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MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No. 2258 Press

B.P. No. Mis.

Dated 12. 9. 195 1873

Not to be folded or roughly handled

No. 182. Read the following endorsement of the District Engineer, Presidency, dated Fort St. George, 12th August 1873, No. 2,230:

From F. DODERET, Esq., Government Mathematical Instrument Maker, Public Works Department, to Lieutenant-Colonel J. GODDARD, R.E., District Engineer, Presidency, dated Chepauk, 4th August 1873.

I HAVE now the honour to submit a complete report of the scientific instruments belonging to the Irrigation and Canal Company which I have inspected agreeably to your orders. At the same time I beg to annex the value at which such instruments are standing in the stores books, as also the value I have put upon them. The whole of the instruments, with the exception of a few parallel rulers, have been used and require cleaning and repairing, but after this is done I think they would be quite as good as new.

Theodolites.—I would recommend the whole being taken with the exception of one which is of an old construction.

Levels, Dumpy.—I would also recommend all being taken.

Levels, Y.—I find the most of these made by Henry Barrow of London, and are of an inferior description. Taking this, as well as the large number in store, and the small [illegible] and for them into consideration, I do not think it right to recommend the [illegible]y should be taken over; I have, however, selected the Y levels by Elliot [illegible]hers and Troughton and Sims, which I think may be taken.

[illegible]mferentors.—With reference to these I beg to say that we have a large supply in the Public Works Stores, and the demand for them is very small. I don't think that we should take them.

Staves, levelling, both Telescopic and Gravatts, are in a very bad condition; they are consequently rejected.

Protractors, brass, circular, with points and verniers are in good condition, and I recommend that they may be taken over as there are only a small number in store. Protractors, brass, semicircular, are in good condition; these may be taken.

Prismatic compasses, of which I have selected five, may be taken over; the others are of inferior quality, and I cannot recommend them. Rulers, parallel, rolling, ebony, I have selected those in good order, which may be taken over.

Measuring chains are very much used and useless.

Drawing instruments and color boxes, most of them empty and worthless.

Compasses, beam, with vernier, are in good condition and may be taken.

Plotting scales.—Those selected should be taken over as per list.

Marquors' scales.— Do. do. do.

Ranging rods are in good order and may be taken.

T Squares, ebony do. do.

Besides the above there are some other instruments for which the Public Works Department has no use whatever.

List of Scientific Instruments belonging to the Madras Irrigation and Canal Company examined and valued by the Government Mathematical Instrument Maker, Public Works Department.

