific instruments which do not require careful inspection and testing or which are of standard description usually quoted by well-known firms, provided that the articles cannot be procured from the Medical Store Depôts.
- (xi) Articles required for Viceregal residences in special and urgent cases.

Note.—Payments for stores purchased under this rule should be made direct to the suppliers by the purchasing officers.

GENERAL RULES.

RULE 8.—*Forecast of requirements which should under the rules be complied with by indent on the India Office.*

All requirements should be fulfilled locally in accordance with the provisions of the Resolution No. 4941—4988-102, dated the 14th July 1909, provided that quality and price are not unfavourable and provided that such purchase does not violate any of the instructions contained in these rules. In cases, however, in which stores have to be obtained through the India Office, every effort should be made to forecast requirements so that the indents may be despatched in ample time. Persistent failure of any officer to make such efforts should be brought to notice by the Local Government or other authority which may, at its discretion, cancel or reduce the power of sanction entrusted to the officer at fault.

RULE 9.—*Time required to obtain Stores from England.*

It may be assumed that the time required from the transmission of an indent upon the Secretary of State to the receipt of the stores is:—

Urgent telegraphic indents, not less than three months.

Ordinary indents, six to ten months, according to the articles demanded.

For special stores, e.g., large girders, rolling stock, etc., up to one year in ordinary times.

NOTE.—When ordinary stock articles conforming to well-recognised standards are required within a shorter period than three months, and the purchase has, under the rules, to be made through the India Office, the indenting officer shall, if he desires that the procedure indicated in the Resolution in the Department of Commerce and Industry No. 6822-6869-37, dated the 13th September 1911, be adopted, state the fact clearly in his telegraphic indent.

RULE 10.—*Method of comparing prices.*

In all cases in which the selection of source of supply depends upon comparison of prices, the procedure to be adopted for such a comparison is as follows:—

- (i) A reference should be made to Home prices as shown in the Rate Lists, and freight should be added at the lowest rates paid by the India Office together with 13s. 4d. per 100L. for interest, 2s. 2d. per 100L. for insurance, and 3d. per ton for freight brokerage.
- (ii) In cases of important contracts, the prices ruling in the English market should be ascertained by telegraphic reference to the Director-General of Stores.
- (iii) In cases where the necessary information as to Home prices is not available from the Rate Lists, the purchase in India shall be subject to the condition that the price is not unfavourable.

APPENDIX I—continued.

(iv) In order to arrive at the market value at an Indian port of the article imported from England, the following charges shall be included :—

- (a) Landing, wharfage, and port charges as shown in the Rate Lists.
- (b) Customs duty, as shown in the tariff to be applicable to the article in question, to be calculated on its cost plus the additional charges mentioned in the earlier part of this rule.
- (v) The cost of carriage to site from port or place of manufacture, as the case may be, shall be taken into account.

RULE 11.—*Tests.*

Any articles purchased in India which should be tested are liable to the specifications laid down from time to time by competent authority, with the approval of the Secretary of State in Council, and should be required to pass the tests prescribed for such articles.

RULE 12.—*Firms from which iron and steel may be bought in India.*

Important iron and steel work, if purchased in India, should only be obtained from firms approved by the local Government or Administration and entered in a Schedule as corrected from time to time by the Government of India. A list of approved firms is given in Appendix B.

Note.—By "important iron or steel work" are meant articles of iron or steel, which form important components of the project in hand, e.g., bridge girders and roof trusses, built up in the firm's workshops and supplied, ready for erection, in such sections as may be convenient, and rolled steel beams, rails or other sections cut to length or otherwise prepared at the firm's workshops to suit the indenting officer's requirements. The intention of the rule is to ensure that part, the accurate preparation of which is essential to the security of a project, shall be obtained only from firms which possess workshops and appliances capable of turning out work of the desired standard. The raw material used may be either imported or of Indian manufacture, subject to the usual specifications.

RULE 13.*—*Financial limits on powers of officers to make purchases in India.*

In the case of purchases made under Rules 1, 2, and 4, an officer's powers of purchase extend to the ordinary limits to which he is empowered to enter into contracts : but in the case of purchases made in India under Rules 3(a) and 5, the limits for expenditure on any one article or on any number of similar articles purchased at one time are as follows :—

(a) *Civil Departments.*

(i) Heads of Departments, Commissioners of Divisions, other officers of or above the rank of Collector whom the Local Government may select, and Principals of Colleges and Inspectors of Schools in Bengal, Bihar and Orissa and Assam	R
	250
(ii) Other officers authorised to incur expenditure	50
(iii) Controller of Printing Stationery and Stamps	1,000
(iv) Local Government or Administration :—	
1. In case of purchases made under Rule 3 (a)	3,000
2. In case of purchases made under Rule 5.	Full powers.

The powers of a Local Government are also exercised by the following officers :—

Surveyor-General of India.

Agricultural Adviser to the Government of India and Director of the Agricultural Research Institute, Pusa.

Director-General of Observatories.

Director-General, Posts and Telegraphs.

Political Resident, Persian Gulf.

Superintendent of Port Blair.

(b) *Public Works Department.*

	For purchases made under Rule 3 (a).	For purchases made under Rule 5.
	R	— R
(i) Executive or Assistant Engineer holding charge of a Division	200	500
(ii) Superintending Engineer or Superintendent of Works	1,000	2,500
(iii) Local Government or Administration	3,000	Full powers.

(c) *Railway Department.*

(i) Executive or Assistant Engineer holding charge of a Division on a line under construction or survey	200	500
(ii) Engineer-in-Chief holding charge of a line under construction or survey	1,000	2,500
(iii) Agent of an open line	1,000	2,500
(iv) Railway Board	3,000	Full powers.

NOTE.—Agents of open lines may delegate to their Engineers-in-Chief, Executive Engineers, or Assistant Engineers holding charge of a Division, such power of purchase as they deem fit up to the limits specified for lines under construction, and to their chief Store-keepers up to the limits specified for Executive Engineers.

* This rule is in abeyance for the period of the war.

APPENDIX I—continued.

(d) Army Department.

	For purchases made under Rule 3 (a). R	For purchases made under Rule 5. R
(i) Director-General of Military Works	3,000	Full powers.
(ii) Divisional Commander	3,000	5,000
(iii) Officer Commanding an independent brigade; Director-General of Ordnance;* Director, Royal Indian Marine; Director-General, Indian Medical Service (for medical store depôts); Director, Army Clothing; and Director-General, Army Remount Department	2,500	2,500
(iv) Officer Commanding a brigade, other than those included in (iii); Director of Ordnance Factories; Director of Ordnance Inspection and Director of Ordnance Stores	1,000	1,000
(v) Superintendent, Army Clothing Factory; Supply and Transport Officer on special duty in Kashmir; and Deputy Director, Royal Indian Marine	500	500
(vi) Chief of the General Staff; General Officer Commanding, Northern and Southern Armies; Adjutant-General in India; Quartermaster-General in India; Director, Medical Services, Army Headquarters, India; Military Secretary to His Excellency the Commander-in-Chief; Military Accountant-General; Controllers of Military Accounts; and Controller of Military Supply Accounts	250	250
(vii) Officer Commanding a station; Superintendent, Army Remount Department; Superintendent, Ordnance Factory; Government Inspector of Army Boots Factory, Cawnpore; Assistant Directors of Ordnance Stores; Inspectors (Ordnance Department), the Assistant Inspector in charge of General Stores and the Proof and Experimental Officer, Balasore; Medical Store-keeper; Commandant, Indian Staff College; Assistant Director of Supplies; Assistant Director of Transport and Assistant Director of Grass Farms	200	200
(viii) Officer Commanding a unit (including a hospital); Senior Medical Officer, Indian Medical Service, of a station; Recruiting Officer for Gurkhas at Gorakhpur; Officers (Ordnance or Departmental) in charge of depôts; Assistant Inspectors (Ordnance Department) with the exception of the Assistant Inspector in charge of General Stores; Officer-in-charge of Supply Reserve Depôts; Commissioned Officers Commanding Depôt Transport Lines, Officer in charge of Supplies and Chief Chemical Examiner		20

(e) Indian Munitions Board.

(i) Metallurgical Inspector, Indian Munitions Board, Jamshedpur	500	500
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NOTE 1.—The financial limits imposed under this rule in respect of purchases made under Rules 3 (a) and 5 do not apply to the purchase of articles required on mobilization or during the continuance of military operations.

NOTE 2.—These powers are subject to the rules of the budget system. No sanction may be given which will involve expenditure from the budget grant of any future year. The powers extending to each sanction, whether against Army, Military Works, or Marine funds.

In the case of the Ordnance, Medical Store and Remount Departments, the Divisional Brigades and Station Commanders are not competent financial authorities.

RULE 14.—Power to sanction departures from the rules.

The Government of India have power to sanction departures from the rules in cases in which such departure is absolutely unavoidable, [subject to a report to the Secretary of State if the expenditure exceeds Rs10,000.]

[] Suspend for the period of the war.

LOCAL PURCHASE RULES.

APPENDIX A.

List of officers referred to in rule 7 (iii), who are authorised to obtain direct from manufacturers or dealers in England, America, Japan, or other foreign countries such articles as they may require for experimental or research purposes.

Superintendent, X-ray Institute.

Chemical Examiners.

Superintendents of Vaccine Depôts.

Principals of Medical Colleges.

* The Director General of Ordnance has full powers of local purchase under Rule 5 in cases where the purchases are required to meet urgent field service requirements or to replace issue from mobilization reserves for the equipment of troops suddenly ordered on field service.

APPENDIX I—continued.

Superintendents of Medical Schools.
 Director of Bacteriological, Pathological or Research Laboratories, including officers in charge of Divisional and Brigade Laboratories.
 Principals of Arts Colleges.
 Principals of Technical and Industrial Institutes.
 Directors of Industries.
 Directors of Fisheries.
 Sanitary Commissioners.
 Director, Madras Cinchona Department.
 Principals of Training Colleges.
 Principals of Veterinary Colleges.
 Officer in charge of the Experimental Sewage Installation at Poona.
 Surveyor-General of India.
 Inspector-General of Forests.
 Director-General of Observatories.
 Director of Botanical Survey.
 Agricultural Adviser to the Government of India and Director, Agricultural Research Institute, Pusa.
 Imperial Bacteriologist, Civil Veterinary Department.
 Imperial Agricultural Chemist.
 Imperial Mycologist.
 Imperial Entomologist.
 Directors of Agriculture.
 President of the Imperial Forest Research Institute.
 Principal of the Imperial Forest College.
 Director, Geological Survey of India.
 Railway Board.
 Directors of Public Instruction.
 Chief Malaria Medical Officer, Punjab.
 Chief Conservator of Forests, Burma.
 Director of the Zoological Survey of India.
 Inspector of Science and European Schools, Central Provinces.
 Metallurgical Inspector, Indian Munitions Board.

APPENDIX B.

List of Firms referred to in Rule 12. (Not printed.)

ANNEXURE III.

SHIP-BUILDING RULES.

(APPENDIX VI TO MARINE REGULATIONS, INDIA, VOLUME III.)

Rules defining (i) the procedure to be observed in respect of the provision of new vessels other than launches for the Royal Indian Marine, Departments of the Government of India and Local Governments and Administrations, and (ii) the financial powers of Local Governments and Administrations in regard to the construction and repair of vessels required for inland navigation, and for use at ports, etc.

(i) *Procedure governing the provision of new vessels, etc.*

1. The following procedure has been laid down in order to ensure that the designs of vessels should embody the latest and most economical improvements introduced in ship-building in the United Kingdom, it being considered desirable that, with a view to obtaining the best results, the same procedure should be followed by all departments in India.

