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MADRAS RECORD OFFICE.

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Dept. *P.W.* Press *2060* Mis. No. *2060*, dated *27-7-1883* Rack No. *101* Range.

Date taken out.	FOR WHAT PURPOSE.			Initials of Referencer.	Date returned.	Initials of attender.
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GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

ACCOUNT.

General.

1883

To

No. XI Public Works.

Dated Simla, June 21, 1883.

Received

No. 2060 Ref. 27 July 1883

Communicated to officers of the P.W.D. for information and filed in continuation of S.O. No. 46 of 12th February 1883

*S. Es.
C. Es. for L.
C. Al. to fort.
S. P. W. A.
Genl. Supt. P.W.D.
Supt. M. H. W.
C. Es. for Rep.
S. S. V. S. Ry. S.
B. H. Ry. S.*

Revised rules for the supply of European stores and instructions for the preparation and submission of annual estimates and returns of expenditure of stores.

[For Heads of Departments.]

Circular No. XI Public Works.
GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.

ACCOUNT.

General.

To

Simla, June 21, 1883.

The Governments of Madras, Bombay, Bengal, the North-Western Provinces and Oudh, and the Punjab, in the Public Works Department.
The Chief Commissioners, Central Provinces, British Burma, Assam and Coorg.
The Resident at Hyderabad.
The Resident at Mysore (through Foreign Department).
The Agents to the Governor General for Central India, Rajputana, and Biluchistan.
The Superintendent of Port Blair, and Chief Commissioner, Andaman and Nicobar Islands.
The Director General of Telegraphs.
The Inspector General of Military Works.
The Accountant General, Public Works Department.
The Director General of Railways.
The Director-in-Chief, Indo-European Telegraph.
The Director, Persian Telegraph.
The Deputy Director, Persian Gulf Telegraph.
(For information and guidance.)
The Consulting Engineers to the Government of India, for Guaranteed Railways, Calcutta, Lahore, and Lucknow.
The Comptroller General.
The Accountant General, Bengal.
(For information only.)

Copy of the following is forwarded to the Local Governments and Administrations and Officers noted in the margin, for information and guidance, in continuation of Public Works Department Resolution Nos. 7-30A.G., dated 8th January 1881.

2. The nomenclature and classification of stores issued by the Director General of Railways for State Railway Stores should be strictly adhered to by all Public Works officers when preparing the Annual Estimates of Stores required from England and the Annual Returns of expenditure on Stores referred to in paragraphs 20 and 23 respectively. These Estimates and Returns will be submitted in Forms K and L attached to this Circular (which in the Public Works Department take the place of Appendices A and B). Separate Returns in Form K are required from the several Branches and State Railways to reach the Government of India on the 1st August; for Form L a combined Return only is required from each Province and State Railway, this should reach the Government of India not later than 31st August. In the General and Irrigation Branches, the Examiners of the several Provinces will see that the Returns received from the Divisional Officers are properly compiled under the headings now laid down.

3. All articles of which the aggregate value purchased or received during the year does not exceed Rs. 1,000, should be grouped together under each class, as shown in the forms.

4. The Lists M and N appended to this Circular show: (M), the List of Public Works Stores, which are ordinarily manufactured in India; and (N), those stores which though not regularly manufactured on a large scale in India are procurable in certain localities on special order and which would probably be regularly manufactured were such articles to become in frequent demand.

By order,

W. S. TREVOR, Colonel R.E.,

Secy. to the Govt. of India.

Documents accompanying.
Enclosure No. 1 and Appendices A, B, C, K, L, M, and N.

6. The established proportion is, as a general rule, three years' supply, and is, unless otherwise specially ordered, based on the average of the previous three years' consumption. Demands in excess of the established proportion should be explained. In the column "Remarks" should be entered the names of the last two or three vessels whose consignments have been included in the quantity in store, as shown in column 6.

7. Patterns or samples of articles required should accompany the indent in cases where the description of the article given in the indent is unavoidably vague or too general for guidance without the help of samples; and when paper is required, it should be explained whether it is wanted for drawing, writing, or printing.

8. Indents for stores required for Provincial Services, with the exception mentioned in paragraph 5, or for Incorporated Local Funds, should be forwarded to England direct by the Local Government concerned, a copy of each indent being simultaneously transmitted to the Government of India in the Financial Department and to the Local Accountant General. But in the case of stores required for Provincial Public Works, indents should be forwarded in triplicate through the Director General of Railways, who will retain the triplicate copy and forward it to the Government of India in the Financial Department for perusal. Indents for chemicals and scientific apparatus, &c., required for Colleges and Schools will continue as heretofore to be submitted to the Government of India in the Military Department for review and transmission to the Secretary of State.

9. Indents for stores required for Imperial Services should be forwarded as follows:—

<i>Nature of Stores.</i>	<i>To be forwarded to England by the—</i>
Military, Marine and Medical	Military Department.
Public Works, including Railway and Telegraph	Public Works Department.
Stamps, Post Office, Mint, and Paper Currency Department	Department of Finance and Commerce.
Other Civil Stores for use in Bombay	Government of Bombay.
" " " " Madras	" " Madras.
" " " " Hyderabad	Foreign Department.
" " " " elsewhere	The Department of the Supreme Government concerned.

10. The Governments of Madras and Bombay, and the several Departments of the Supreme Government, will furnish a copy of each indent to the Government of India in the Department of Finance simultaneously with the transmission of the original indents to the India Office; in the case of Military and Public Works Stores, the Governments of Madras and Bombay will forward a copy of each indent to the Government of India in the Military and Public Works Departments, respectively, and not direct to the Department of Finance. In the case of the Departments of the Supreme Government, the Department of Finance will return the copies of the indents after perusal with any remarks that may seem called for.