Description of Instruments.	Number on Instrument.	Size of Instrument.	Number or Quantity.	Public Works Store Book Price.	Valued by Mathematical Instrument Maker.	Remarks.
				Rs. A. P.	Rs. A. P.	
Theodolite, Surveying	.....	4½ inches.	1	150 0 0	100 0 0	Cover of object glass and eyepiece missing. Repairable.
Do. do.	02	5 ,,	1	198 4 0	120 0 0	Long eyepiece missing; cover of socket missing. Repairable.
	60	5 ,,	1	295 11 0	150 0 0	Plumb bob missing. Repairable.
Do. Transit	689	6 ,,	1	354 4 0	190 0 0	Fair order.
Do. Everest	596	6 ,,	1	354 4 0	190 0 0	Repairable.
Do. do.	606	6 ,,	1	354 4 0	190 0 0	Do.
Do. Surveying	599	6 ,,	1	354 4 0	190 0 0	Plumb bob and reading lens missing.
Do. do.	708	6 ,,	1	354 4 0	190 0 0	Eyepiece, reading lens and plumb bob and reading microscope missing.
Do. do.	702	6 ,,	1	354 4 0	190 0 0	Spirit level broken, eyepiece missing, reading lens broken.
Do. do.	71	7 ,,	1	580 1 0	300 0 0	Eyepiece missing. Repairable.
Do. Transit	104	7 ,,	1	418 13 0	250 0 0	Spirit level broken; cover of socket missing.
Do. Everest	610	7 ,,	1	418 13 0	250 0 0	Upper and lower level broken; eyepiece missing.
Do. do.	160	.....	1	.....	120 0 0	
Do. and level combined	814	10 inches.	1	115 0 0	70 0 0	Repairable.
Levels, Dumpy	.....	12 ,,	1	134 1 0	100 0 0	
Do. do.	201	14 ,,	1	154 10 0	100 0 0	Reading lens broken. Repairable.
Do. do.	252	14 ,,	1	154 10 0	100 0 0	
Do. do.	664	14 ,,	1	154 10 0	100 0 0	Repairable.
Do. do.	188	14 ,,	1	154 10 0	100 0 0	
Do. do.	240	14 ,,	1	154 10 0	100 0 0	Spirit bubble broken. Repairable. Object glass spoiled.
Do. do.	976	14 ,,	1	154 10 0	100 0 0	Cover of object glass, eyepiece and reflector missing.
Do. do.	1,017	14 inches.	1	154 10 0	100 0 0	Eyepiece missing.
Do. do.	1,016	14 ,,	1	154 10 0	100 0 0	Object glass chipped; reading lens missing.
Do. do.	1	15 ,,	1	.....	120 0 0	Eyepiece missing, reflector, reading lens missing. Repairable.
Do. Yly Elliot Brothers	2	10 ,,	1	157 10 0	100 0 0	
Do. do. do.	1,008	11 ,,	1	.....	100 0 0	
Do. do. do.	1,015	11 ,,	1	.....	100 0 0	
Do. do. do.	1,004	11 ,,	1	.....	100 0 0	Long eyepiece missing.
Do. do. do.	1,005	11 ,,	1	.....	100 0 0	
Do. do. do.	1,006	11 ,,	1	.....	100 0 0	
Do. do. do.	1,000	14 ,,	1	191 2 0	120 0 0	
Do. do. do.	221	14 ,,	1	191 2 0	120 0 0	
Do. by Troughton and Sims	553	20 ,,	1	262 8 0	180 0 0	
Do. do. do.	555	20 ,,	1	262 8 0	180 0 0	
Do. do. do.	551	20 ,,	1	262 8 0	180 0 0	
Do. do. do.	01	20 ,,	1	262 8 0	180 0 0	
Do. second class or Maistry	2,760	.....	1	88 0 0	50 0 0	Repairable.
Do. do. do.	2,763	.....	1	88 0 0	50 0 0	
Pentagraph	2	.....	1	78 3 0	40 0 0	
Do.	1,573	.....	1	78 3 0	40 0 0	
Scales, plotting, boxwood, in case	.....	.....	9	9 0 0	5 0 0	
Protractors, circular, brass, in case	.....	.....	4	21 9 0	15 0 0	
Do. semicircular do.	22	.....	1	.....	4 0 0	
Do. do. do.	70	.....	1	.....	3 0 0	
Rulers, parallel, rolling, ebony	.....	18 inches.	15	7 12 0	5 0 0	
Do. do.	.....	12 ,,	5	4 4 0	3 0 0	
Do. do.	.....	9 ,,	8	2 5 0	1 8 0	
Do. do.	.....	6 ,,	6	.....	1 0 0	Each.
Do. brass	.....	18 ,,	2	17 2 0	6 0 0	
Compass, beam, in case, large	72	.....	1	22 1 0	12 0 0	
Do. do.	73	.....	1	22 1 0	12 0 0	
Scale, Marquors', in case	139	.....	1	6 4 0	4 0 0	
Compass, prismatic	.....	.....	5	36 2 0	20 0 0	
Ranging rods with iron sockets	.....	.....	30	.....	1 4 0	
T Squares, ebony	.....	36 inches.	3	4 0 0	2 8 0	
Do. do.	.....	42 ,,	7	.....	3 0 0	

CHEPAUK,
4th August 1873.

(Signed) F. DODERET,
Govt. Mathematical Instrument Maker, P.W.D.

From J. N. GRAINGER, Esq., General Superintendent of Public Works Workshop and Stores, to Lieutenant-Colonel J. GODDARD, R.E., District Engineer, Presidency, dated Chepauk, 7th August 1873, No. 649.

With reference to G. O., No. 1,704, dated 1st July 1873, communicated with your No. 1,598, dated 10th idem, directing me to give effect to the orders of Government in the selection and re-valuation of the machinery and tools required for the Public Works Stores and Workshops, I have the honour to forward a revised list of such articles as have been selected by me after personal inspection, separating those required for stock in the Public Works Stores from those required by the Chepauk Workshop.