2. When a Local Government or Administration, or a Department accepts the necessity for the construction or purchase of a new vessel, it should send the necessary design of the vessels to the Director, Royal Indian Marine, who will forward it to the Director-General of Stores, India Office, for reference to the Consulting Naval Architect at the India Office, with full particulars of all requirements which the new vessels should meet, and with the request that the Director-General of Stores may send out a specification, drawing and estimate of cost of the proposed vessel.

3. On the receipt of the above Director, Royal Indian Marine, will if he considers that there are any points which require modification, return the specification and drawings to the India Office with his remarks.

4. When the points at issue have been settled, the accepted specification and drawings will be returned by the Director, Royal Indian Marine, to the Local Government or Administration, or Department concerned, with an intimation whether the proposed vessel can be built with advantage and economy at either of the Royal Indian Marine

APPENDIX I—concluded.

Dockyards at Bombay and Calcutta. Final orders as to the construction of the vessel will then be issued by the Local Government or Administration or Department in question, or the sanction of the Government of India obtained should such be required [see (ii) below].

5. The procedure laid down above will not be applicable in the following cases :—

- (a) Sea-going vessels of 120 feet length and under, irrespective of the method of propulsion. Proposals for such vessels will be sent to the Director, Royal Indian Marine, who will use his discretion as to the necessity for reference to the Director-General of Stores, India Office.
- (b) All vessels for inland water, except such special ones as dredgers, or those in which there is novelty of design or construction, either in hull or motive power. The procedure in respect of such special vessels will be that laid down in clauses 2-4.

6. The Director, Royal Indian Marine, will, however, be at liberty to refer any case he may consider advisable to the Director-General of Stores, India Office, for reference to the Consulting Naval Architect for plans, specification and estimate.

(ii) *Financial powers of Local Governments and Administrations in regard to the construction and repair of vessels, etc.*

7. Local Governments and Administrations are empowered to sanction the construction or purchase at the cost of Provincial revenue of all vessels that may be required for inland navigation and for use at ports, provided :—

- (a) That, without the previous sanction of the Government of India to be obtained through the Marine Department, the cost shall in no case exceed Rs. 1,00,000.
- (b) That the advice of the Director, Royal Indian Marine, as regards the type and cost of the vessel shall invariably be obtained, and shall be adopted on all material points.
- (c) That without the previous sanction of the Government of India in the Marine Department no vessel shall be built otherwise than at a Government Dockyard.

8. The preceding rules do not apply to non-sea-going vessels of any kind other than those driven by engine power.

9. The Railway Department (Railway Board) of the Government of India are allowed a free-hand in the matter of having vessels constructed at the Government Dockyards, subject to the condition that, when new types of river steamers are required for use in connection with State Railways worked, or under construction by the State, the Railway Board, before concluding a contract for their purchase, will ascertain, from the Director, Royal Indian Marine, what would be the cost of obtaining similar vessels from the Royal Indian Marine Dockyards.

10. Local Governments and Administrations have full power, without any limit to cost, to sanction expenditure on repairs to all vessels required for inland navigation and for use at ports.

(iii) *General.*

11. All communications from Local Governments and Administrations, relating to works of construction or repairs to be undertaken for them in Government Dockyards should be addressed to the Director, Royal Indian Marine, if the work is to be done at Bombay, and to the Captain Superintendent, Royal Indian Marine, if at Calcutta.

Estimates for Imperial Marine Works to be undertaken in the Kidderpore Dockyard, costing over Rs. 1,000 are to be forwarded to the Director, Royal Indian Marine, who will deal with them as laid down in paragraph 8 clause (i).

12. In all estimates for new works submitted to the Government of India due allowance is to be made for contingencies, and the estimate is to be carefully scrutinized to ascertain whether it has been made out in good faith and correctly shows the expense that is likely to be incurred. Once the work is sanctioned and a specific sum allotted for it the amount should not be exceeded without the previous sanction of the Government of India.

APPENDIX II.

APPENDIX II.

Extracts of evidence relating to the Terms of Reference of the Stores Purchase Committee recorded by the Public Works Reorganization Committee.

From Volume II.

K. S. FRAMJI, Esq., Executive Engineer, Kolaba District, Bombay.

Pages 13-14—

(Written.) 61. . . . Further decentralization in the Public Works Department itself would appear desirable by giving new or increased powers in the following respects :—

* * * * *

(b) Executive Engineers may be given more latitude in the matter of local purchase of articles of European manufacture, the rules in force at present are unduly rigid ;

G. WITTET, Esq., F.R.I.B.A., Consulting Architect to Government, Bombay.

Page 21—

(Written.) 121. . . One of the difficulties in this country is to keep abreast of the improvements in fittings and appliances connected with the building trades. At home agents regularly lay all new developments, their firms bring out, before people interested in the building and allied trades, and either exhibit samples, or arrange for the person interested to visit show rooms or works in which the article has been installed. Under the existing system there is very little inducement for firms or their agents to approach Government officers in India who deal with buildings. If the powers permitting the local purchase of materials imported into the country were extended and greater freedom allowed in placing orders with local agents, instead of having to indent on the Stores Department, it would encourage firms in the country and local agents of home firms to bring samples of new or improved goods to the notice of possible buyers and also to keep stocks in this country.

Pages 23-24—

(Oral.) 136. . . The witness complained that his operations were hampered by the rules regulating the local purchase of stores and that he was not allowed sufficient latitude in the matter of purchasing such stores from England. He did not see enough of novelties from home, because no encouragement was offered to agents of English firms to bring them out to India. He considered that more elasticity should be allowed to officers and that they should be authorised to exercise discretion as to buying locally or indenting upon the India Office.

143. . . In regard to the question of the local purchase of stores, the witness was asked whether he thought it would be feasible for the Government of Bombay to appoint a government buyer who would reside in Bombay and obtain tenders when required, either in India or from England. The tender would be accepted and the stores obtained by this officer, who would be paid a certain percentage on the amount of the order but would receive no commission of any sort from the seller. The witness was afraid that this system would bring no new materials to the notice of the architect. When, however, it was pointed out to him that the buyer would be in close touch both with the office of the witness, and with the building trades elsewhere, and would be responsible that all goods delivered were in accordance with specifications, the buyer receiving only a small percentage, say three per cent. on an engine and 1½ per cent. on a simple order for pipes or girders, the witness admitted that this would be at least a step in the right direction and a great improvement on the present system, besides being much more expeditious than indenting on the India Office. There were all sorts of improvements continually going on at home in such details as window fittings, etc., which he never saw out here, and even if he found them in a catalogue it was hardly possible to indent on the India Office for a small quantity. If, however, they were obtainable from a firm in India merely the required number could be ordered. It was with this object in view that he had suggested a Buildings' Trades Exhibition.

W. F. STUART-MENTETH, Esq., M.I.E.E., A.M.I.C.E., Electrical Engineer to Government, Bombay.

Page 28—

(Written.) 186. . . We could, however, effect greater economy which would at the same time encourage local enterprise if restrictions on local purchase were removed. We find it very difficult to work an estimate when purchasing through the Director-General of Stores. There is no question that local firms would welcome and benefit by the withdrawal of these restrictions. It would also encourage British firms to open branch offices in India which is a great want that I have been striving for in

connection with this presidency. (Attention is invited to the instances quoted at the end of this statement.)

187. . . (3) To encourage local electrical enterprise we must encourage "turn over," that is, sale of material, in the first instance, by local purchase and by standardising pressures of supply so that stocks are not too varied. Local firms only undertake contract work with a view of selling their material, they prefer to sell the material direct rather than undertake the erection of it.

APPENDIX II—continued.

(Written.) Cases of loss and delay in ordering material through the Director-General of Stores.

Page 30—

1. In February 1915 we indented on the Director-General of Stores for laboratory equipment estimated to cost £1,229. The indent comprised electrical plant, switch boards and instruments. The Director-General placed the whole order with a firm that manufactured electrical plant only; this firm then sub-contracted the rest of the order with a firm that made switch boards only; this firm in turn again sub-contracted with an instrument manufacturer for the supply of the instrument portion; the result was that the Director-General's quotation amounted to £2,610 exceeding the cost of supply by a local firm by £1,139; that is, it doubled the cost of the work; the material has not yet been supplied.

2. Batteries of a certain make were ordered in 1912. The Director-General supplied batteries of another make which could not be utilised and contended that these batteries were identical in all respects with those that had been ordered but afterwards admitted and regretted his mistake. Batteries were then ordered and supplied locally which involved government in a loss of nearly Rs. 4,000 and several months' delay.

3. Switch boards ordered through the Director-General of Stores in May 1912 arrived broken and 1½ years expired before their replacement was effected.

4. A Cooper Hewitt printing machine was ordered from the Director-General of Stores; on arrival, one lamp was broken, the cost was borne by this office; a new lamp which was then ordered was again broken and the cost again borne by this office. Lamps were then ordered from a local firm and supplied intact within three months. A delay of nearly two years occurred through this order being placed with the Director-General of Stores.

5. A motor pump estimated to cost £80 was ordered through the Director-General of Stores; intimation was received that the cost would exceed the estimate by £165; the pump was purchased locally for £62.

6. Motors for printing machines estimated to cost £41 were ordered through the Director-General of Stores; a cable was received intimating that the cost would be £108; the motors were then purchased locally at half the Director-General's cost, namely £54.

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(Oral.) 197. . . Referring to the rules regarding the purchase of stores, the witness stated that it took much longer to get stores through the India Office than to get them direct from firms in England. In the latter case they could be obtained in two or three months, while if the India Office were indented upon there were indefinite delays. He instanced the case of an indent which had been sent two years ago and had not yet been complied with, thereby stopping a most important work. It was true that the war had delayed matters, but a local firm could have obtained the material in a much shorter time. He did not attach much value to the inspections done by the India Office. When he was at home he had made inquiries at the office of the Director-General of Stores regarding inspections, and had found no case in which any examination or inspection had been carried out by the Stores Department which could not equally well have been carried out in India. Firms in India not only supplied exactly according to specification but also undertook the responsibility that what they supplied was in order, whereas, in the case of materials or plant obtained direct from England, there was always considerable trouble in replacing anything broken *en route*. Increased local purchases of stores would certainly tend towards the establishment and development of firms in India. At present the Director-General placed all orders for electrical materials with certain firms in England; if local purchase were encouraged those firms would have to come to India to get their work. There was, he considered, sufficient scope in India to admit of competition among electrical firms, as work of that nature was developing rapidly.

C. J. HANSOTI, Esq., Superintending Engineer, Bombay.

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(Oral.) 378. . . He had not experienced any difficulty in the purchase of stores through the Director-General of Stores. He thought that the suggestion that

the Director-General of Stores should be located in India was a good one, and if such a course were adopted he did not think that it would lead to a rise in the prices of stores.

H. D. GILL, Esq., Partner, Messrs. Richardson and Cruddas, Bombay.

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(Written.) 430. . . The chief direction in which private engineering enterprise can be encouraged is by relaxation of the present rules relating to the local purchase of engineering stores and materials and, considering the importance of having in this country ample stocks of these things as well as a flourishing engineering industry, not only to meet the pressing military requirements in times like the present, when shipping facilities are becoming more and more restricted, but also in times of peace for the development of the vast agricultural and mineral wealth of the country, I submit that any measures having this object in view merit the serious attention of Government. This, however, and the safeguards necessary in order to protect British Imperial interests are perhaps matters which more strictly come within the scope of the Indian Industrial Commission now sitting.