11. With each indent, whether for Imperial or Provincial services, an explanatory memorandum or statement should be transmitted to the India Office when practicable, in the form published with this Department Circular No. 1620, dated 21st March 1882, giving the reasons for retaining in the indent any articles included in Appendix C to this Resolution, or such articles as are to any extent manufactured in India, instead of substituting for them articles procurable locally.

Books, Newspapers, &c.

12. Books and newspapers are exempted from the general rule requiring all articles of European manufacture to be obtained by indenting on the Secretary of State, and in regard to them the following procedure is prescribed.

13. Books, maps, and newspapers, or other periodicals published in Europe or America whether required for Imperial or Provincial services, or for Local Funds, shall be procured independently of the India Office, either through local book-sellers or by direct orders to agents or publishers in Europe or America.

14. For official publications, other than Parliamentary papers, whether periodical or not, requisitions, should be forwarded by the Departments of the Supreme Government, and by the Local Governments and Administrations requiring them for their own use and for the use of the officers subordinate to them, direct to the address of the Assistant Under Secretary of State for India; the revenues (Imperial, Provincial, or Local) to which the cost is chargeable, and, if Imperial, the head of account or grant to which it is debitable, being specified in the requisition.

15. Parliamentary papers required for departments and officers elsewhere than in the Madras and Bombay Presidencies will be supplied, as published, by the Secretary of State to the Home Department of the Government of India, under the terms of his Despatch No. 5, dated 13th January 1876. Any communications regarding their distribution should be made to the Secretary to the Government of India in the Home Department.

16. Parliamentary papers required by the Governments of Madras and Bombay should be obtained direct from the Secretary of State.

17. Government does not undertake to supply books and newspapers indiscriminately, and supplies must be confined to what is found actually necessary for the public service. Books for regimental schools, regimental and prison libraries, and Military Offices will, so far as the requisitions are in accordance with the rules in force in the Military Department, be bought under the orders of the Government of India, Military Department, for the Bengal Army, and of the Governments of Madras and Bombay for the Armies in those Presidencies. Books for the Educational Department should be obtained under the rules and usage of the several Local Governments concerned. Purchase of other works should be confined strictly to those books, principally of reference, which are of obvious practical necessity to the office for which it is proposed to purchase them, independently of the desire of officers for improvement on subjects connected with their duties. Purchases of other than hand-books, manuals, practical guides, and the like should be rarely, if ever, made for executive officers, but mainly for officers charged, among other duties, with important deliberative duties of advising Government on special or important subjects.

18. All books and periodicals procured for any office should be registered or filed, and must not be permanently removed from the office for which they were intended.

19. Payment for books, newspapers, &c., procured from abroad should, by preference be made in India, either through an agent or a bank, on bills drawn by the supplier. When this is not practicable, the remittance should be made invariably through the local Accountants General and the accounting officers of the Military and Public Works Departments, who should be responsible for the purchase of the bills.

Annual Estimates of Stores required from England.

20. In order to facilitate the preparation by the India Office of the estimates of expenditure on stores, the Secretary of State has desired that forecasts shall be annually forwarded by the various indenting departments of the value of their probable requirements in respect of stores from England during the ensuing financial year. The Governor General in Council accordingly directs that all officers submitting indents for stores from England shall prepare and forward to the Local Government, or the Department of the Supreme Government concerned, as the case may be, for transmission to the Secretary of State, statements in the annexed form (Appendix A), showing in groups of principal articles the estimated gross quantities, rates, and value of stores required for the ensuing financial year.

21. Separate estimates should be prepared of stores required for Imperial Services and for Provincial Services or Incorporated Local Funds, and they should be carefully framed on the basis of previous experience, modified to meet the known or probable requirements of the service for the year which they may represent; those relating to Imperial services should be sent to the Government of India in the Department concerned, and those relating to Provincial services to the Local Government; and all should be despatched so as to reach the Local Government of the Government of India not later than the 1st of August in the year preceding that to which they relate. They should then be transmitted to the India Office so as to arrive there not later than the 1st of October in each year. The Public Works and Military Departments of the Government of India will arrange for the submission of the estimates by indenting officers in those Departments.

Annual Returns of Expenditure on Stores.

22. The existing system provides for the proper accounting for stores received from Europe and for the audit of store expenditure. For the Civil Departments of Government, instructions as to the account procedure are contained in Rule 15 of Chapter 72 and Rule 29 of Chapter 73 of the Civil Account Code; the latter rule refers to the annual report of the expenditure on stores prescribed in the Resolutions of this Department, No. 1267, dated 21st July 1871, and No. 5487, dated 10th September 1874 (for the Military and Marine Departments), and reproduces the form of the annual statement prescribed in the Resolution of this Department, No. 3574, dated 3rd November 1880, for transmission to the Secretary of State through the Government of India in the Department of Finance, showing to what extent and in what respects the intervention of the Store Department of the India Office has been dispensed with, distinguishing in groups of principal articles the stores procured in India from those imported from Europe, and giving financial results, as far as possible, whenever the system of local purchase has been adopted.

23. It is of great importance that the Secretary of State and the Government of India should have the means of observing the financial effect of the change which is being made in the mode of obtaining stores by substituting articles of local manufacture for imported stores, and also that sufficient information should be supplied to the Secretary of State to admit of a comparison between the rates of India Office purchases and those for corresponding articles of Indian manufacture purchased in considerable quantities. The Governor General in Council accordingly requests that returns for each province and department (including Military and Public Works) may be prepared commencing from the year 1882-83, in the form annexed as Appendix B to this Resolution, and submitted to the Government of India in the Department

of Finance for transmission to the Secretary of State. The statements, it should be observed are intended merely to be returns of stores received or purchased as the case may be, and it is not necessary that they should be agreed with the books of the departmental account officers, but each statement should be complete for the province or department to which it relates.

24. In future similar returns should be submitted by the 31st August in each year, and all returns, including those of the Military and Public Works Departments, should be forwarded to the Government of India in the Finance Department, in order that before transmission to the India Office, an abstract statement may be compiled showing the total value of stores procured of local manufacture and of stores imported, so as to set forth in a convenient form the progress made during the year in substituting local manufactures for imported articles.