2. The articles are in good condition, and as regards the price offered by me, I beg to state that I shall accept the stores at the selling rates to Government Departments, proposed by Mr. Badham in paragraph 5 of his letter to the Joint Secretary to Government, Public Works Department, dated 14th May 1873, No. 106.

List of Articles selected from the Stock of the Madras Irrigation and Canal Company for the Public Works Stores and Chepauk Workshops.

Description of Articles.	No.	Irrigation and Canal Company's Price.
		Rs. A. P.
For Public Works Stores.		
Chain, iron, crane, ¼ inch ... ... lbs.	2,691 per lb.	0 1 0
Do. measuring, 100 feet; no arrows ... ... No.	1	10 12 0
Chests, cash, iron, small ... ... ,,	3 each.	175 0 0
Clips, iron, for stone or timber ... ... ,,	2 ,,	4 8 0
Crane, 1 ton ... ... ,,	1	775 0 0
Ladles for pitch pots ... ... ,,	16 each.	2 14 5
Lead, sheet ... ... lbs.	672	.....
Paper, drawing, cartridge continuous, mounted on Brown Holland, 54 inches ... ... Rolls.	6 per roll.	214 11 8
Do. do. Double Elephant ... ...Sheets.	872 per sheet.	0 6 3
Do. do. Single do. ... ... ,,	419 ,,	0 2 1
Do. sectional, 20 inches ... ... ,,	72 ,,	0 10 7
Pots, pitch, large ... ... No.	16 each.	4 6 5
Scales, counter beam ... ... ,,	1	15 1 7
For Chepauk Workshops.		
Axes, carpenters', 5 lbs ... ... No.	25 each.	1 4 11
Do., felling, English ... ... ,,	4 ,,	0 10 9
Bars, Miners, boring, 2 feet 6 inches × 1½ inches ... ,,	84 ,,	1 8 9
Do. tamping, brass ... ... ,,	14 ,,	6 4 5
Boards, drawing, Howlet's pattern ... ... ,,	1	10 0 0
Bolts, tower, 24 inches ... ... ,,	1	0 15 0
Do. do. 13 ,, ... ,,	11 each.	0 7 0
Do. do. 11 ,, ... ,,	333 ,,	0 5 1
Do. do. 10 ,, ... ,,	367 ,,	0 5 1
Do. do. 9 ,, ... ,,	74 ,,	0 4 9
Do. do. 8 ,, neck ... ... ,,	11 ,,	0 5 0
Do. do. 12 ,, ,, ... ,,	218 ,,	0 5 0
Do., flush, brass, 4½ inches ... ... ,,	68 ,,	0 2 4
Do. do. do. 3 ,, ... ,,	72 ,,	0 1 10
Borax ... ... lbs.	28 per lb.	0 4 8
Boxes and taps for cutting wood screws, 1 inch ... ... Sets.	2 per set.	2 0 0
Do. do. do. do. 1¼ ,, ... ,,	2 ,,	3 0 0
Do. do. do. do. 1½ ,, ... ,,	1	3 5 0

List of Articles selected from the Stock of the Madras Irrigation and Canal Company, etc.—(Continued.)