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(Oral.) 435. . . * * * * *
He was of opinion that one of the directions in which change should be effected in the present system, in order

to give encouragement to private enterprise, was the relaxation of the rules relating to the local purchase of stores. He thought that private enterprise should be encouraged rather by developing existing firms than by creating new ones. He went on to say that Rule 1 of Appendix 30, Public Works Department Code, which related to the purchase of articles manufactured in India from Indian materials read quite satisfactorily, but he thought that Rule 8 nullified it to some extent. This rule, he suggested, was an inducement to officers to err on the safe side, and to send an indent through the Secretary of State for materials, which they were, in reality, authorised to purchase locally if they exercised their powers. As regards Rule 2, he considered that if imported articles could be supplied by firms in India at the same rate as that at which they were imported through the Stores Department, they should be purchased locally, a procedure which would give such firms as his own an opportunity of stating whether they could produce such articles. This system, he added, would, if enforced for some time, encourage local manufacture. As regards Rule 3, he advocated that, although an Indian firm might not have a particular article in stock, yet if they could quote cheaper rates than the Stores Department in

APPENDIX II—continued.

England, the article should be ordered from the Indian firm. He believed that this system worked satisfactorily in the case of large municipalities, e.g., Bombay which had adopted it. He considered that the local purchase of stores was the main item in regard to which the Public Works Department could do more to encourage private enterprise.

436. In connection with the criticism on the Public Works Department that it did not encourage, as much as it might, the use of indigenous materials, as for example lime and cement, he had not noticed any tendency of this sort. It was, however, a subject on which he was not competent to speak. His firm was mainly concerned with iron and steel. They had used Bongal pig-iron for many years and accepted the steel turned out by the Tata Iron Works so long as it came up to the British standard specification. He could not say whether there was any tendency on the part of the Public Works Department to adhere too rigidly to the use of imported materials. His firm had a large experience of Public Works Department contracts in connection with steel and iron-work, which was not confined merely to the supply of materials but extended to the construction of bridges and other structural work. Some of the bridges supplied by them were erected by the Public Works Department and others by his firm. With the exception of the local purchase of stores he had no suggestions to make as to improving and encouraging private enterprise, and thought that the Public Works Department had given sufficient scope to private enterprise in other respects.

439. . . He would not advocate the transfer of the Director-General of Stores to India all at once, as he considered that there was a possibility that such a move might prove a failure. It was rather a big question and he was not prepared to say that all his difficulties would be removed if the Director-General of Stores' Office were located in India.

442. . . He was not in a position to say where the Director-General of Stores would have to be located were he transferred from London to India. He thought there would be difficulty in effecting this transfer.

443. He did not think it would be a feasible scheme for a local Government, e.g., the Government of Bombay, to have a "buyer" for the purchase of stores, who would not be an official but a business man and who would obtain tenders, lay them before the local Government for selection, obtain the goods, do the testing, make the payments, and receive a commission from the local Government, because an Executive Engineer would much prefer to place his orders direct as he knew best what he wanted. He foresaw difficulties in adopting this system of a "buyer," and thought that the whole question was a matter for the Public Works Department themselves to decide, as it involved internal organization. He considered, however, that plenty of firms could be found who would be willing to take up the post of "buyer," though, from an industrial point of view, it would not be desirable to empower this "buyer" to purchase stores from England. There were several firms in India similar to his own, which were confined to India and were not branches of a firm in England. It was necessary to keep in close touch with home manufacturers as many articles, such as engines, could not be obtained in India and hence had to be imported, although he thought that they would, in course of time, be made in India. He thought that, if one firm were appointed as "buyer" other firms would express dissatisfaction, and that this "buyer" would have to give up private practice and be a government official rather than a whole-time man engaged for the purpose. Such a man, being a government official, would be liable to get into a groove, and the amount of work which would have to be done would eventually require a whole department rather than a single man to cope with it, as was now the practice on railways where there were store-keepers and a regular stores department.

J. W. MACKISON, Esq., M.I.C.E., Executive Engineer, Bombay Municipality, Bombay.

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(Oral.) 531. . . The Bombay Corporation found it necessary to supply large contractors with the materials required for construction, as for example, cement, etc., as the latter found it difficult to obtain the quality specified by the Corporation, and were not to be trusted to obtain such materials themselves. The Corporation obtained the materials they required through the agency of the municipal central stores. About seventy schedules for various materials were issued every year. All the pipes, machinery and a portion of the cement required were obtained from England. Some cement, however, was obtained locally. The purchase of materials from England was entrusted to supply firms who had agents in Bombay, but special machinery and plant were secured direct from the latter country. This procedure had been found quite satisfactory.

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(Oral.) 545. When special stores were required by the Bombay Corporation they engaged the services of Sir John Wolfe Barry. It was difficult in Bombay to obtain information regarding all the recent improvements taking place in England, although the Corporation kept themselves fairly up-to-date by taking in all the best engineering papers published in England and America.

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(Oral.) 547. . . The Bombay Corporation was not bound and had never found it necessary, to obtain materials from the Director-General of Stores at the India Office. The rates paid by the Bombay Corporation for stores were not, he thought, very different from those paid by the Public Works Department and the former were often supplied with copies of the Public Works Department and Improvement Trust rates. He could not, however, say for certain whether stores were supplied by the India Office at cheaper rates than those at which the Corporation obtained them. The latter had their own specifications, which were much the same as the British standard specifications. The Bombay Corporation had a central stores which arranged for the supply of materials to all its departments. The storekeeper in charge fixed the rates, but the witness was unable to give detailed information in this connection.

Page 65—

(Oral.) 558. The materials, i.e., stores and machinery, obtained by the municipality from England were both inspected and tested there by Sir John Wolfe Barry, who was their consulting engineer.

G. T. MAWSON, Esq., M.S.O.C.E., M.C.I., General Manager, Messrs. Marsland, Price and Co., Ltd., Bombay.

Page 76—

(Oral.) 677. Private enterprise was generally encouraged by the Public Works Department, although

more support might be given if all work were let out on contract, instead of being done departmentally, and if

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the present restrictions on the purchase of European stores were removed.

Page 77—

(Oral.) 681. If the Director-General of Stores was located in India and ordered materials direct from local firms he thought that his firm would get better patronage

and would be in a position to compete with firms in England. It was rather doubtful whether this would encourage local manufacture in India, but it would tend indirectly to keep more money in the country. If iron and steel were more extensively purchased in India it would lead to the establishment of further iron works in that country. His firm did not deal in machinery except as importers.

F. J. PRESTON, Esq., M.I.C.E., Chief Engineer, Great Indian Peninsula Railway, Bombay.

Page 78—

(Oral.) 692. The railway company obtained most of its stores from England except small articles which were purchased locally. The stores purchased in England were not procured through the India Office, but through the railway company's home board, to whom indents were sent from India by the railway officers. He did not

agree with the contention that it would be of great benefit to India as a whole if the local purchase of imported stores were encouraged to a greater extent than at present, and considered that the most economical system was the present one of obtaining stores from England through the home board.

G. L. THOMSON, Esq., Superintending Engineer, Nagpur.

Page 98—

(Oral.) 870. He believed that the rules regarding the purchase of stores were unpopular in the Central Provinces, but did not wish to criticise them as the present system seemed to work all right. The rule under which certain stores had to be obtained through the Secretary of State did not hamper the working of the Department, as the engineer was given fairly wide discretion as to local purchase provided prices were favourable. The existing rules were, he thought, sufficiently liberal and he did not desire that they should be relaxed.

Office, whether any particular article of indigenous manufacture was obtainable in India. Beyond such application there was really no guide as to whether articles were obtainable in India or not.

901. He approved of the suggestion that the Director-General of Stores should have his head office in India instead of in England, and considered that this would expedite matters, and would still enable such articles to be obtained from England as could be got cheaper there. Though it might cost more to have the Director-General of Stores in India, he thought it would be more economical in the end. He had sometimes found that firms supplied materials to the India Office in England at a cheaper rate than they would supply them to an individual in India direct, and it would hence be advantageous if the India Office representative were located at Bombay.

Page 100—

(Oral.) 900. It was only by applying to firms that it could be ascertained, before indenting on the India

J. M. VACHA, Esq., Executive Engineer, Central Provinces.

Page 128—

(Oral.) 1107. He considered that the present system of getting stores from the India Office was quite suitable and that no alteration was required in the procedure. He preferred getting stores from England to buying locally, because they were of better quality and much

cheaper. Four years ago he had got cement through the India Office which was of much better quality and cheaper than any cement obtainable in India. He did not think that the system involved any unnecessary delay.

F. A. A. COWLEY, Esq., Chief Engineer and Secretary to the Government of Bengal, in the Marine and Irrigation Branches.

Page 180—

(Oral.) 1307. The whole of the rules regulating the local purchase of stores required complete revision from the beginning. He saw no reason why everything should be obtained from the Director-General of Stores. There were eminent firms in England who had branches in Calcutta, and although these branches might quote even lower rates than the Director-General of Stores could obtain for the supply of a certain article from England, it was not possible to purchase such an article locally. He advocated the abolition of the rules altogether and the abolition to a great extent of the Director-General of Stores, as very little benefit was derived by buying an article through that officer especially when the difference of cost to government might be as little as $1\frac{1}{2}$ annas per hundred weight, and involved the wastage of a lot of time and paper.

Page 181—

(Oral.) 1409. In connection with the rules relating to the local purchase of stores he remarked that his experience was that officers who, after obtaining technical sanction to works, foresaw what they would require sufficiently early, indented for the articles on the Director-General of Stores, India Office, but if they were pressed for time they purchased the articles locally. His impression was that the local purchase of stores in Calcutta had not decreased, but had, on the contrary, rather increased in amount. Firms which supplied the Director-General of Stores with materials and which had branches in India tendered at the same rates in Calcutta for the articles as they did in England. The only difficulty experienced by purchasing locally was the absence of the test made by the Director-General of Stores, which was not available in India but, he added, if an article broke at the first, second, or even fifth time of usage, no firm of any standing in Calcutta would hesitate to

APPENDIX II—continued.

replace it. Rule 8 of the Stores Rules did, he thought, tend to make officers write to England for materials instead of purchasing them locally as they interpreted the rule to lay down that if it was foreseen sufficiently early that an article was required it should be obtained by indent on the Director-General of Stores, unless it was manufactured and could be bought in India.

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G. G. DEY, Esq., Superintending Engineer, Public Works Department, Calcutta.

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(Oral.) 1474. . . Certain stores had to be obtained from Europe, but the witness was unable to say whether there was any method of ascertaining whether the price and quality were favourable in comparison with the quotations of the Director-General of Stores. He had not had frequent occasion to indent for European stores, and articles were usually obtained in India unless there was ample time and it was possible to foresee sufficiently far ahead what stores would be required. Since the war

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(Oral.) 1418. As it was necessary to keep up the standard of materials, and also to have one officer responsible for them, he approved of the suggestion that the Director-General of Stores Office might be transferred to Bombay or Calcutta.

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there had been difficulty in regard to the purchase of steel.

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1476. . . His experience of obtaining stores by indent from the India Office was very limited. The only large indent which he had sent home was for materials for a bridge which he was certain were not obtainable in India. He had no means of ascertaining what articles of indigenous manufacture were available in India except from the ordinary list, which was perhaps obsolete.

A. K. TAYLOR, Esq., A.M.I.C.E., M.I.E.E., A.C.G.L.I., Executive Engineer, Electrical Division, Calcutta.

Page 199—

(Written.) 1573. . . The Public Works Code is, I consider, unduly restrictive as regards electrical work—probably because it was framed to deal with buildings and not mechanical and electrical engineering works. These restrictions, of course, depend to some extent on their interpretation by the Accountant-General, Bengal, who, of course, is not an engineer, e.g., the conditions governing the local purchase of European stores appear to be unnecessary. The present limitations are wasteful and cause delay. If reliable firms knew that government orders would be placed with them, lower rates would be obtainable than are possible at present: these will, in all probability, be at least as low as those obtained by the present method of home indent. All responsible firms will guarantee their materials, nor need any which are damaged or below specification ever be accepted. If facilities for local purchase had existed before 1914 much of the exasperating delay in obtaining machinery of all kinds in this country on the outbreak of war would never have occurred. It is clearly to the public advantage that the government should encourage British engineering firms of good standing to establish themselves in the country; and the engineers of these firms

will have a better knowledge of local conditions and requirements than any official in England.