25. A few remarks are offered in explanation of the form in which the statements are to be submitted and of which a specimen is annexed (Appendix B). The statement should be prepared in three parts, *viz* :—

1. European stores obtained through the Secretary of State.
2. European stores specially purchased in India.
3. Articles manufactured in India, or of Indian origin, and substituted for stores hitherto imported through the Secretary of State.

In the second and third parts the average price or rate for each class of articles, as well as all incidental charges, should be shown as far as possible in the prescribed columns, and also the estimated cost as far as can be given of similar articles if obtained through the India Office, and the gain or loss, being the difference between the actual and the estimated cost. Such observations as may seem necessary in regard to variations in quality being noted in a column of remarks. When the exact proportion of incidental charges cannot be ascertained, an approximate percentage charge may be made.

26. In the case of stores manufactured in Europe and obtained through the Secretary of State, no details are required; the articles should be grouped under a few main headings, in the manner indicated in the first column of the form, and the total value only should be given against each heading. In the case of articles of European manufacture purchased in India under the conditions stated in paragraph 3 of this Resolution, as well as in the case of articles of Indian manufacture substituted for articles previously obtained from England, details must be given of the different kinds of articles included under each major heading. The purchases of European articles in the local market being restricted to special cases, the items should not be numerous, and therefore no separate major headings need be laid down for them. They should be shown under appropriate headings in the prescribed column of the statement. As regards articles manufactured in India and purchased in lieu of stores hitherto imported, it is necessary that a uniform classification under major headings should be adopted in view of the compilation ultimately of an abstract statement; accordingly, a list has been prepared of the articles which can be procured of Indian manufacture, and is annexed as Appendix C. In this list the articles have been arranged under appropriate major headings which have been shown in alphabetical order; it is important that, in furnishing details in the prescribed column of Appendix B of the classes of articles of Indian manufacture substituted for articles hitherto imported, officers should follow as closely as possible the classification given in Appendix C. This classification as now published is, however, intended principally for the guidance of officers in the Civil Departments of Government; it is not in all respects applicable in its present form to the Public Works and Military Departments, and in reissuing this Resolution the Government of India in those Departments will circulate a revised Appendix C for the guidance of Public Works and Military officers in the preparation of the annual statements. Those Departments will also prescribe the major headings to be adopted on the principle above stated, in classifying in Appendix B the expenditure on European stores obtained through the Secretary of State.

27. The statement should include articles of importance only, that is to say, articles of which the consumption is considerable; petty articles as well as all stores which have been invariably obtained in India should be excluded. The major headings should invariably be placed in alphabetical order. Any articles not falling under one of the prescribed major headings, but which may have been received from England or purchased in the local market in considerable quantity, should be separately entered; but no articles of which the aggregate value purchased or received during the year does not exceed Rs. 1,000 should be so entered. The Governor General in Council requests that the necessary steps may be taken in the Public Works and Military Departments to ensure a uniform classification by officers in those Departments in the preparation of the statements now prescribed, and that instructions may be issued in those Departments on the principles laid down in this Resolution as to the limits of values, which should be observed in determining what articles should be included in the returns.

28. The orders of the Secretary of State make it incumbent on all officers of Government requiring stores of European manufacture to obtain them by indenting on the Secretary of State, and permit of the purchase in the local market of articles made in Europe or America only under the special circumstances mentioned in paragraph 3 of this Resolution. The Governor General in Council therefore desires again to invite the special attention of Local

Governments to the expediency of supplying the wants of Government by the purchase in the local market of articles of *bonâ fide* local manufacture. The Government of India is desirous to give the utmost encouragement to every effort to substitute for articles now obtained from Europe articles of *bonâ fide* local manufacture or of indigenous origin; and where articles of European and of Indian manufacture do not differ materially in price and quality, the Government would always be disposed to give the preference to the latter; and the Governor General in Council desires to remind all officers of Government that there is no reason why articles manufactured in India should not be obtained locally even although the raw material necessary to their manufacture may have been originally imported from Europe. It is most desirable to bear in mind the distinction between articles of European manufacture and articles produced or worked up in India from imported material; the former should not, save in exceptional cases, be purchased in the local market, while the latter should by preference be purchased locally whenever the quality is sufficiently good, and the price not higher than the cost of laying down the imported article. There are many articles which may not be immediately obtained in the local market, but which can be made in the event of Government encouraging the manufacture.

29. The list (C) appended to this Resolution is not to be understood to enumerate all the articles which should be obtained of Indian manufacture. It merely contains, for the information of the officers concerned, a list of the articles which, so far as has been yet ascertained by the Government of India, can be manufactured in India, and specifies the various sources, so far as at present known, from which the articles can be obtained of local manufacture; some of the articles named in the list, though they can be manufactured in India, are at present only made on a small scale on special order, but the Governor General in Council believes that, in the event of a constant demand arising for them, there is no reason why they should not become articles of regular manufacture in India. The list is also intended to serve as a guide to ensure that uniformity of classification which is necessary to serve as a guide for the compilation ultimately of a single annual statement. Other articles which may be procurable of *bonâ fide* local manufacture should be included under the appropriate headings or separately, in preparing the annual statement.

Enclosure No. 1 to Government of India, Public Works Department
Circular No. XI P. W., dated 21st June 1883.

No. 300, dated 16th April 1883.

RESOLUTION—By the Government of India, Department of Finance and Commerce.

READ again—

Financial Resolution No. 185, dated 10th January 1883, prescribing the procedure to be adopted for the supply of European stores required for the public service in India.

RESOLUTION.—In modification of the orders contained in paragraphs 5 and 8 of the Resolution read above, the Governor General in Council is pleased to direct that indents for chemicals and scientific apparatus required for Colleges and Schools shall be forwarded by the Local Government direct to the India Office, a copy of each indent being simultaneously transmitted to the Government of India in the Financial Department.