Description of Articles.	No.	Irrigation and Canal Company's Price.
		Rs. A. P.
For Chepauk Workshops.—(Continued.)		
Braces, Ratchet Smiths', with steel male centres without bits, 18 inches ... ... No.	2 each.	11 0 4
Do. do. do. do. do. 24 inches ... ,,	1	13 6 8
Do. do. do. do. do. do. ... ,,	1	16 13 2
Braces, Ratchet, eccentric lever, 24 inches ... ... lbs.	120 per lb.	0 8 8
Brass sheet ... ... No.	12 each.	0 3 10
Cans, tin, for oil, 4 ounces ... ... lbs.	420½ per lb.	0 2 0
Chains, iron, crane, ¾ inch ... ... No.	100 each.	0 8 2
Chisels, carpenters', socket of sizes ... ... ,,	6 ,,	0 10 6
Do. turners', of sizes ... ... Sheets.	300 per sheet.	0 0 8
Cloth, emery ... ... No.	15 each.	2 7 2
Cocks, brass, with spanners, ½ inch ... ... ,,	9 ,,	3 8 2
Do. do. do. ¾ ,, ... ,,	1	1 5 6
Do. do. do. 1 ,, ... ,,	3 each.	0 15 10
Compasses, carpenters', 7 inches ... ... ,,	2 ,,	1 2 6
Do. do. 9 ,, ... ,,	2 ,,	26 4 0
Do. do. 12 ,, ... ,,	69 ,,	0 9 6
Cramps, carpenters', 5 feet with lengthening bar ... ,,	1 per gross.	8 14 2
Drills, steel, assorted ... ...Gross.	12 each.	1 3 0
Ferrules for tool handles (iron) ... ... No.	15 ,,	0 13 2
Files, safe edge, 2nd cut, 16 inches ... ... ,,	6 ,,	0 11 4
Do. flat, 2nd cut, 14 inches ... ... ,,	1	0 10 0
Do. square, 1 side safe, 2nd cut, 14 inches ... ... ,,	4 each.	0 10 0
Do. parallel, safe, single cut, 14 inches ... ... ,,	7 ,,	0 6 2
Do. do. do. round edge, 14 ,, ... ,,	9 ,,	0 8 0
Do. flat, 2nd cut, 12 inches ... ... ,,	12 ,,	0 7 0
Do. do. bastard, 12 ,, ... ,,	5 ,,	0 10 5
Do safe edge, bastard, 12 inches ... ... ,,	1	0 8 0
Do. do. smooth, 12 ,, ... ,,	12 each.	0 8 10
Do. cabinet, half round, bastard, 12 inches ... ... ,,	35 ,,	0 10 2
Do. do. do. 2nd cut, 12 ,, ... ,,	2 ,,	0 10 11
Do. half round, bastard, 12 inches ... ... ,,	9 ,,	0 9 8
Do. round, bastard, 12 ,, ... ,,	6 ,,	0 8 1
Do. square, bastard, 12 ,, ... ,,	5 ,,	0 8 6
Do. do. 1 side safe, 2nd cut, 12 inches ... ... ,,	1	0 9 9
Do. do. do. smooth, 12 ,, ... ,,	1	0 10 0
Do. 3 square, bastard, 12 inches ... ... ,,	5 each.	0 9 0
Do. half round, bastard, 11 ,, ... ,,	9 ,,	0 8 0
Do. flat, smooth, 10 inches ... ... ,,	13 ,,	0 9 11
Do. do. bastard, 10 ,, ... ,,	1	0 6 0
Do. half round, bastard, 10 inches ... ... ,,	22 each.	0 6 0
Do. Cabinet, half round, bastard, 10 inches ... ... ,,	1	0 8 0
Do. 3 square, bastard, 10 inches ... ... ,,	2 each.	0 9 9
Do. half round, smooth, 10 ,, ... ,,	1	0 7 7
Do. do. rough, 10 ,, ... ,,	6 each.	0 8 8
Do. parallel, safe edge, 10 ,, ... ,,	8 ,,	0 8 2
Do. flat, smooth, 9 inches ... ... ,,	12 ,,	0 4 11
Do. do., bastard, 9 ,, ... ,,	5 ,,	0 6 2
Do. safe edge, bastard, 9 inches ... ... ,,	12 ,,	0 6 3
Do. do. smooth, 9 ,, ... ,,	6 ,,	0 5 0
Do. half round, smooth, 9 ,, ... ,,	11 ,,	0 8 10
Do. do. 2nd cut, 9 ,, ... ,,	6 ,,	0 5 0
Do. do. bastard, 9 ,, ... ,,	6 ,,	0 4 8
Do. square, 1 side safe, smooth, 9 inches ... ... ,,	12 ,,	0 4 0
Do. do. do. 2nd cut, 9 inches ... ... ,,	16 ,,	0 9 0
Do. half round, smooth, 8 inches ... ... ,,	17 ,,	0 4 5
Do. do. bastard, 8 ,, ... ,,		
Do. do. cabinet, bastard, 8 inches ... ... ,,		

List of Articles selected from the Stock of the Madras Irrigation and Canal Company, etc.—(Continued.)