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Page 200—

(Oral.) 1588. In explanation of his complaint regarding the supply of European stores, he stated that, when he was first appointed as Electric Inspector, he indented for a particular class of apparatus, but the Stores Department objected to its supply and substituted one of another make; to this he naturally objected. On the general question regarding the suitability of the Stores Rules he stated that he could obtain certain electrical stores from the firms with whom he placed contracts. For maintenance work, for example, he was permitted to purchase small fittings, bulbs, etc., but there were occasions when special apparatus was required which could not be purchased locally under the rules. The rules also prohibited the purchase of plant above a certain size for the generation of power other than through the Director-General of Stores, and he did not think this restriction was necessary. Broadly speaking, he was not, however, particularly hampered in the purchase of stores.

The Hon'ble Mr. F. O. LECHMERE-ORTEL, A.M.I.C.E., F.R.I.B.A., Chief Engineer and Secretary to the Hon'ble the Chief Commissioner of Assam.

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(Oral.) 1680. The rules for the supply of European stores were in his opinion cumbersome and inapplicable to the Buildings and Roads Branch of the Public Works Department, as the quantity of European stores used by that branch was comparatively small. He therefore advocated for this branch the removal of the present restrictions and the free purchase in India of all descriptions of stores of European manufacture. The rules in their relation to railways were on a different footing; their demands were on a large scale and could be obtained more economically through the India Office. The services of the India Office would still be available for special requirements, if desired, when these could not be obtained locally. He added that his proposal would act as an encouragement to local engineering firms. The quality of the stores obtained through the India Office was good; his complaint chiefly related to the delays involved. There would be no danger in the concession, since the recognised firms in India were already listed and only approved specifications would be permitted. As an

additional precaution arrangements could be made for testing stores at centres such as Calcutta and Bombay. This proposal did not necessarily involve the maintenance of a separate Stores Department in India, as the machinery for the purpose was already available there and was used for testing local manufactures, but there was no good reason why its activities should be confined to this alone. In Calcutta materials were, witness thought, tested at the Sibpur College.

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Pages 210-211—

(Oral.) 1693. . . Improvements had been introduced in the rules for the local purchase of stores, but a provision still existed under which the submission of reports and explanations was inevitable if articles other than those specified were obtained locally. This, the witness thought, was a restriction which could well be abolished. It was possible to effect a comparison in the prices of some of the stores obtainable in England and in

APPENDIX II—continued.

India from the returns of the Railway Department which specified the average prices paid. The Public Works Department was guided by those returns as a rule, and, in the absence of tests, it insisted on the supply of articles manufactured by certain recognized firms. The requirements of the Buildings and Roads Branch of the Public Works Department in Assam were not complicated, and if English-made girders of a particular make, for instance, were needed, there would be no

difficulty in procuring them locally. Rolled steel girders were manufactured in India, but the firm which turned them out was at present requisitioned for war work. The existing rules for the supply of European stores were in his opinion too cumbrous and involved, with the result that an officer sometimes ran counter to one rule when complying with the requirements of another, and engineers were afraid to exercise the discretion given them under the rules.

J. W. MEARES, Esq., M.I.C.E., M.I.E.E., Electrical Adviser to the Government of India.

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(Oral.) 1751. The operation of the rules in regard to the local purchase of stores was more restrictive in the case of the Electrical Branch than in that of other branches, as there were electrical firms in India which could supply all that was required. He thought it would be infinitely better to buy things from local firms representing home firms as articles could then be tested in the country before payment was made, and, in the event of their being unsatisfactory, payment of the bills could be withheld. In obtaining stores through the Director-

General of Stores the difficulties lay in the facts that that officer supplied what he chose and that the tests made in England were useless. He could say from personal experience that the India Office tests were exceedingly perfunctory.

1758. Indents for the purchase of stores were not submitted through him unless the stores were intended for the Government of India, although it was possible for a department to indent for an obsolete instrument, since electricity was a rapidly developing industry.

Rai Bahadur KRISHNA CHANDRA BANERJEE, Superintending Engineer, Public Works Department (retired).

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(Written.) 1916.v. . The rules of the Public Works Department Code should in my opinion be relaxed in regard to the local purchase of stores as long as the schedule rates of the Department are not exceeded.

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(Oral.) 1939. He knew the rules in connection with the purchase of European stores very well, and thought that when there was not sufficient time to obtain stores direct from England for the construction of buildings they should be purchased locally. A good many government officers preferred buying their stores from England as materials so bought were of better quality and cheaper.

OSWALD MARTIN, Esq., Partner, Messrs. Martin and Co., Engineers and Contractors, Calcutta.

Page 244—

(Oral.) 1962. . . On the presumption that the changes he had recommended were introduced, the reduction in establishment in India and in the purchasing and inspecting staff in England, which was referred to in his written statement, would be brought about by the purchase direct by contractors of the European stores which were at present obtained by the Department through the India Office. It was true that the rules permitted the local purchase of stores and that those rules covered nearly everything that was required in India, but the rules were very seldom followed as it was very much easier for an Executive Engineer to indent for what he needed, inasmuch as he was required to furnish reasons for each local purchase he effected and shoulder the responsibility for the suitability of the materials. It was not his opinion that the Public Works Department considered that the materials in India were not good enough, as steel joists of well known brands for instance, could be obtained from firms in Calcutta and Bombay, identical to those purchased by the India Office in England. It was certainly the general impression that stores locally purchased were more expensive than those obtained by indent on the India Office, but he did not think that this was really the case, though he could not prove it. His reason for thinking so was that purchases in India were made direct and not through an intermediary.

1963. He approved of the suggestion that a buyer should be appointed either for the whole of India, or separately for each province, if such a scheme were found practicable. Personally, he had not considered the point, but mentioned that it had been discussed at great length by the Indian Engineering Association in whose

hands he desired to leave the matter. This body had held numerous meetings and discussed the matter with the Member for the Commerce and Industry Department. In his opinion such buyer should be a whole-time government official, and it would perhaps be necessary to appoint more than one for the whole of India, though certain provinces might be linked up such as Bengal and Bihar and Orissa for instance. Probably it would be best to have a buyer at each of the important centres, viz., Bombay, Calcutta and Madras. It would not, however, be possible to abolish the India Office entirely, as certain indents would still have to be sent forward to England for compliance.

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(Oral.) 1973. . . His personal opinion was that government were not really able to purchase articles cheaper than through the agency of master-contractors, but the question was a difficult one to prove either way. A firm could buy materials more cheaply than government because it was able to purchase at times when it suited manufacturers to sell, whereas government approached suppliers and middlemen just when they required any particular material and hence had to pay more. Besides, a private firm stocked a particular article for use and bought it at a cheaper price than government because its purchases were made at wholesale and cheaper rates. His firm, for example, had a London branch which purchased just what manufacturers were disposed to sell and shipped the material to Indian branches to stock. In the case of steel joists, the firm obtained from the manufacturers so many hundred joists at a time of stock length, and these were

APPENDIX II—continued.

utilized in the buildings undertaken by the firm after being cut to size in the firm's own yards. As a concrete instance, he cited the case of the Patna and Allahabad High Courts the plans of which were similar. In the case of the former, the rate for fixing the joists supplied by his firm was Rs. 8-8-0 a hundredweight, whereas the Public Works Department estimated rate for the Allahabad High Court was Rs. 11 for large sections and Rs. 10 for small sections, and after allowing for the difference of freight and for duty paid the rates were, Martins, Rs. 8-12, Public Works Department, Rs. 11 and Rs. 10. The joists for the Allahabad High Court were obtained direct from the Director-General of Stores, but by utilising his firm for the Patna High Court the Department

saved very considerably. Mirzapur and Porebunder stone could also be obtained at cheaper rates than the Public Works Department as the firms employed an agent who went round the quarries, made bargains on their behalf, and despatched the stone. It was true that such agent gave advances, but that was the ordinary way of doing business. He was aware that the Public Works Department could not do so, as they were prohibited by rule from granting advances. If a special kind of lime such as Katni was specified he admitted that his firm would probably not be able to obtain it cheaper than the Public Works Department did, but considered that the difference between the two rates would be small.

J. HARPER, Esq., General Manager, Messrs. Marshall, Sons and Co., Ltd., Calcutta.

Pages 247-248—

(Written.) 2001. . . It has long been advocated that considerable economy might be effected by the various government departments having fuller powers to purchase their requirements locally. Some concessions in this respect have been made, but in my opinion do not go far enough to ensure the real benefits that might result from a more complete organized system. The present *modus operandi* of sending indents through the India Office must frequently mean considerable delay, retarding important works, and sometimes resulting in engineers not having their exact requirements fulfilled. It is also believed that a substantial saving would result from the introduction of an efficient purchasing department on this side.

(2) It must be borne in mind that facilities for obtaining locally a large portion of the required supplies are yearly becoming greater. As examples, I would point to the Tata Iron and Steel Works, and the excellent quality cement that is now being manufactured in the country, so that there would be the further advantage of government assisting in a marked degree many local industries, were some organization, as suggested, brought into being.

(3) As regards road rollers, portable engines, disintegrators, etc., which are in frequent demand by the Public Works Department these could invariably be procured on the spot, as most of the leading English makers have agents in the leading centres, who, in normal times, stock such machinery, and my own Company, who are contractors to all departments of the Government of India, lay themselves out to keep a varied assortment of such machinery at their branches at Calcutta, Bombay, Madras and Lahore.

(4) What is suggested would entail a separate purchasing department controlled by a responsible competent officer, but the system should enable the departments to procure their requirements more economically than by the present routine, and avoiding the drawbacks previously referred to.

(5) I regret time will only permit of my touching upon the finger of this important subject, but should any innovations, at any time, be contemplated, my humble services are at the disposal of the authorities. In this case, my offices might be considered of some use, as my experience goes back some years, and includes the arranging of contracts with the India Office and Indian State Railway departments in London, supervising the progress of contracts through our works in England, and the tests required by the specifications, in the presence of the inspecting engineers.

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(Oral.) 2009. The rules relating to the local purchase of stores were not strictly adhered to, and, as a sequence, articles were not purchased in India to the fullest possible extent. He had examined the rules, but was not able to indicate any particular restrictions from his point of view. He asserted, however, that the freer local

purchase of stores in India would result in a saving in the expenditure incurred on their direct importation. Although he had not been resident in England for the past thirty years, he thought that similar conditions still prevailed in this respect. In his opinion, government could not purchase stores cheaper in England than in India because it had, perforce, to resort to middle-men. It would be better to purchase direct in India such stores as were supplied by his firm to the India Office as the expenses in England were very heavy. In his firm's works for example, he did not think there was any department without an inspector. It was true that the system of direct purchase from England ensured good supervision and the efficient testing of materials. Such supervision and testing was necessary for materials manufactured by some firms, but was hardly necessary in the case of firms of high reputation, e.g., boiler manufacturers. For India boilers were made by his firm to government specifications and complied with the Boiler Commissioners' regulations and rules. These rules were really equivalent to the Board of Trade rules, and hence boilers manufactured for India ought to suit anybody.

2010. The establishment, in India, of a government purchasing department was desirable but the head of such a department should possess some knowledge of mechanical engineering, and might be a high government official vested with powers in keeping with the importance of his position. The new department would act as an incentive to local industry and lead to the freer purchase of Indian manufactured articles, and the same tests as were in force in England, might be applied to such materials as iron and steel, cement, etc.