Appendix A to Government of India, Public Works Department Circular No.
XI P. W., dated 21st June 1883.

[See paragraph 20 of the Resolution of the Government of India in the Department of Finance and Commerce,
No. 185, dated 10th January 1883.]

*Estimate of the probable quantity and value of Stores required from England
for the use of during the official year 1884-85.*

Description or class of stores.	ACTUAL EXPENDITURE FOR THREE YEARS.			PROBABLE ESTIMATED RE- QUIREMENTS FOR 1884-85.		
	1880-81	1881-82	1882-83	Quantity	Rate.	Value.
	Rs.	Rs.	Rs.		Rs.	Rs.
Iron						
Copper						
Machinery						
Canvas						
Ironmongery						
Ordnance						
Shot and Shell						
Anchors						
Cable, &c.						
Stationery						
&c., &c.						

N.B.—In the estimates for 1884-85 and 1885-86, for Public Works Stores, the actual expenditure for one and two years respectively may be given if the figures for three years are not easily obtainable.

(8)

Appendix B to Government of India, Public Works

(See paragraph 23 of the Resolution of the Government of India

Annual Statement of Expenditure on Stores in the

(1) STORES MANUFACTURED IN EUROPE AND OBTAINED THROUGH THE SECRETARY OF STATE.		(2) STORES MANUFACTURED IN EUROPE BUT PURCHASED IN INDIA UNDER PARAGRAPH 3 OF GOVERNMENT OF INDIA FINANCIAL RESOLUTION NO. 185, DATED 10TH JANUARY 1883.							
Description or Class of Stores.*	Total cost, including charges.	Description or Class of Stores	Number or quantity.	ACTUAL COST IN INDIA.		ESTIMATED COST IF OBTAINED THROUGH INDIA OFFICE.			
				Average price or rate.	Incidental charges, carriage, &c.	Total cost.	Average price or rate.	Incidental charges, freight, exchange, &c.	Total cost.
	Rs.				Rs.	Rs.		Rs.	Rs.
Chemicals ...									
Coal ...									
Machinery ...									
Mint Stores ...									
Printing Materials ...									
Stationery ...									
Other articles should be grouped under appropriate headings.									

* Any stores imported from England or purchased in the local market in considerable quantities which do not fall under

(9)

Department Circular No. XI P.W., dated 21st June 1883.

in the Department of Finance and Commerce, No. 185, dated 10th January 1883.)

[here enter Presidency, Province or Department] for the official year 188 .

(3) STORES MANUFACTURED IN INDIA AND SUBSTITUTED FOR STORES FORMERLY IMPORTED THROUGH SECRETARY OF STATE.									
Description or Class of Stores.*	Number or quantity.	ACTUAL COST IN INDIA.			ESTIMATED COST IF OBTAINED THROUGH INDIA OFFICE.			DIFFERENCE.	
		Average price or rate.	Incidental charges, carriage, &c.	Total cost.	Average price or rate.	Incidental charges, freight exchange, &c.	Total cost.	Gain	Loss.
			Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
AGRICULTURAL IMPLEMENTS—									
Axes ...	...	...							
Bill hooks ...	...	...							
(as in Appendix C.)									
BUILDING AND ENGINEERING MATERIALS—									
Portland cement ...	...	...							
(and so on as in Appendix C.)									

any of the headings given in this column or in Appendix C should be separately entered under appropriate headings.

Appendix C to Government of India, Public Works Department Circular No. XI P. W., dated
1st June 1883.

(See paragraph 26 of the Resolution of the Government of India, Department of Finance and Commerce, No. 185,
dated 10th January 1883.)

List of articles which can be procured of Indian manufacture.

Names of articles.	Source from which obtainable of local manufacture, so far as known.	Names of articles.	Source from which obtainable of local manufacture, so far as known.
A.			
AGRICULTURAL IMPLEMENTS—			
Axes Baskets, wire Bill hooks Buckets Forks Harrows Knives Kodolies Pick-axes Pots, watering Rakes Rollers Scythes Shears Shovels Spades	Canal Foundry and Workshops, Roorkee; Jessop and Company, Calcutta.	CHEMICAL PRODUCTS AND DRUGS AND MEDICINES—	
		Acid, boracic " hydrochloric, pure " " commercial... " " Purvis, tested " nitric, pure " " commercial " sulphuric, pure " " common Aloe, socotorina Alum Ammoniaecum Ammonia chloride, salammoniac " liquor " " acetatis " " fortissimus Antimony, black " metal " oxide " sulphide " sulphuric Arsenic Assofetida Blistering flies (mylabris cichorii) Borax Calcium, chloride of Calumba root Camphor " oxide, black Cardamom seeds Caraway seeds Cassia pulv. Castor oil Catechu Chloroform, methylated Cinchona Cinnamon bark Cloves Copper, black, oxide of " nitrate of " oxide pure " " grannulated " sulphate* Coriander seed Cubebs Ether, rectified " sulphuric Ferri, sulphas Gamboge Ginger, dry Gold, chloride of Gum, acacia " benzoni " mastiche " myrrh " tragacanth Hyoscyamus, extract of " leaves Iron, oxide of " perchloride (crystallized) " peroxide of " persulphat " sulphate Jalap Kameyla	Most of the chemicals are made at Cossipore Chem- ical Works, Calcutta, belonging to Dr. Wal- die. Hyoscyamus can be pro- cured from the Botani- cal Gardens at Saha- ranpur, North-Western Provinces, and from the Botanical Gardens at Ghaneskhind, Poona. Jalap and peppermint can be procured from the Government Gardens at Ootacamund.
APPAREL—			
Badges Buttons* Caps, forage (for police) Coats and capes, waterproof Lace, gold " silver	Largely made at Delhi, Agra, and Lucknow and in Calcutta.		
ARMS—			
Scabbards Swords	Extensively manufactur- ed in the North-West- ern Provinces and Pun- jab.		
B.			
BUILDING AND ENGINEERING MA- TERIALS—			
Compasses Gypsum Portland cement	Canal Foundry and Work- shops, Roorkee. Indian Portland Cement Company, Calcutta, (Messrs. Burn & Co).		
C.			
CABINETWARE AND FURNITURE—			
Envelope stands Stationery cabinets Brooms			
CANVAS—			
Canvas	United Spinning and Weav- ing Company, Bombay, and other Cotton Mills at Bombay.		