Description of Articles.	No.	Irrigation and Canal Company's Price.
		RS. A. P.
For Chepauk Workshops.—(Continued.)		
Files, half round, rough, 8 inches ... ... No.	1	0 4 0
Do. equalling, cant, smooth, 8 inches .. .. ,,	6 each.	0 6 4
Do. feather edge, smooth, 8 ,, ... ,,	6 ,,	0 10 6
Do. flat, smooth, 7 inches ... ... ,,	24 ,,	0 3 11
Do. do. bastard, 7 ,, ... ,,	2 ,,	0 5 6
Do. round, bastard, 8 inches ... ... ,,	2 ,,	0 8 0
Do. flat, bastard, 6 inches .. .. ,,	2 ,,	0 3 0
Do. cant, smooth, equalling, 6 inches ... ... ,,	6 ,,	0 4 8
Do. do. taper, 6 inches ... ... ,,	6 ,,	0 4 8
Do. do. do. 4 ,, ... ,,	6 ,,	0 3 [illegible]
Do. do. 4 inches ... ... ,,	3 ,,	0 3 3
Do. feather edge, smooth taper, 4 inches ... ... ,,	6 ,,	0 4 10
Do. do. do. 4 ,, ... ,,	4 ,,	0 5 3
Do. 3 square, saw hand, blunt, fine, 2nd cut, single, 6 inches ,,	60 ,,	0 4 4
Do. do. do. do. do. do. 7 ,, ,,	120 ,,	0 4 8
Do. saw hand, 2nd cut, 3½ inches ... ... ,,	192 ,,	0 1 7
Do. do. do taper, 7 inches ... ... ,,	60 ,,	0 3 10
Do. do. do do. 5 ,, ... ,,	158 ,,	0 2 4
Do. do. do. do. 6 ,, ... ,,	22	0 3 0
Do. do. do. do. 4 ,, ... ,,	185 each.	0 1 4
Do. do. mill, blunt, 2nd cut, 8 inches ... ... ,,	27 ,,	0 5 7
Do. do. do. smooth, 1 side safe, equalling, 8 inches. ,,	24 ,,	0 6 10
Do. do. frame, 8 inches ... ... ,,	14½ ,,	0 5 6
Do. topping, 2nd cut, safe, 8 inches ... ... ,,	11 ,,	0 5 6
Do. saw, smooth, 2nd cut, 7 ,, ... ,,	24 ,,	0 4 5
Grind-stone, Newcastle, 25 ,, ... ,,	1	19 2 4
Do. do. 16 ,, ... ,,	1	19 2 4
Hammers, carpenters', hand, Exeter, No. 6 ... ... ,,	24 each.	0 8 4
Do Engineer, unhandled ... ... ,,	13 ,,	1 6 11
Do. do. hand, handled ... ... ,,	11 ,,	1 15 11
Do. Mason's stone, 1½ lbs. ... ... ,,	17 ,,	0 6 0
Do. do. do. 2 ,, ... ,,	21 ,,	0 12 0
Do. do. do. 3 ,, ... ,,	11 ,,	0 14 1
Do. Upholsters ... ... ,,	3 ,,	0 11 7
Hinges, brass, butt, 3 inches ... ... Pans.	22½ per pan.	0 4 7
Do. do. do. 4 ,, ... ,,	12 ,,	0 14 1
Do. do. do. 2½ ,, ... ,,	23 ,,	0 3 0
Do. do. do. 2 ,, ... ,,	24 ,,	0 1 9
Do. wrought iron, butt, 3 inches ... ... ,,	7½ ,,	0 2 2
Do. do. do. 2½ ,, ... ,,	50 ,,	0 1 6
Do. do. do. 4 ,, ... ,,	18 ,,	0 3 7
Hooks, bill ... ... No.	63 each.	0 15 6
Iron, tinmen's, soldering, with copper bits, straight ... ,,	1	1 2 10
Do. do. do. bent ... ,,	1	3 7 8
Lead, white, dry ... ... lbs.	196 per lb.	0 2 7
Machine, planing ... ... No.	1	768 4 3
Do. wall drilling ... ... ,,	2 each.	586 14 0
Measures, powder, copper cup, 1 oz. to 1 lb. (set of 6) ... Set.	1 per set.	6 0 0
Paper glass ... ... Sheets.	2,500 per sheet.	0 0 6
Picks, English, with handle ... ... No.	162 each.	2 9 9
Pillars, drilling, large ... ... ,,	2 ,,	18 15 3
Do. do. small ... ... ,,	2	18 13 8
Punches, leather, assorted... ... ... ,,	9	0 6 11
Rivets, iron, ½ × $\frac{5}{16}$ round heads ... ... lbs.	541 per lb.	.....
Press, lithographic ... ... No.	1	137 8 0
Stones do. 20 inches × 13 inches ... ... ,,	34 each.	4 7 9

List of Articles selected from the Stock of the Madras Irrigation and Canal Company, etc.—(Concluded.)