2011. The appointment of a supervisory officer to check indents submitted by the Public Works and other Departments, and to refuse to forward to the Secretary of State indents for articles that might be procurable in India would also be an advantage, but purchases from England could not be stopped suddenly, and would have to be abandoned gradually. A large number of articles of equally good quality at present indented for from England, could be obtained in India and departmental works were often held up pending the receipt of an article from England that might probably be obtained locally.

2012. The increase in the local purchase of stores would eventually lead to the Stores Department of the India Office being transferred to India, but this change could not be introduced immediately as the classes of materials produced at present in India were comparatively small and it was not possible to procure in India everything that was required. It would, however, be possible for a buyer in India to buy as satisfactorily as the Director-General of Stores, London. The best course to adopt, in the circumstances and as a preliminary step, would be to empower a competent government official in India to purchase such articles of indigenous manufacture as were required as also European stores stocked by manufacturing firms in India, and to give such an official the necessary staff.

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(Oral.) 2016. If a buyer was appointed in India with plenary powers, all the large manufacturing firms in England would naturally have representatives in India. Materials might be purchased at a cheaper rate in India through such representatives, in spite of the fact that the commission they would demand would be an addition to the value of the materials. Workshops in England were put to a great deal of trouble and expense consequent to the visits of inspectors and accordingly added a certain percentage to the price of materials to

cover such expenditure. Firms like his own would be in a position to keep on hand a larger amount of stock to meet government demands, and this would be of advantage to private industries. In India his firm usually had about £200,000 to £250,000 worth of machinery on stock at their various branches and if a buyer were appointed in India his firm would not only be able to supply machinery from this stock, but would also maintain a larger stock to the advantage both of the country and of the firm itself.

J. M. LACEY, Esq., A.M.I.C.E., Superintending Engineer, Public Works Department, Madras.

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(Oral.) 2097. Structural steel was obtained by direct indent on the Secretary of State as the supply from this source was found to be cheaper and better. The conditions at present were exceptional, but he could produce figures in support of his assertion. None of the firms in Madras manufactured structural steel and it had been his experience that he had always been obliged to pay at a higher rate when he had run short of requirements and had purchased steel in the open market. He admitted, however, that if the ordinary requirements of the Department were supplied by firms, that the rates would possibly be reduced, but even then they would be subject to great fluctuation.

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(Oral.) 2124. Under the rules articles could only be indented for when they were not procurable in India, and

inquiries were always made as to the local rates of supply prior to the despatch of an indent. In cases where steel had been purchased locally it had been found uneconomical. The quality, however, was good.

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2130. He did not agree with the argument that a business firm could purchase stores cheaper as they purchased articles when the market was most favourable whereas the Department effected purchases only when articles were needed and accordingly had to pay whatever price was demanded, as he considered the fact that the Department purchased stores in greater bulk enabled them to obtain them cheaper. The Stores Division in Madras stocked a considerable quantity of stores for departmental requirements, and the amount of the reserve limit was fixed by government.

Rai Shaib R. A. SRINIVASA AYYENGAR AVARGAL, Executive Engineer, Public Works Department.

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(Written.) (11.) There is one obstacle at present for the free encouragement of private enterprise, which is also the cause of delay complained of in various cases, and this is the restriction regarding the local purchase of certain articles. Under the present rules even though a contractor may undertake to do the whole of a work on a contract, he is precluded from buying and supplying certain materials locally unless he happens to be one of

the firms approved by the Government of India. If he does not happen to be one of such firms the materials have to be bought by the officers, whose powers are restricted. The rules should be so modified that he may be allowed to buy the materials locally, so long as he gets them from one of the firms approved by government and the materials satisfy the current specifications and lists prescribed by the Government of India.

W. HUTTON, Esq., A.M.I.C.E., Sanitary Engineer to the Government of Madras.

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(Written.) 2192. . . (2) In the matter of the construction of waterworks or other important sanitary works, the present practice in the Madras Presidency is for the Public Works Department division concerned to supervise the work, the execution being done by private agency for the work of buildings and earthwork and the laying of pipes. The pumping plant, water pipes and other materials, are obtained by the Sanitary Engineer to Government on indent from the Director-General of Stores, under the existing rules, and are not supplied by the private agency. They should be supplied by private agency and this same or other private agency should be employed, as a rule, to erect the plant and to lay the pipes, under the general inspection of the Public Works Department engineer concerned. Only in this manner do I consider any modification of the system of execution of works by the Public Works Department desirable, and the modification is required because the existing system was founded before the execution of sanitary works, on a modern scale, was introduced into India. The present system, it seems to me, subject to the above suggested modification has grown up as the

result of years of experience and no radical alteration is necessary or advisable.

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(Written.) 2195. . . The Public Works Department Code is unduly restrictive especially in the two important points of—

(i.) the obtaining of European stores through the India Store Department, London; and

(ii.) * * * * *

In regard to the obtaining of European stores through the India Store Department, London, I venture to suggest that this results in delay in the execution of works and therefore extra expense. The stores obtained from the India Store Department, London, are excellent in quality, in my opinion, and no complaint can be made on that score. They are also cheaper, as a rule, than stores obtained in India and consequently in every way more satisfactory. But firms in India could undoubtedly by their system of code telegram obtain stores from the

APPENDIX II—continued.

manufacturers much more quickly than they can be obtained now under the system of indenting on the India Store Department. With suitable precautions such as insisting on only stores of British manufacture being obtained from local firms, and standard specifications with necessary testing centres (one at Madras), it would be desirable in the interests of industrial growth in India to permit the Public Works Department to obtain all stores in India from local firms, while at the same time the India Store Department might be maintained, at any rate for some years to enable Public Works Department engineers to obtain stores from the India Store Department, London, if circumstances made this at any time necessary or desirable. In other words I would venture to suggest that instead of Public Works Department engineers being obliged by strict rules to obtain European stores from the India Store Department, and under certain special circumstances from local firms, the rules should be reversed making it possible for Public Works Department engineers to obtain generally all stores of British manufacture from local firms in India, with the option of indenting on the India Store Department in exceptional circumstances. This suggestion if carried out would not, I think, result ultimately in increased cost of stores, as local firms would soon realize that if their prices were unsatisfactory the contract would be lost to them and indent placed with the India Store Department, London. The adoption of this policy would result in the keeping of a minimum stock by the Public Works Stores, Madras, and other Public Works stores, and the consequent saving of interest charges and depreciation on stock and surplus stores. It would in all cases be advisable for these Public Works stores to keep in stock, for immediate use, engines and

pumps and other construction plant, with the necessary workshops for repair purposes, for issue as at present to the Department or to private agencies undertaking work on contract.

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(Oral.) 2203. In the matter of the local purchase of European stores he was of opinion that the existing rules should be revised so as to empower an engineer to purchase locally imported articles of European manufacture if he considered such a course more economical. He did not agree that there was any force in the contention that such permission would place the local officer entirely in the hands of local firms and thought that his position would be no worse than it was now. In his opinion, sanitary appliances could be purchased locally at a reasonable price, though perhaps not quite as cheaply as in England, but in view of the expeditious manner in which they could be obtained, he deemed it expedient to permit their local purchase.

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(Oral.) 2216. He did not approve of the proposal to transfer the office of the Director-General of Stores to India as he thought the Department would continue to labour under the same difficulties. Nor did he approve of the suggestion to appoint an official buyer in the capital of each province. He added that if it was intended to encourage Indian industries the best and simplest course, in his opinion, was to abolish the European stores rules altogether.

The Hon'ble Sir FRANCIS J. F. SPRING, K.C.I.E., M.L.C.E., M.I.M.E., MEM. AM. SOC., C.E., Chief Engineer and Chairman, Madras Port Trust.

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(Written.) 2410. . . It seems to me that so long as the India Office Stores Department has got to be kept up—and I am convinced that the time has not come for abolishing it—the busier it is kept the better. Moreover if you abolish it you are absolutely bound, in order to avoid disastrous failure of materials, to keep up testing and inspecting agencies in India of at least equal efficiency, and probably in at least four separate centres. If I require a bar of steel, to lift a 33-ton concrete block and to go on doing it a hundred times without risk of killing my best diver or my best foreman, I don't go into an Indian shop and buy that bar. I go to the India Office Stores Department, or to my own and equally reliable London Agency, and say plainly what I need the bar for, or 100 of them, and am quite certain that I shall get what I want, I do not want to tell tales out of school, but I know absolutely what I am talking about in this matter. If I am in a hurry I go to the nearest Public Works Department stock depot and choose my bars—if they will part with them from their India Office heap. And the same with most things of importance. By all means start a similar agency in India and let them pick and choose and test from the stocks in the yards of the firms operating in India. But I must have what I want and I must be certain of getting it. All the same I am still of the opinion to which I have given strong expression off and on in the last quarter of a century, that we ought to try, as a matter of general policy, to deal directly, more and more as years go on, with Indian firms of repute and reliability—as indeed we are doing all the time. But we shall not be justified in so doing if such a policy costs us more than a fair percentage over and above corresponding English prices, say 5 per cent., not 25 per cent., which is I think now-a-days what such an altruistic policy is mostly apt to cost us. I do not know who the people are, who started this inquiry, but I rather suspect that they are the sort of people who think that anything spelt “steel,” or “cement” is steel or is

cement, which, as every practical engineer knows is very far from being the case, and the worst of it is the practical engineer in the mofussil will usually not have access to the means of knowing whether what he buys is or is not the thing that he wants to buy.

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(Oral.) 2421. The decision whether to import European stores or to purchase them locally for the Port Trust Works, was made according as to which of the two courses was more economical and met his requirements in the matter of time of supply and so on. For instance he had obtained about 1,000 tons of steel well-coubs from firms in Madras, Bombay and Calcutta. On the other hand, he required a couple of thousand tons of steel for some new warehouses under construction and had endeavoured to induce Indian construction firms to tender for Tata's steel, in the hope of thereby helping a nascent Indian industry. But the firms in question failed to quote within 25 per cent. of the price at which he actually obtained the structural steel in question delivered at Madras from England. He had, from time to time, purchased structural steel-work from three firms in Madras who stocked the unmade up material and, as above stated, had constructed certain work for him, under his supervision.

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2423. With regard to the suggestion that as stores were purchased largely by Public Works officers by indent on the Secretary of State, such stores could equally well be purchased through the representatives in India of practically the same firms from which they were at present obtained from home, he was of opinion that there were advantages in employing only a single purchasing agency, as at present instead of several.

2424. He was inclined to the belief that too large a stock was kept in the Public Works Department's depôts.

APPENDIX II—continued.

and that it could be reduced, thus paving the way for the freer local purchase of stores. One of the complaints of the engineering firms in Calcutta, which was perhaps justified to a certain extent, was that, owing to the India Office being indented on for certain classes of stores, firms in India were handicapped in respect to the importation of such stores, and that if the practice of indenting through the India Office were discontinued, these firms could expand their business and indeed perhaps manufacture some of such materials. As regards this complaint he felt that he had a right to express an opinion, having personally been connected with the initial movement which had resulted in the placing of larger orders for the local manufacture in India of small railway girders not in excess of 150 feet in length, as well as of railway wagons. Indeed he had himself drafted the letter from a certain firm to the Government of India which had led to its obtaining large additional orders for the manufacture of railway girder work. Ordinarily speaking, however, he would not hope to obtain as cheap and as good materials from Indian firms as he could obtain by indent on England. Manufacturing firms in India stocking large tonnages of bars and plates, not necessarily manufactured to the India Office specification, could scarcely be expected to inform their constituents of the inferiority of their materials, and it was not every Public Works engineer who was in a position to get reliable testing done, perhaps 1,000 miles away from his work.