* These articles are not at present regularly manufactured in India, but can be made to order, and probably would be manufactured, were there any regular demand for them.

List of articles which can be procured of Indian manufacture—continued.

Names of articles.	Source from which obtainable of local manufacture, so far as known.	Names of articles.	Source from which obtainable of local manufacture, so far as known.	
CHEMICAL PRODUCTS AND DRUGS AND MEDICINES—continued.		COTTON AND LINEN GOODS—contd.		
Kousso ...	Most of the chemicals are made at Cossipore Chemical Works, Calcutta, belonging to Dr. Waldie. Hyoscyamus can be procured from the Botanical Gardens at Saharanpur, North-Western Provinces, and from the Botanical Gardens at Ghaneshkhind, Poona. Jalap and peppermint can be procured from the Government Gardens at Ootacamund.	Long cloths ...	The Cotton Mills in Bombay and Cawnpore.	
Liquorice root ...		Mule twist thread ...		
Morphia acetat ...		Mulmul ...		
" hydrochloras ...		Muslin ...		
Narcotine ...		Putsoes or dhoties ...		
Nitre ...		Rumals ...		
Nutmegs ...		Saloo, red ...		
Nuxvomica ...		Sheeting ...		
Oak bark ...		Shirtings ...		
Oil, cajeputi ...		Tape ...		
" poppy ...		Towels ...		
" chaulmugra ...		Turbans ...		
" croton ...		Wicks for lamps of all descriptions.		
Opium, cake, medical ...				
" powder ...				
Peppermint ...				
Petroleum ...				
Plaster of Paris ...				
Rose confect. ...				
Rose-water ...				
Saltpetre ...				
Senna leaves ...				
Silver, cyanide of ...				
" nitrate of crystal ...				
" " common ...				
" " fused ...				
Spirit ether nitroze ...				
Ununtamul ...				
Wax (vegetable), white ...				
Zinc, chloride of ...				
COAL AND COKE, &c.—		E.		
Coal† ...		EARTHENWARE AND PORCELAIN—		
Coke† ...		Basins, porcelain ...	Raniganj Pottery Works (Messrs. Burn & Co.), Mercara Pottery, Coorg, (Mr. H. R. East).	
Charcoal, animal ...		Cups ...		
" pure ...		Dishes ...		
" wood ...		Filters ...		
		Jugs ...		
		Pans ...		
		Pots, earthen ...		
		Saucers, colour ...		
		Slabs " ...		
CORDAGE AND ROPE OF VEGETABLE FIBRE—		G.		
Cord ...	Messrs. Ahmuty & Co. and W. H. Harton & Co. of Calcutta.	GLASS AND GLASSWARE—		
Fishing line ...		Gum bottles ...		
House " ...		Ink pots ...		
Log " ...		Retorts ...		
Rat " ...				
Oakum ...				
Rope ...				
" Coir ...				
" Hemp, tarred ...				
" Manilla ...				
Roping, twine ...		H.		
Twine ...		HARDWARE AND CUTLERY—		
COTTON AND LINEN GOODS—		Adzes ...	Canal Foundry and Workshops, Roorkee; Postal Workshop, Aligarh; Messrs. Apar & Co., Burn & Co., Jessop & Co., Ahmuty & Co., Anunto Ram Dhur & Co., of Calcutta; Messrs. Fraser and Miller, and Messrs. Richardson and Crudas, of Bombay.	
Braids ...	The Cotton Mills in Bombay and Cawnpore.	Anvils, small, watchmaker's ...		
Calico ...		Badges ...		
Chintz ...		Balanees ...		
Cloth, cotton, of sorts ...		Bayonets ...		
Coats, drill (blue and khaki) ...		Bells ...		
Cord, cotton ...		Blocks, single and double ...		
" shoulder ...		Bodkins ...		
Cotton thread for sewing ...		Bolts, brass and iron ...		
Cotton packing ...		Bradawls* ...		
" twist ...		Brass hands, punkah ...		
Dhoties, grey, cotton ...		" lamps ...		
Drills, unbleached, and dyed ...		Call bells ...		
Duck ...		Candlesticks ...		
Dungri cloth ...		Coach screws, for brackets* ...		
Dusters ...		Cocks, brass (delivery) ...		
Jumpers, drill ...		Crucibles ...		
Khaki cloth ...		Hammers (all kinds) ...		
		Handles, brass ...		
		Hatchets ...		
		Hinges ...		
	Hooks for carbines ...			
	Knives ...			
	Lamps of sorts ...			
	Lanterns " ...			
	Locks* " ...			
	" pad ...			

List of articles which can be procured of Indian manufacture—continued.