Description of Articles.	No.	Irrigation and Canal Company's Price.
		RS. A. P.
For Chepauk Workshops.—(Concluded.)		
Scales, counter scoop, with steel yard ... ... No.	3 each.	.....
Saws, cross cut, with handles, 5 feet ... ... ,,	5 ,,	5 6 11
Do. Ben metal, 14 inches ... ... ,,	10 ,,	2 7 11
Do. metal blades, 14 inches ... ... ,,	20 ,,	0 6 11
Screws, brass, ½ inch ... ... Gross.	6 per dozen.	0 0 10
Do. do. ¾ ,, ... ,,	6 ,,	0 1 4
Do. do. 1 ,, ... ,,	4 ,,	0 2 4
Solder, soft, for tin ... ... lbs.	3½ per lb.	0 8 6
Do. spelter, coarse ... ... ,,	56 ,,	0 9 11
Do. do. for iron and copper ... ... ,,	18¾ ,,	0 9 10
Spanners, bridding, 12 inches ... ... No.	6 each.	4 0 0
Do. do. 18 ,, ... ,,	3 ,,	6 13 10
Do do. 24 ,, ... ,,	3 ,,	9 2 11
Tin sheets, single ... ... Sheets.	503 per sheet.	0 1 3
Taps, liquor, brass... ... ... No.	3 each.	1 14 0
Tar paint .. .. lbs.	212 all.	15 5 11
Do. Stockholm ... ... Gallons.	26 per gallon.	0 14 7
Tubes, glass, for boilers ... ... No.	5 each.	0 3 10
Weights, iron, 56 lbs. ... ... ,,	52 ,,	3 10 2

CHEPAUK,
7th August 1873.

(Signed) J. N. GRAINGER,
General Supdt. P. W. Workshops and Stores.

SUBMITTED, in original, to the Chief Engineer and Secretary to Government, Public Works Department, with reference to G. O., No. 1,704, dated 1st July 1873.

(Signed) J. GODDARD, Lieut.-Colonel, R.E.,
District Engineer, Presidency.

No. 183. ORDER THEREON, 12th September 1873, No. 2,258.

ACCOUNT, No. 8.

THESE papers will be communicated to the Chief Engineer for Irrigation with reference to G. O., 1st July 1873, No. 1,704.

2. The Government approve of the purchase of the surplus stores of the Madras Irrigation and Canal Company, shown in the list furnished by the General Superintendent, Public Works Workshops and Stores, at the prices named, subject to the percentage reduction referred to in the letter* from the Acting Manager, dated 14th May 1873, No. 106, and, as soon as the amount to be paid shall have been determined and reported, funds for the purchase of these stores will be appropriated. It is observed that the litho-graphic press and stones, included in Mr. Grainger's list as intended for the use of the workshops, have already been purchased by the Lithographic Department of the Government Office.

* Printed in Proceedings, Madras Government, 1st July, No. 1,704.

Proceedings of the Madras Government, Public Works Department,
12th September 1873.

3. With regard to the list of scientific instruments reported on by the Government Mathematical Instrument Maker, the Chief Engineer for Irrigation will ascertain whether the Chief Engineer and Manager of the Company is willing to accept the valuation of Mr. Doderet. If so the Government will be prepared to purchase all the instruments named in Mr. Doderet's list, except the theodolites, of which it is considered that six instruments out of the thirteen shown in the list will suffice for the wants of the Public Works Department.

(True Extract.)

Lieut.-Colonel, R.E.,
Joint Secretary to Government.

To the Chief Engineer for Irrigation.
" District Engineer, Presidency.
" Chief Engineer and Manager of the Madras Irrigation and Canal Company.
" Officiating Controller of Public Works Accounts,
with copy of G. O., No. 1,704, 1st July 1873.

Exd. E. C. Shunker.
Spare Copies.

No 2230. Report on Machinery, Tools and Scientific Instruments belonging to the Irrigation and Canal Company, Madras.

Letter from the Mathematical Instrument maker No — of 4th August 1873.

Letter No 649 of 7th August 1873 from the General Superintendent of Stores and Workshops

Encls.
2. Original letters
2. Lists.

Submitted in original to the Chief Engineer and Secretary to Government P.W.D. with reference to G.O. No 1704 of 1st July 1873.