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(Oral.) 2425. He was in favour of the appointment in India of an official buyer for the purchase of all materials procurable in the country at suitable rates and that indents on the Secretary of State should only go forward for such materials as were not thus available. He understood that the testing laboratory at Alipore was mainly concerned with railway work for the usual needs of the Public Works engineer in the matter of the testing and inspection of materials the India Office was as good as could be desired. He added that for works of any importance the testing of materials was most essential.

The Hon'ble Mr. GORDON FRASER, Chairman, Chamber of Commerce, Madras.

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(Oral.) 2456. He knew very little regarding the Public Works Department Stores Division in Madras, but contended that the Department ought to purchase freely all articles of indigenous manufacture, provided they were suitable, as well as imported materials stocked in India by private firms. The importation of European stores was at present restricted by the European stores rules inasmuch as they allowed only for the purchase in India of such articles as were actually available in the country, and firms could not stock a larger quantity and variety of materials unless they were certain of receiving orders from government at all times, and not only when government had run out of stock of certain materials.

2463. He did not think that government departments would be in as favourable a position to buy stores as an

2426. He was opposed to the suggestion that, before being forwarded to the Secretary of State, all indents for stores should be scrutinised by a government official who would be empowered to disallow such items as could be obtained in India. Such a scrutinizer would be apt to think of the written name of the thing and not of the actual thing. Thus, take the petty items, sealing wax. There is sealing wax that burns to a cinder before it melts and drops, and there is other sealing wax that melts and drops before it burns. But to the suggested scrutinizer—meaning really one of his babus—both are “sealing wax” all right. Only the former is made in India and the latter in England, and according to orders the former must have the preference.

2427. He considered that an Executive Engineer should make it his business to be aware of the sources of supply of materials. He did not agree with the contention that although local purchase of indigenous articles was permissible in India, yet, for lack of a catalogue or handbook containing the necessary information, it was not possible to ascertain what materials were really manufactured locally or from where they were procurable.

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(Oral.) 2443. The question whether it would be expedient to attach, to the office of the Director of Industries, an official buyer who would be able to judge of the relative prices of materials depended on the personality of the Director of Industries for the time being. That officer would probably have very little real knowledge of the work of the official buyer, but he would—or at least ought to—be cognisant of the capabilities of Indian firms and of the suitability of the classes of materials they manufactured. Except at Messrs. Tata's works at Sakchi no firms in India now manufactured steel from the ore. They imported plates and bars and put them together; but it might be worth government's while, for the sake of industrial development, to pay a little more for their steel-work, made from the ore in India.

ordinary business firm, because the latter had a freer hand and were able to select their market, and he stated that he thought government could buy as cheaply from Indian importers as by direct indent. Indian merchants were keen competitors and he had never known, during the past twenty-two years, of any attempt on the part of Indian merchants to combine with the object of increasing rates. On the contrary, they reduced prices in an extraordinary degree, and accepted work for a profit of only 1 or 2 per cent.

2464. . . He did not advocate an immediate closure of the Stores Department as government could not under present conditions be sure of securing all the stores they required locally. He considered, however, that government should make their requirements known in order to enable private firms to stock the necessary articles and renew them from time to time.

HORMUSJI NOWROJI, Esq., A.M.I.C.E., Sanitary Engineer to the Government of Madras (retired).

Pages 311-312—

(Written.) 2528. . . Another change by which private enterprise can be encouraged is the relaxation of the rule prohibiting the local purchase of foreign manufactured articles. The conditions of supply of such articles in India have changed. Several English manufacturers of machinery and engineering requisites have opened branches in India; others are represented by local engineering firms. The time has arrived for some change in the rules which govern the purchase in India of articles

of English manufacture. Under the existing rules no such article, however small its value, may be ordered out from England either direct from the manufacturer or through local agents by any officers of the Department without the sanction of government. Articles of English manufacture available in India may be purchased only in an emergency, when the work is likely to be seriously delayed by their absence, subject to the limitation that no article of a value exceeding Rs. 2,500 may be purchased without the sanction of the local Government.

APPENDIX II—continued.

(2) I would increase the Superintending Engineer's powers of sanction with regard to articles of English manufacture from Rs. 2,500 to Rs. 10,000, and do away with the distinction now observed between articles in stock in India and articles not in stock in India at the time of ordering. It not infrequently happens that, though merchants usually stock the article, they are out of stock at the moment of receiving the order. My experience is that articles of stock pattern can usually be obtained more quickly and at less cost from the local branches and agents than through the India Office. There is also freedom from risks of damage and breakage during transit in the former case, and there would be less difficulty in returning a defective article or one not according to the specification. In the case of large orders for machinery and materials which have to be made for some special purpose and according to a special design or specification and have to be examined and

tested before shipment there are obvious reasons for obtaining them through the India Office.

Pages 313-314—

(Oral.) 2538. He had found that the rules for the supply of European stores hampered him considerably when he was Sanitary Engineer particularly in cases where an article was needed very urgently, and considered that an article such as a 10 horse-power engine could be obtained more cheaply and quickly locally, but that for large indents, e.g., an indent for 500 tons of pipes, or an engine for a large water-works, the India Office was the best source of supply. The reason for the latter recommendation was that special engines were required for large water-works, and that they were not at present manufactured in India. He added that no benefit would be derived if large orders were placed with Indian firms as the profits would be absorbed by middlemen.

Memorandum by Government of Bombay.

Page 333—

It would be a great convenience also if the stores rules were so modified as to allow of a great deal more local purchase, seeing there are so many firms, branches of firms and agents now in India who can quote very reasonable rates for the articles in which they deal.

4. Particular attention is invited to the Stores Rules, noted on in the reply to point (V). It would be a great benefit if the powers permitting local purchase of materials imported into the country were extended and

greater freedom allowed in placing orders with local agents instead of having to indent on the Stores Department. It would encourage firms in this country and local branches and agents for Home firms to keep stocks in the country and to bring samples of new or improved goods to the notice of possible buyers. One of the difficulties in this country is to keep up to date with modern fittings and appliances. At Home agents regularly lay all the improvements their firms bring out before people interested in the building trades, but in India there is at present very little inducement for them to do so.

From Volume III.

The Hon'ble Mr. C. H. WOLLASTON, Chief Engineer and Secretary to the Government of Burma, Public Works Department.

Page—

(Written.) (a) The executive officer in charge of a division should have greater powers than he has at present under the following heads:—

- (i) advances to contractors;
- (ii) sanction of allotments under re-appropriation;
- (iii) local purchase of articles of European manufacture.

Page 2—

(Oral.) 2667. The Central Store Depot in Rangoon was treated as a sub-division and was in charge of a temporary engineer with the rank of Assistant Engineer. It had recently been found necessary, however, to place an Executive Engineer temporarily in charge, to put the working of the sub-division on a proper basis. The Store Depot obtained the requirements of the province by indent on the Director-General of Stores and kept them in stock, issuing them to departmental officers according to their needs. He was opposed to the abolition of the depot and to each division maintaining its own stock, as Executive Engineers were not allowed to indent for stores in anticipation of sanction to estimates and it was possible that a particular division might run out of certain articles at a time when they were most needed. There was, besides, the drawback that the India Office took about a year to comply with indents. Articles of European manufacture, e.g., cement, corrugated iron, etc., were not as a rule purchased locally as they had to be indented for, under rule, unless they were required urgently, and the main justification for the maintenance of a separate stores depot was the necessity

for keeping a certain quantity of particular materials in stock in order to obviate delays.

Page 5—

(Oral.) 2701. . . With regard to the purchase of stores he stated that, though the rules permitted the local purchase of articles which were already in India, at the time of ordering them, provided that their prices and quality were not unfavourable, such permission was only availed of in urgent cases because the preamble to the particular rule on the subject stated that all stores should as a rule be obtained from the Director-General of Stores. He thought it expedient that the Public Works Department should be allowed greater latitude in the matter of the purchase of materials from firms approved by the Government of India, as the present restrictions for the local purchase of stores were not conducive to either efficiency or economy. The tendency in Burma was to restrict indents as far as possible and to effect local purchases of locally manufactured articles with due regard to economy and the saving of time.

Page 6—

(Oral.) 2703. Considerable delays were experienced in obtaining stores from the India Office.

2704. The temporary engineer attached to the Central Stores at Rangoon supervised all departmental indents including those forwarded to the Secretary of State, and every attempt was made to procure either locally or in India such locally manufactured articles as were required by Executive Engineers. He considered the

APPENDIX II—continued.

suggestion for the appointment of a local buyer good in principle, but doubted whether such an officer could ever compete with the Director-General of Stores who received indents from the whole of India. In his opinion the present method was cheaper than that of having a separate buyer for each province. Except for delays which had been experienced, the Public Works Department had no complaint to make either in respect to the price or quality of stores obtained through the India

Office, especially as it was empowered to purchase articles locally in cases of urgency. The Department was quite prepared to utilize indigenous articles available in India and Burma.

2705. All imported European stores were tested in England prior to their despatch, as Burma did not possess a testing laboratory. Stores obtained from India were tested by a government inspector in India.

H. E. W. MARTINDALE, Esq., M.B.S.I., Chief Engineer and Joint Secretary to the Government of Burma.

Page 8—

(Written.) Paragraph (ii) So long as the Public Works Department obtains the bulk of its materials and plant through the India Office, private enterprise cannot be encouraged.

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Page 9—

(Oral.) 2720. Private enterprise was not encouraged by the present system of indent on the Director-General of Stores for materials. Such materials were obtained at cheaper rates from England than by direct purchase in India. He thought private enterprise could be encouraged in India by government lowering the standard of materials in cases where a high standard was not essential.

B. RAIXES, Esq., Electrical Inspector to the Government of Burma.

Page 13—

(Written.) (2) Obtaining material straight from home for government use appears at first sight to be a more economical method of dealing with petty works and

repairs. This has been tried and no particular advantage found, either in price or quality, but the storage of large quantities of perishable material has been found to be a distinct drawback.

M. OPPENHEIMER, Esq., Representative of the Rangoon Trades Association.

Page 30—

(Written.) . . . as importers of building materials such as cement, reinforcing materials of sorts, mamooties, pick-axes, shovels, felling axes, crow bars, saws, corrugated iron, steel beams, nails, paints, oils, varnishes, disinfectants and many other articles, I certainly am of the opinion that government would be well advised to make its purchases of these lines locally by inviting public tenders. All goods to be at least equal to a standard maintained in the Central Stores of the Public Works Department. Keen prices would thus be quoted, and I feel sure government would score not only in this respect but also in freshness of stores thus obtained. Waste and loss would be prevented.

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(Oral.) 2902. With regard to his recommendations for the freer purchase, locally, of stores, he was informed that it had been put forward in evidence that an average for a specified period, between the cost of articles purchased locally and those obtained by indent through the Secretary of State, showed that the former was 25 per cent. dearer than the latter. He thereupon remarked that this was due to the exemption of government from import duty and the better terms given to the state by shipping companies. For instance, shipping companies generally took the risks that mercantile firms had to insure against, e.g., breakage and shortage of articles, and he expressed the belief that government had secured such advantages through gentle pressure. In his opinion a further reason for the difference and a perfectly legitimate one was that government were able to secure cheaper rates owing to their purchasing stores in bulk. But he added that owing to government purchasing stores locally only when they ran short of their requirements, firms ran up their prices knowing that government would be compelled to pay them.

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2904. He then remarked that the main consideration in the matter of the economical local purchase of stores was competition, and, so long as government could be assured of this, they could confidently look forward to a reduction of 17½ per cent. in the present Indian rates provided the remaining 7½ per cent., which represented import duty, was eliminated from the calculation. In his opinion, the competition in Rangoon was sufficiently keen to effect the desired reduction.