Names of articles.	Source from which obtainable of local manufacture, so far as known.	Names of articles.	Source from which obtainable of local manufacture, so far as known.	
Hardware and Cutlery—contd.		Liquors, &c.—contd.		
Nippers ...	Canal Foundry and Workshops, Roorkee; Postal Workshop, Aligarh; Messrs. Apear & Co., Burn & Co., Jessop & Co., Ahmuty & Co., Anunto Ram Dhur & Co. of Calcutta, Messrs. Fraser and Miller, and Messrs. Richardson and Crudas of Bombay.	Rum ...	Messrs. Ahmuty & Co. Calcutta; Rosa Factory (Messrs. Carew & Co.), Shahjahanpore; Asl Distillery, Ganjam.	
Nuts* ...		Spirits, methylated ...		
Oil-feeders ...		" of wine rectified ...		
Pestles and mortars ...		M.		
Pincers ...		Metals, Brass—		
Planes ...		Hoops, brass ...	See Hardware, &c.	
Pliers, assorted ...		Pipes " ...		
Rings, iron and brass ...		Taps " ...		
" for keys ...		Metals, Copper—		
Rules, foot* ...		Copper leaf (books) ...	See Hardware, &c.	
Safes, iron* ...		Metals, Iron—		
Scales and weights (all sizes) ...		Anchors, small ...		
Scissors ...		Chains, galvanized, with arrows ...		
Screw drivers ...		" iron ...		
Sieves (assorted) ...		" all other sorts (galvanized or not galvanized).		
Spatula ...		Clip hooks ...		
Stoves ...		Compasses ...		
Taps and dies* ...		Crowbars ...		
Trowels ...		Drums, iron, galvanized or not (for oil) ...		
Tweezers ...		Filings ...		
Vices, bench* ...		Grapnels ...		
" hand ...		Handcuffs ...		
" pin with screw ...		Hand-saws ...		
Weighting machines, for letters and parcels ...		Jumpers, iron ...		
Weights ...		Marlin spikes ...		
Wheels, punkab, brass ...		Pipes, gas* ...		
Wrenches ...		Pipes and tanks, iron ...		
HEMP—		" galvanized iron* ...		
Spun yarn ...	See Cordage.	Pulleys, cast iron ...		
" tarred ...		Rivets* ...		
HIDES AND SKINS—		Spears ...		
Hides ...	See Leather.	Stand, iron tripod ...		
Skins ...		Thimbles, iron ...		
L.		Washers ...		
LEATHER AND LEATHER GOODS—		Metals, Tin—		
Ball bags ...	Messrs. Tuck, Harvey & Co. Foy Brothers, and Cooper, Allen & Co. of Cawnpore; Mr. F. Rowland of Bombay; Messrs. Maurice, Fielman & Co., Tangra Tannery, Calcutta.	Boxes, tin ...		Largely made in the Indian bazars.
Batons frog ...		Cans, tin ...		
Bellows ...		Cases, tin, for maps ...		
Belting for driving machines ...		Ingots, imported from the Straits Settlements ...	Ditto.	
Belts of sorts ...		Sand boxes, tin ...		
Covers, leather ...		O.		
Delivery hose, leather ...		Oils—		
Havresacks ...		Castor oil ...	The Gourepore Co., Limited, Calcutta; Messrs. Tuck, Harvey & Co., Cawnpore; and the Punjab Steam Mills Co., Lahore.	
Laces, leather ...		Cocanutt " ...		
Leather ...		Linseed " (boiled) ...		
Pads ...		" (raw) ...		
Patees ...		Mustard " ...		
Petaras ...		Sweet " ...		
Postal bags ...		Turpentine " ...		
Pouches, ammunition ...		S.		
" cap ...		Scientific Instruments and Apparatus—		
Saddlery, camel ...		Rain-gauges ...		See Hardware, &c.
" horse ...		Spirit levels ...		
Slings for carbines ...		Sundials ...		
" muskets ...		Silk—		
Talwar, frog ...		Ribbon ...	See Hardware, &c.	
Writing cases, leather ...		Tape ...		
LIQUORS, &c.—		S.		
Beer ...	The several Indian breweries.	S.		

* These articles are not at present regularly manufactured in India, but can be made to order, and probably would be manufactured, were there any regular demand for them.

List of articles which can be procured of Indian manufacture—continued.

Names of articles.	Source from which obtainable of local manufacture, so far as known.	Names of articles.	Source from which obtainable of local manufacture, so far as known.	
P		SOAP—		
PAINTS AND COLOURS—		Soap	North-West Soap Co., Meerut ; Tuck, Harvey & Co., Cawnpore ; Calcutta (Garden Reach) Soap Works ; Bombay Steam Soap and Candle Works.	
Lamp black		STATIONERY—		
Lead, red		Envelopes	See Hardware, &c., and Penknives.	
" white		" " linen lined		
Paint, black		Erasers		
Polish		File boards		
Varnish, copal, japan, &c.*		Glue, best, for binding		
PAPER AND PASTE BOARD—		" pots		
Paper, brown	{ Bally Paper Mills, Calcutta. Scindia Paper Mills, Gwalior. Upper India Paper Mills, Lucknow. Girgaum Paper Mills, Bombay.	Gum Arabic		
" blotting			Ink, writing, black	{ Dr. Waldie, Calcutta ; Babu Amrito Lal Roy, Calcutta. G. D. Iyah Pillai ; M. Narasimooloo Chetty ; Gooerdondoss Birjubookondoss & Co., and Theagaroya Moodelly, Madras ; Mr. Kelkar of Poona ; Pranlal Achrablal of Bombay.
" cartridge			" " blue-black	
" packing			" " registration, black	
Paste boards	{ Kurree Bux Brothers, Calcutta. A. B. DeNigri, Calcutta.	" " powder, black		
Straw "		" " red, not for registration		
PRINTING AND LITHOGRAPHING MATERIALS—		" for seals		
Case racks		" printing		
Centre pieces, brass		Inkstands, wooden		
Chases		" pewter, round		
" cast-iron		" brass		
Composing sticks (gun-metal)		" glass		
Cylindrical inking tables		Knives (paper folder)		
Footsticks, iron		Note books		
Forme racks		Paper-cutters (ivory, bone or wood)		
Galleys, brass, with wooden rims		" weights		
" large, brass bottomed		Penholders (ivory)		
Imposing slabs		" (other kinds)		
" " wooden frames for table, iron		Penknives	{ Premchand Mistry of Kachannugger, Burdwan, Bengal.	
Lye		Scissors		
" jars, portable, cast-iron, with false bottom		Portfolios		
Mallets, book		Rulers, flat		
Plainers		" parallel		
Pressing boards		" round		
Shooting sticks, iron		Sand		
Side		Wax-cloth		
Tools, Book-binder's		" sealing		
" stereotype picker's		STONE AND MARBLE—		
Trough (for galley washing)		Grindstones		
" for lye		Jars, stoneware, for battery		
Wood-bearers		Marble		
PROVISIONS—		T		
Hog's lard		TALLOW—		
Vinegar		Candles	Bombay Steam Soap and Candle Works.	
S		W		
SCIENTIFIC INSTRUMENTS AND APPARATUS—		WAX—		
Rain-gauges	{ Canal Foundry and Work-shops, Roorkee.	Bees		
Spirit levels			Candles	
Sundials				
SILK—				
Ribbon	Alliance Cotton and Silk Manufacturing Co., Bombay.			
Tape				
Goung-boungs or turbans				
Head-bands				