Sd. Jno. Goldsmid Lt. Col. R.E.
District Engineer
Presidency.

Fwd 1st Gen. C.
12th August 73

P. W. 1873 Depart.
Rec'd of Ly Bd of Wks Office
No 4489
From
The Dist Engr
Dec
To
The Chief Engr
Bd of Wks
Wash
No 2230
Dt. 12 Aug 73
Rec'd 15 "
Encls. 4.
No 2258 - 12 Sept 73
Submitting
letters from the Ed Supt
of W Works & mathema-
tical instrument maker,
with lists showing the
valuation of scientific
instrument belonging to
the Irrigation Canal Co. lake

No 182

Rec'd 6 Copy 13 Aug 73

List of articles selected from the stock of the Madras Irrigation and Canal Company for the Public Works Stores and Chepauk Workshops.

Description of Articles	No	Irrigation and Canal Company's Price			Remarks.
For Public Works Stores					
Chain Iron brass 1/2"	lbs 2691	a	1	a	
do Measuring 100 feet no arrows	No 1		10	12 a	
Cleats cast Iron small	" 3 each	1	75	a a	
Clips do for stone or timber	" 2 "		4	8 a	
Crane Iron	" 1		7	75 a a	
Ladles for Pitch Pots	" 16 each		2	14 6	
Lead sheet	lbs 672				
Paper drawing Cartridge boiler mounted as Brown Holland 54"	3 Rolls 67 Roll		214	11 8	
do do Double Elephant	Sheets 872 per sheet		a	6 3	
do do Single do	" 419 "		a	2 1	
do Sectional 20"	" 72 "		a	10 7	
Pots Pitch Large	No 16 each		4	6 6	
Scales Counter Beam	" 1		15	1 7	
Byes Carpenters 6 lbs	No 25 each		1	4 11	
do Felling Axe best	" 4 "		a	10 9	
Bars Iron no Boring 2 1/2" x 1 1/2"	" 84 "		1	8 9	
do Tampion & Brace	" 14 "		6	4 5	
Boards Drawing Bevelets Pattern	" 1		10	a a	
Bolts Fixed 24"	" 1		a	15 a	
do do 13"	" 11 each		a	7 a	
do do 11"	" 333 "		a	5 1	
do do 10"	" 367 "		a	5 1	
do do 9"	" 74 "		a	4 9	
do do 8" Nickel	" 11 "		a	5 a	
do do 12" do	" 218 "		a	6 a	
do Elect Brass 4 1/2"	" 58 "		a	2 4	
do do do 3"	" 99 "		a	1 10	
Borax	lbs 28 per lb		a	4 8	
Boxes and Taps for Cutting Wood Screws 1"	Sets 2 per set		2	a a	
do do do do 1 1/4"	" 1 "		3	a a	
do do do do 1 1/2"	" 1 "		3	6 a	
Braces Ratchet Smiths with steel Male Centres with 6" sweep	No 2 each		11	a 4	
do do do do do 18"	" 1 "		13	6 8	

5 1/2

13 C

15 C

List of articles selected from the stock of the Madras Irrigation and Canal Company for the Public Works Stores and Chepauk Workshops.