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2906. . . He attributed a portion, 17½ per cent., of the difference between the rates at which stores were obtainable from England by the Public Works Department and private firms, respectively (which remained after the exclusion of 7½ per cent. import duty) to the non-payment of storage duties and interest on the value of goods which latter in the case of firms amounted to 6 per cent., and added that the average period for which goods were thus stored was 60 days.

2907. He maintained that government paid less freight on stores as they were not compelled to secure themselves against breakage to the extent firms had to and added that the reason for the difference in the treatment accorded by shipping companies was that government were their regular customers and dealt with them more largely. A further reason for the difference between the two rates was that a private firm had to allow for its profits, but he admitted that all the reasons he had urged did not account for the entire difference of 25 per cent.

2908. In his opinion a private firm could not hope to compete with government in the matter of the purchase of stores because of its limited resources, and the question whether government paid more or less accordingly did not affect them as acutely as it did a firm. He had, however, been able to supply the Railway Department with certain articles, at cheaper rates.

APPENDIX II—continued.

G. V. CLARK, Esq., Partner, Messrs. Clark and Greig, Rangoon.

Page 38—

(Oral.) 2976. . . The Public Works Department could purchase a great deal of stores locally, and there was sufficient competition to keep down the prices. One of the reasons why the Public Works Department obtained their materials cheaper was that they did not pay duty and insurance charges. It was hardly fair to expect firms to keep articles in stock only for occasional purchases by the Public Works Department. If, however, the Public Works Department agreed to purchase all

their stores locally the firms would no doubt be willing to stock the necessary stores. He did not anticipate that any firm would be prepared to supply imported articles to government at the rates quoted by the Director-General of Stores, nor for an additional 10 per cent, but considered that firms would be only too glad to supply stores at 10 per cent. over and above the prices at which they themselves could import articles from England, provided such supply covered all the requirements of government.

T. GIBSON, Esq., Messrs. C. R. Cowie and Co., Rangoon.

Page 39—

(Oral.) 2995. His firm were importers and dealers in machinery, metals, and articles of hardware, and only undertook petty repairs. They were connected with the Public Works Department in that they supplied that Department with materials and stores.

2996. He suggested the freer purchase locally of European stores and considered a concession in this direction would induce local firms to stock a larger and better supply of materials. The Stores Departments in Rangoon imported English stores, including cement and metal work, to the extent of between Rs. 4 and 5 lakhs annually, and though this amount was not considerable it would form an important factor. He did not agree that the Public Works Department could obtain stores cheaper by direct indent than by purchasing them locally. On the contrary he thought that the reverse was sometimes the case, and that if government apprised local firms of their requirements they would be able to supply stores at cheaper rates than those at which they were obtained at present. Firms were quite cognizant of the fact that the Public Works Department only purchased stores from them when they ran out of stock, hence they based their charges accordingly. As a matter of fact it was the practice for the Department to make enquiries of local suppliers as to the rates for particular articles they required, and to accept the lowest quotation received. Consequently if an article which was required, happened to be scarce and such article was stocked only by one firm, the Department had to pay more for it than they would have had to if a number of firms kept it in stock. The prices of articles were regulated by the demand.

2997. Four or five firms in Rangoon were in a position to furnish quotations for raw materials such as bars, bolts and angles. He did not anticipate that if the present practice of obtaining stores direct from England through the Secretary of State were abandoned it would lead to a combination on the part of firms with the object of enhancing the rates for materials, as competition between them was too keen to admit of it, and they would stock a larger supply of materials for the use of the Public Works Department. In his opinion, if the annual indent which was despatched to the Secretary of State were made over to firms for compliance, they would probably be able to supply the materials at 20 per cent. less than the rates at which they were ordinarily obtainable by government and with greater expedition.

2998. He recommended that local importing firms might be asked to furnish quotations for materials required for Public Works Department work, and thought such a procedure would encourage both importing and engineering firms, in that they would thus have the opportunity of tendering for articles of Indian and English manufacture. If government definitely announced their intention of obtaining certain articles in India it would certainly result in the establishment in Rangoon of works for their manufacture.

2999. His firm supplied the Public Works Department with a considerable quantity of stores, in fact they had direct dealings with several Executive Engineers. But the rule under which these officers could only purchase from the firm such articles as were not in stock required modification.

3000. Cement could be tested in Rangoon without any difficulty, but that obtained from Europe was invariably accompanied by a test certificate. Most of the iron and steel materials were likewise tested by the manufacturers before they were shipped, and steel materials were practically all manufactured by firms who were on the Admiralty list in England. He did not think that government gained appreciably by having all their materials tested in England.

3001. His experience in connection with the local purchase of stores was confined to the supply of materials to the Public Works Department, both through the local Stores Department and to Executive Engineers direct. He had had no connection with building contracts.

3002. . . His firm were not actually supplied with test certificates for the iron bars they imported but a considerable quantity of the bars were purchased from the Lanarkshire Steel Company who did their own testing and guaranteed a certain standard of strength. He did not think that if his firm were required to give a guarantee for the iron bars they supplied it would lead to increased rates because once they knew the requirements they could specify them in their indents and obtain the necessary guarantee from the manufacturer. The Scotch steel bars imported by his firm at present were of a standard specification, but formerly a large percentage of the bars were imported from Belgium and were not of the same quality.

3003. . . His firm sold only the Associated Branch of cement which they imported from England.

R. STANLEY BAKER, Esq., A.M.L.C.E., Executive Engineer, Public Works Department.

Page 48—

(Written.) 3063. . . The rules regarding the purchase of European stores need revision. At present such stores may only be purchased from agencies or firms in India when they are actually in the country at the time the order is placed. If they are not in the country an indent has to be sent to the India Office (about 17 copies of each indent are required) and one is lucky if one gets the stores in six months. Even when the stores

are in India the sanction of the local Government to each purchase over Rs. 500 has to be obtained.

(2) On the other hand, if a large contractor is employed he may supply European stores up to any limit in the ordinary course of his contract. But if one wants a little of ink for vernier recorder one has to send indents through the Secretary of State. In many cases correspondence with the makers is essential and dealing through the India Office is impracticable. In such

APPENDIX II—continued.

cases the only course is to get the makers to send out what is wanted to some agent in India and then place the order with the agent when the goods arrive. This is a round-about and unsatisfactory method of conducting business.

(3) Another objection to obtaining stores through the India Office is that no matter how damaged or deficient they may be when they arrive, the India Office always says they were in perfect order and perfectly packed when despatched and they have to be accepted and made the best of.

The Hon'ble Mr. E. G. STANLEY, A.M.L.C.E., M.C.I., Chief Engineer and Secretary to the Government of Bihar and Orissa, Buildings and Roads Branch.

Page 57—

(Written.) The rules for the supply of stores do not suit present conditions. It is quite unnecessary to indent on the Stores Department of the India Office for most of the materials used by the Department, seeing that large stocks of such materials are held by the numerous firms in the country amongst whom there is sufficient competition to guarantee goods being obtained at reasonable prices.

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Page 60—

(Oral.) 3135. The imported materials used in the construction of buildings by the Buildings and Roads Branch consisted chiefly of steel joists and he recommended that the Stores Department in England should be abolished, at any rate so far as indenting on that Department by the Buildings and Roads Branch was concerned, as there was a sufficiency of steel joists in the country to meet all requirements and the market quality of branded steel did not require further testing. Also because competition in this connection was sufficiently keen to secure fair rates. There was no Government Stores Department in the province, and there were only

two canal workshops, one at Dehri-on-Sone, and the other at Jobra in Cuttack, which carried out repairs connected with irrigation work. The Railway workshops, as far as he was aware, carried out repairs to the tools and plant of the Public Works Department. The mathematical instruments belonging to the Department were repaired by the Mathematical Instrument Department, Calcutta, and the other requirements of the Department, e.g., steel or iron girders, were of stock pattern, and were bought from large firms in Calcutta.

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(Oral.) 3162. No indents for stores had passed through his hands whilst Chief Engineer, but he had, as Superintending Engineer, examined such indents very carefully to see that the conditions of the Code had been satisfied in respect to the materials required not having been available in India. He did not think there was any need for the existence of the Stores Department in England so far as the Buildings and Roads Branch was concerned, as the only imported implements required were steam rollers and electrical machines for which tenders were now invited from the different firms in India.

A. N. McINTYRE, Esq., A.M.I.E.E., Electric Inspector and Electrical Engineer to the Government of Bihar and Orissa.

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(Oral.) 3561. All stores required for repair works were purchased from electrical firms in Calcutta, and he did not, as a rule, indent on the Secretary of State for any of such stores. This arrangement was satisfactory and it was possible under it to secure stores as cheaply as they could be obtained from England. One of the advantages in dealing with a local firm was that it was possible to induce them, if anything went wrong, to put things right whereas such a procedure was next to impracticable when dealing with the Secretary of State. In certain cases in which he had indented on the India Office for instruments, his indents had not been satisfactorily complied with, but as he had not had much experience in obtaining articles through the Secretary of State he

had not actually effected a comparison between the cost of such articles and those purchased locally.

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(Oral.) 3575. All electrical stores were exempt from the rules in the Public Works Department Code regarding the purchase of stores, since everything below a capacity of 10 or 25 kilowatts was excluded.

3576. In spite of the march of progress in all directions and the fact that electricity was a progressive science, he considered that such advances as were made from time to time were not so serious as to point to the necessity of using the agency of the Director-General of Stores in the purchase of electrical stores, and he could keep himself sufficiently informed of the latest developments in the market through the technical press.

P. H. TILLARD, Esq., Superintending Engineer, Public Works Department.

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Page 114—

(Written.) The following are a few of the points which need revision.

(1) Purchase of all European stores should be permitted in India; these stores are more generally rolled steel joists, angles and tees, paints, etc., all of which are required urgently as soon as an estimate is sanctioned, and if indented for from England the delay in receiving the articles would almost always prevent a work being completed within the financial year. The orders regarding the indent on England should, therefore, be abolished, and further the Executive Engineer should be given power

to sanction the local purchase of all stores up to the provision in the sanctioned estimate.

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(Oral.) 3670. Structural steel-work was not ordinarily, but occasionally, supplied to contractors by the Public Works Department as contractors generally supplied their own steel for small works. Though it was intended that structural steel should be obtained by requisition on the Secretary of State the practice had not been adopted for the large number of small works that were ordinarily constructed in the province owing to the

APPENDIX II—continued.

fact that it took about six months to get an indent for such material complied with. It would not be possible if the India Office were indented on for all the structural steel that was required for such works to get the latter

completed in time. Hence structural steel was ordinarily obtained in India. It was not the general, but only the occasional, practice to give out a separate contract for structural steel-work.

F. LISHMAN, Esq., F.R.I.B.A., Consulting Architect to the Government of the United Provinces.

Page 160—

(Written.) 3958. . . Whether the cramped system of indenting for goods from England can be widened

or swept away entirely I do not know, but in ordering special goods it would be a great advantage if the Architect could get into direct touch with the firm from which the goods may have to be ordered.

Khan Bahadur MUNSHI HIRE KHAN, District Engineer, Agra.

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(Written.) (2). The district engineer or sub-divisional officer has no power to purchase articles of European manufacture in India. This is a great hindrance and causes unnecessary delay in the execution of work and repairs. This point deserves consideration. The facility of work demands that district engineers should have powers to purchase building materials of European manufacture in India on sanctioned estimates without

any limit. Of course large orders for heavy machinery, etc., should be placed with the Director-General of Stores as hitherto.

4016. . . The rules regarding the purchase of articles of European manufacture in India are unduly restrictive and, in my opinion, should be relaxed to enable quicker execution of work. The prices of Indian firms now compare favourably with those at which articles are obtained through the Director-General of Stores and the restrictions imposed by the rules are unnecessary.