* These articles are not at present regularly manufactured in India, but can be made to order, and probably would be manufactured, were there any regular demand for them.

List of articles which can be procured of Indian manufacture—concluded.

Names of articles.	Source from which obtainable of local manufacture, so far as known.	Names of articles.	Source from which obtainable of local manufacture, so far as known.
WOOLLEN GOODS—		WOOLLEN GOODS—contd.	
Blankets ...	Woollen Mills Co., Cawnpore; Woollen Factory, Bangalore (Mr. S. Lee); Egerton Woollen Mills, Amritsar, Punjab.	Cloth, serge ...	Woollen Mills Co., Cawnpore; Woollen Factory, Bangalore (Mr. S. Lee); Egerton Woollen Mills, Amritsar, Punjab.
Braid ...		" woollen ...	
Broadcloth ...		Cords, woollen ...	
Bunting, assorted... ..		Felt ...	
Capes ...		Flannel ...	
Carpets ...		Jerseys ...	
Cloth, baize ...		Lace, woollen ...	

Appendix K to Government of India, Public Works Department Circular No. XI P.W., dated 21st June 1883.

Estimate of the probable quantity and value of stores required from England for the use of _____ ^{Province} _{Railway} during the official year 1884-85.

Description or Class of Stores.	Actual expenditure for three years.			Probable estimated requirements for 1884-85.		
	1880-81	1881-82	1882-83	Quantity.	Rate.	Value.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
A.—BRIDGE-WORK—						
(Articles exceeding Rs. 1,000 each to be detailed) ...						
(Articles not exceeding Rs. 1,000 each to be grouped together) ...						
B.—ENGINEERS' PLANT—(excluding petty tools)						
(Articles exceeding Rs. 1,000 each to be detailed) ...						
(Articles not exceeding Rs. 1,000 each to be grouped together) ...						
C.—WORKSHOP MACHINERY AND HEAVY TOOLS—						
(Grouped as above) ...						
D.—BALLAST AND PERMANENT-WAY—						
(Grouped as above) ...						
E.—ROLLING STOCK—						
(a) Locomotive ...						
(Grouped as above) ...						
(b) Coaching and Goods Stock.						
(Grouped as above) ...						
F.—STATION MATERIALS AND FENCING—						
(Grouped as above) ...						
G.—TOOLS AND STORES—						
(Grouped as above) ...						

Appendix I to Government of India, Public Works Department Circular No. XI P.W., dated 21st June 1883.

Annual statement of expenditure on Stores in the

Province for the official year 1884-85.

Appendix M to Government of India, Public Works Department Circular No. XI P.W.,
dated 21st June 1883.

LIST OF ARTICLES IN ORDINARY USE IN THE PUBLIC WORKS DEPARTMENT THAT ARE MADE IN INDIA.

Engineers' Plant (excluding petty tools).

Ballast beaters.
Barrows, wheel.
Beater-picks, platelayers'.
Blocks, wood.
Boats.
Derricks.
Dredgers.
Bars, fire (for engines).

Brasses, crankshaft (for engines).
Forks, rail, lifting.
Gauges rail, platelayers'.
Levers, wooden.
Monkeys, pile driving, wood, iron bound.
Trollies, platelayers', complete.
Excavators.

Workshop machinery and heavy tools.

Bellows, smiths'.
Boxes, moulding.

Mills, paint, hand.

Ballast and Permanent-way

Ballast.
Cushions, wooden, for bowl sleepers.

Keys, wooden, for chairs or bowl sleepers.
Sleepers, timber.

Rolling Stock.

Glasses looking (ordinary)
Cloth, baize, green.
,, canvas.
Durries.
Felt.

Hides, horse.
Stops, leather, door.
Straps, leather, glass frame.
Thread, sewing.
Washers, leather for axle boxes.

Station Machinery and Fencing.

Beam Scales.
Cases tickets, complete.
Gates, (Level Crossing).

Gradient boards.
Luggage trucks.

Tools and Stores.

Bill hooks.
 Brooms country.
 Daws or jungle cutters.
 Hammers.
 Handles.
 Hatchets.
 Hold-fast joiners.
 Kodalies.
 Mallets.
 Maul.
 Phowrahs.
 Rammers.
 Riddles or screens, iron.
 Scissors.
 Screens.
 Shovels.
 Sieves.
 Slabs, painters stone with mullers.
 Soldering irons.
 Spades handled.
 Spikes marlin.
 Barrels, oil.
 Bells.
 Bottles, tin.
 Buckets, leather.
 " wooden.
 Cans, tin.
 Chain, brass or lamp.
 Drippers and trays, tin for oil.
 Drums, iron for oil, &c.
 Feeders, oil.
 Funnels.
 Gongs, bell metal.
 Lanterns.

Weights, brass, standard, Indian.
Lamp, chimneys.
Bags, audit, leather.
" cash "
Belting.
Buckets, leather.
Hides, tanned.
Laces, belting, leather.
Skins, buffalo.
Washers, leather.
Oil, linseed, raw.
" " boiled.
Battens.
Beams.
Boards.
Coal.
Coke.
Petroleum.
Agdams.
Boxes.
Breadbaskets.
Canisters.
Cans.
Casks.
Dammer.
Glasses, looking (ordinary).
Ladders.
Pails, slop.
Punkah fitting.
Bands, cap.
Belts.
Blankets.
Bunting.
Caps.

Tools and Stores—contd.

Cloth.
Clothing.
Crockery.
Pouches for guards.
Sheeting.
Bags.
Bannels.
Baskets.
Borax.
Buckets, wooden.
Bungs (").
Candles, composition (?).
Cane rattan.
Canvas.
Cement, Portland.
Fire clay.
Coir.
Cord.
Cotton ball thread for wicks.
Earth, Fullers.
Clay, fire.
Flags bunting.
Flax.
Glue, ordinary.
Grease.
Gunpowder.
Gunny bags.
Hemp.
Hose, canvas.
Jute.
Lime.
Oil, almond.
" Castor.
" cocoanut.
" kerosine.
" mowa.
" mustard or rape.
" poppy.

Oil, Rangoon.
" sweet.
Pasteboard.
Pitch, Indian.
Plumbobs.
Potash, country.
Ranging rods.
Rope.
Rosin.
Salamoniac.
Salt.
Sand moulders.
Shellac.
Slates, roofing.
Soap.
Soda.
Staves, flag.
Tallow.
Tamping rods.
Tar, coal.
Tents.
Tiles, flooring, Indian manufacture.
Twine.
Waste, cotton, jute.
Wax.
Webbing.
Wedges.
Wine, spirits of methylated.
Yarn.
Bottles, gum.
Gum arabic.
Knives, pen.
Paper, cartridge.
Rules, ebony, round.
Saucers, color.
Boards, drawing.
Staves, levelling.
Tables, plane.

Appendix N to Government of India, Public Works Department Circular No. XI P.W., dated 21st June 1883.

LIST OF ARTICLES IN ORDINARY USE IN THE PUBLIC WORKS DEPARTMENT THAT ARE NOT MANUFACTURED IN INDIA BUT WHICH CAN BE MADE IN INDIA ON SPECIAL ORDERS AT A HIGHER PRICE.

Iron Bridge Work.

Castings of sorts.	Girders, plate.
Curbs.	Girders, triangulated.
Cylinders.	Hook bolts.
Girders, Lattice.	

Engineers' Plant (excluding petty tools).

Anchors (small).	Portable forges.
Anvils.	Pug mills.
Blocks, iron.	Screw Jacks.
Grappels.	Skips.
Iron crows with levers.	Soorkee mills.
Mortar mills.	

Ballast and Permanent-way.

Bolts.	Keepers, fang bolt.
Chairs, iron, for rails.	Rail presses.
Clips for rails.	Spikes.

Rolling Stock.

Bars, brass.	Caps, brass, for door handle nuts.
Beds, iron, upper for carriages.	Calchers, brass.
Bolts, brass, rod.	Chains, iron.
Brackets.	Escutcheons, brass.
Glass paper.	Drawing Instruments.
Tumblers, iron, for rope.	Horizon, artificial.
Tickets, card.	Pens, drawing.
" copper.	Rulers, parallel.
Boxes, date (or rack).	Squares.
Chains, measuring.	Stencil plates.
Clinometers.	Straight edges.
Compasses.	Plates, brass.
Eyes bronze.	Plugs for wash hand basins.
Eyelets, brass.	Rails, roller, brass for sliding doors.
Handles, brass.	Reflectors.
Hinges "	Rings, bronze and brass.
Hooks "	Sockets, brass.
Keys, carriage door.	Staples "
Lamps, roof.	Stops "
Lifts, brass.	Studs "
Locks.	Nails "
Mouldings, brass.	

Station materials and Fencing.

Pillars and brackets (cast iron).	Roofing irons.
Pipe, brass.	Tanks, cast irons.
Pipes, irons.	Weights.

Tools and Stores.

Adzes, carpenters'.	Saws, tenon.
" platelayers'.	Scrapers.
Anvils.	Screwdrivers.
Asphalting tools.	Scribers.
Augers, carpenters'.	Shears.
Awls.	Spanners.
Axes.	Spatulas.
Bars, crow.	Spokeshaves.
Beaters, platelayers'.	Squares.
Beck-irons for coppersmith.	Swages.
Bevils.	Tinmen's tools.
Bits, copper, solderings.	Tongs.
Blacksmiths' tools.	Trowels.
Braces.	Turnscrews.
Brands.	Vices.

Tools and Stores.—contd.

Brass furnace tools.	Wrenches.
Brushes.	Bolt ends.
Callipers.	Bolts and nuts.
Chisels.	Boxes, cash, &c.
Coach-makers' tools.	Brads.
Compasses, combs, graining, steel.	Buckets, iron, galvanised.
Coppersmiths' tools.	Cans, copper.
Cramps.	Chain, iron.
Crowbars.	Cocks, brass.
Drills.	Esenteheons, brass for locks.
Drivers, screw.	Hasps and staples.
Floats, hand.	Hinges.
Gimlets.	Hooks.
Gouges.	Locks.
Knives.	Measures, copper, liquid.
Ladles, letters and figures, steel.	" tin "
Mops, washing.	Nails, brass.
Mullers painters'.	Nuts.
Needles.	Pins.
Nippers.	Pots, glue, cast iron.
Pincers, carpenters'.	Rivets.
Plane irons.	Shackles.
Planes.	Sheaves.
Platelayers' tools.	Washers.
Pliers.	Weights, brass, standard, English.
Pokers.	" cast iron.
Punches.	Lamps, hand.
Rimers.	Wicks, argand.
Saws, cross-cut.	Hose.
" hand.	Gold leaf.
Saws, pit.	