T. GAVIN JONES, Esq., Empire Engineering Co., Ltd., Cawnpore, Representative of the Upper India Chamber of Commerce.

Page 176—

(Oral.) 4069. He recommended that stores should be purchased solely in India, that the Stores Department of

the India Office should be abolished and that government should rely on the Indian firms or British firms with offices established in India for the whole of their requirements.

W. BELL, Esq., Electrical Inspector to the Government of the United Provinces.

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(Oral.) 4245. Electrical stores were as far as possible purchased from firms in India and the supply had been found satisfactory. There was no necessity for indenting for such stores on the India Office. He had not much experience of stores purchased by indent on the Secretary of State, but was aware that there was always considerable delay in procuring the stores. When a machine was bought by indent in India final payment was not made until the machine passed a test at site, as it was possible that it might pass the test in England and might when tested in India turn out to be unsatisfactory. He himself was not in a position to carry out tests of stores locally purchased as he had neither an electrical laboratory nor the instruments for the purpose. If he were supplied with the instruments, however, tests could be made equally well, or even better, in India than by the India Office in England.

4246. He had made a comparison of the cost of purchasing stores in India and in England, and had found that electric lamps could be had cheaper in India than in England. He was therefore of opinion that no economy

would result from effecting purchases through the India Office. In the case of the Mussooree hydro-electric scheme, the cost of which was about Rs. 10 lakhs, all the stores were purchased locally through the agents of English firms which had their offices in Calcutta or Bombay and no direct purchases were made from England.

4252. His statement that electrical stores could be purchased cheaper in India than in England was based on a comparison of the real rates and not on the catalogue rates of firms.

4261. The fact that the price of electrical stores in Calcutta compared favourably with prices in England was a normal occurrence. It was not at all due to the war as there was a combination in England to keep up prices. For reasons unknown to him, the firms at home did not work up their agents in India to level up the prices in India, but this was not due to American competition as the American articles were cheaper than in England. The practice of the Electrical Branch was to obtain articles of British manufacture only.

C. H. WEST, Esq., Sanitary Engineer to the Government of the United Provinces.

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(Written.) There are two points on which the restrictions made hamper the execution of work.

(a) The restriction with regard to purchase of European stores in India.

APPENDIX II—continued.

A. R. ASTBURY, Esq., A.M.I.C.E., Sanitary Engineer to the Government of the Punjab.

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(Oral.) 4339. There was no necessity so far as the Buildings and Roads Branch was concerned for indents for stores to be made on the Secretary of State as in the large majority of cases such articles of European manufacture as were required could be purchased in India in the open market. Only occasional articles, e.g., a ventilating fan, which were not ordinarily stocked in India

should be obtained through the Secretary of State. He expressed himself as willing to recommend that the system of indents on the Secretary of State should be abolished altogether and that Executive Engineers should be allowed to make their own arrangements for the purchase of such stores of European manufacture as they might require.

Rai Bahadur KANHAIYA LAL, Executive Engineer, Public Works Department.

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(Written.) (22). It is very difficult to comply with the rules and regulations and certificates required for obtaining stores of European manufacture, so I would suggest that a special qualified officer with adequate staff be appointed in an important or a central place in India,

like Bombay or Calcutta or Delhi, to receive indents of all officers and to scrutinize whether the articles indented for are obtainable in India from any Indian manufacturing firms or from surplus stores of various departments, and then to arrange for the supply of the same from Indian sources or through the India Office.

C. C. T. EASTGATE, Esq., M.I.E.E., Electrical Engineer and Electrical Inspector to the Government of the Punjab.

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(Oral.) 4478. All his electrical stores were purchased in India, and as he had never indented on the Secretary of State for stores, this arrangement was satisfactory. He had not made a comparison of the prices at which

electrical stores could be obtained from England and in India, respectively, and hence could not state whether the local stores were more economical. The purchases generally effected were inconsiderable and did not amount to more than Rs. 10,000 a year.

F. W. K. YROMAN, Esq., Superintending Engineer, Public Works Department.

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(Written.) The rules which require stores of European manufacture to be ordered through the India Office, perhaps, in some cases, lead to the employment of small contractors instead of firms with considerable capital. No doubt there were adequate reasons for these rules when they were framed, but since that time conditions have changed altogether. These rules, although they have been made somewhat more elastic in recent years, should be still further relaxed or abolished entirely. It should be permissible to purchase all materials and stores of European manufacture required for all ordinary purposes direct from firms having branches or agents in India. All that is required is that there should be sufficient guarantee for the quality of what is purchased and

that prices paid shall be reasonable. If purchasing officers were permitted to order all stores from firms whose names were on a government list this would probably be a sufficient safeguard for the quality of stores supplied, as only firms with a reputation would be on the list. This change in the rules would, to a certain extent, be an encouragement to private enterprise in the country, but would make little or no local difference.

4423.

(/) The rules for the local purchase of European stores, Appendix 30, Public Works Department Code, Volume III, appear to be unduly restrictive and complicated. Superintending Engineers may be given increased powers and Executive Engineers permitted to purchase stores from recognized firms up to the limit of their powers of sanction for works.

The Hon'ble Mr. J. CURRIE, President, Punjab Chamber of Commerce.

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(Oral.) 4681. . . It could not generally be asserted that when the Public Works Department bought materials from outside merchants they were charged from 20 to 25 per cent. more than they would have been had they purchased such materials from England. If the practice of obtaining all materials from England were adopted and the Department purchased articles from firms in India only when they ran short, he did not think that the firms in question would put up their prices on that account. They would probably only add to the cost of the materials their charges for storage, railway freight and a reasonable profit. A charge of 25 per cent. more than that for which materials could be obtained from

England was very extravagant, particularly in normal times, as with the available railway facilities there was not a point in India in which it was not easy to obtain quotations from at least half a dozen markets. He could only explain the fact that the charge of 25 per cent. in question had been made over and above the sum paid for such materials in England by classifying the man who quoted such a price as a rapacious individual. Probably the man had not been in the habit of receiving orders from the Public Works Department, had not sufficient turn-over and made the most he could out of the opportunity. Such a procedure on the man's part was dead against the interests of the country.

APPENDIX II—continued.

BAWA BUDH SINGH, Executive Engineer, Sha'pur Provincial Division. Representative of the Punjab Engineers Association.

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(Written.) 4722. * * * * *

As regards the purchase of materials of European manufacture I think the rules may be relaxed a good deal and more powers delegated to executive officers. More firms might with advantage be brought on the Public Works Department list in order to have a healthy competition. Manufactures of well known firms, e.g., Dorman Long's steel joists or Gillingham Brand cement might be allowed to be purchased from any respectable firm irrespective of the fact whether it is borne on the Public Works Department list or not. In this respect I would like to suggest that every local Government may have a central stores bureau, which should help the executive officers in making purchases of materials of European manufacture. The Executive officers should send their requisitions to the bureau, and make no direct purchases except under exceptional circumstances. I think it would be really useful if such a bureau, as suggested above, could also undertake the manufacture and storage

of standard sizes of doors and windows and other departmental requirements. Manufacture of Public Works Department requirements in India should be encouraged, except proper safeguards should be taken to see that the quality of such manufactures does not deteriorate. I think the Government is already much interested in the matter.

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(Oral.) 4732. The present rules regarding the local purchase of stores should be revised and the powers of Executive Engineers should not be restricted to purchases only from recognised firms when articles of the same quality were procurable elsewhere. He did not desire that the rules in this connection should be abolished altogether but that Executive Engineers should be given further powers to purchase stores locally. He therefore advocated an extension of the limit from Rs. 500 to Rs. 2,500.

H. T. KEELING, Esq., C.S.I., A.M.I.C.E., Chief Engineer and Secretary to the Chief Commissioner in the Public Works Department, Delhi Province.

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(Written.) 4749. * * * * *

(4) Restrictions on the local purchase of plant stores and material should be removed entirely and Chief and Superintending Engineers in charge of works should be given full powers to deal direct with manufacturers applying to an authority, preferably a technical one at the India Office for assistance in inspection whenever required. In my experience practically the only advantage obtained under the present system is a reduction in the price of material such as cement, steel and so forth, when purchase is made in large quantities. In the case of manufactured articles of plant and machinery, it is in my opinion more economical and quicker to permit the indenting officer to do business direct with the manufacturer without the intervention of a third party.

shops. He was here informed that the government workshop in Madras was at present an extensive one, and stated that he had not seen it since 1912 but that he knew it was proposed to increase its extent at that time as it had been found that cheaper work could be carried out in it on the whole than it was possible to obtain from the few firms in Madras which were in a position to quote prices. He agreed that cheapness was not the only element to be taken into consideration in connection with the question of the abolition or retention of Public Works Department workshops, and that the industrial advancement of the country had also to be considered, and repeated that it was only necessary to maintain government workshops in the absence of healthy competition.

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(Oral.) 4761. He had personally found that it was preferable to deal with manufacturers direct. Hence he adhered to the view in his written statement that, in so far as the Buildings and Roads Branch of the Public Works Department was concerned, there was no need to indent on the Secretary of State for plant of European manufacture. In his opinion an engineer in charge of a building could obtain such plant as was required sooner and more economically by purchasing direct from the manufacturers. The tests undertaken by the India Office were as a rule carried out on the material during the process of manufacture. For instance, if a steam navy were being manufactured, test pieces were attached to certain portions of it and as each such portion was made it was cut off and sent to the laboratory. On the result of such a test the materials for the making of the steam navy were either accepted or rejected. Most reliable firms in England carried out their own tests, and these were sufficient for the ordinary articles that were usually indented for.

4762. There was no necessity for the maintenance on a large scale of Public Works Department workshops, provided there was healthy competition among private firms. To dispense with government workshops in the absence of such competition, however, would practically induce monopolies, and these should always be avoided if possible. Though adequate public competition might be secured in places like Bombay and Calcutta, he was doubtful whether the output of the government workshop in Madras was such as to induce firms other than those already established in that presidency to set up work-

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(Oral.) 4813. The possibility of dispensing with the India Office by appointing a buyer at each provincial headquarters, either to purchase stores for all officers, or to supervise indents and instruct officers where to purchase specific articles, depended on the nature of the operations in each province. It was a little difficult to obtain such information in Delhi and he was the only officer who effected purchases there, but such was not the case in other places. The ordinary *mofussil* Executive Engineer would undoubtedly find a centrally situated buyer or adviser located in a presidency town of great use and assistance. Such an officer might be located at Bombay for the Bombay Presidency, at Madras for the Madras Presidency and at Calcutta for Upper India and Bengal.

4814. The rules regarding the purchase of stores of European manufacture restricted officers of the Public Works Department very considerably. Though it was possible to purchase almost anything through a contractor there were certain local orders that had been issued in regard to the purchase of stores which frequently interfered with this power, and he had known contractors who had purchased inferior articles. He recommended that purchases from the representatives of firms in this country, but not from agents, should be encouraged, as it was desirable to encourage manufacturers in England to establish branches in India and at the same time to encourage indigenous industries; also that unrestricted purchases might be made from branches of firms established in India. It was true that such branches would generally be English branches, but Indian firms which

APPENDIX II—concluded.

dealt in similar articles usually manufactured them in the country in some instances at a cheaper rate than it was possible to procure them from England. Articles of indigenous manufacture might not be up to the qua-

lity of English manufactured articles, suffice for the purpose for which they^t. they might and it was preferable in such cases to enco. required purchase of indigenous articles. the

Memorandum by the Government of the United Provinces.

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(5) *Stores*.—There should be an efficient purchasing agency for valuable imported materials of all kinds at the chief ports and none should be allowed to go outside

this without approval of the Chief Engineer. The present testing establishment at Calcutta could be expanded to suit. Officers responsible for the execution of works should be empowered to use this agency, subject to safeguarding limits.

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