Description of Articles	No.	Irrigation and Canal Company's Price	Remarks.
Braces Ratchet Eccentric lever 24"	Do	1	16 1/2
Brass Sheet	lbs	120 @ 1/4	" 8 8
Cans Oil for Oil & Drivers	Do	12 each	" 3 10
Chains Iron Crane 3/8"	lbs	420 @ 1/4	" 2 4
Chisels Carpenters Socket of sizes	No	100 each	" 8 2
Do Turners of sizes	"	6 "	" 1 06
Cloth Emery	Sheets	300 @ 1/4	" " 8
Cocks Brass with Spanners 1/2"	Do	15 each	2 7 2
Do Do Do 3/4"	"	9 "	3 8 2
Compasses Carpenters 7"	"	1	1 5 6
Do Do 9"	"	3 each	" 15 10
Do Do 12"	"	2 "	1 2 6
Cramps Carpenters 5 with lengthening Bar	"	2 "	26 4 "
Drills Steel Assorted	"	69 "	" 9 6
Ferrules for Tool Handles (Iron)	Gross	1 @ 1/2 Gross	8 11 2
Files Taper Edge 2nd cut 16"	Do	12 each	1 3 "
Do Flat 2nd cut 14"	"	15 "	" 13 2
Do Square Wide Taper 2nd cut 14"	"	6 "	" 11 4
Do Parallel Safe Single cut 14"	"	1	" 10 "
Do Equalling Cant Smooth 8"	"	6 each	" 6 4
Do Feather Edge Smooth 8"	"	6 "	" 10 6
Do Flat Smooth 7"	"	21 "	" 3 11
Do Do Bastard 7"	"	2 "	" 5 6
Do Round Bastard 8"	"	2 "	" 8 "
Do Flat Bastard 6"	"	2 "	" 3 "
Do Cant Smooth Equalling 6"	"	6 "	" 4 8
Do Do Taper 6"	"	6 "	" 4 8
Do Do Do 4"	"	6 "	" 3 3
Do Do 4"	"	3 "	" 3 3
Do Feather Edge Smooth Taper 4"	"	6 "	" 4 10
Do Do Do 4"	"	4 "	" 5 3
Do 3 Square Saw Hand Blunt Fine 2nd cut Single 6"	"	60 "	" 4 4
Do Do Do Do Do 7"	"	120 "	" 4 8
Do Saw Hand 2nd cut 3/2"	"	192 "	1 7
Do Do Do Taper 7"	"	60 "	" 3 10
Do Do Do Do 5"	"	168 "	" 2 4
Do Do Do Do 6"	"	22 "	" 3 "

List of articles selected from the Stock of the Madras Irrigation and Canal Company for the Public Works Stores and Chepauk Workshops.

Description of Articles	No	Irrigation and Canal Company's Price			Remarks.
Files Saw Band 2nd Cut Taper 4"	Rs	185	each	1 4	
Do Do Mill Blunt 2nd Cut 8"	"	27	"	5 7	
Do Do Do Smooth Sides safe Equalling 8"	"	34	"	6 10	
Do Do Prairie 8"	"	144	"	5 6	
Do Slopping 2nd Cut Safe 8"	"	11	"	5 6	
Do Saw Smooth 2nd Cut 7"	"	24	"	4 5	
Grindstones Peicobastle 25	"	1		19 2 4	
Do Do 16"	"	1		9 2 4	
Hammers Carpenters Hand Peter Rob	"	24	each	8 4	
Do Engineer Lenhandled	"	13	"	1 6 11	
Do Do Hand handled	"	11	"	1 15 11	
Do Masons Stone 1 1/2 lbs	"	17	"	6 "	
Do Do Do 2 lbs	"	21	"	12 "	
Do Do Do 3 lbs	"	11	"	11 1	
Do Upholsterers	"	3	"	11 7	
Hinges Brass Butt 3"	Pairs	22 1/2	Files	4 7	
Do Do Do 4"	"	2	"	14 1	
Do Do Do 2 1/2 4	"	23	"	3 "	
Do Do Do Round edge 14"	"	1	each	10 "	
Do Flat 2nd cut 12"	"	7	"	6 2	
Do Do Bastard 12"	"	9	"	8 "	
Do Safe Edge Bastard 12"	"	12	"	7 "	
Do Do Smooth 12"	"	5	"	10 5	
Do Cabinet 1/2 Round Bastard 12"	"	1		8 "	
Do Do Do 2nd cut 12"	"	12	each	8 10	
Do 1/2 Round Bastard 12"	"	35	"	10 2	
Do Round Bastard 12"	"	2	"	10 11	
Do Square Bastard 12"	"	9	"	9 8	
Do Do Side Safe 2nd cut 12"	"	6	"	8 1	
Do Do Do Smooth 12"	"	6	"	8 6	
Do 3 Square Bastard 12"	"	1	"	9 9	
Do 1/2 Round Bastard 12"	"	1	"	10 "	
Do Flat Smooth 10"	"	5	each	9 "	
Do Do Bastard 10"	"	9	"	8 "	
Do 1/2 Round Bastard 10"	"	13	"	9 11	
Do Cabinet 1/2 Round Bastard 10"	"	1		6 "	

12 8

17 C

15 C

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List of articles selected from the stock of the Madras Irrigation and Canal Company for the Public Works Stores and Chepauk Workshops.

Description of Articles	No	Irrigation and Canal Company's Price	Remarks.
Files 3 Square Bastard 10"	Nos 22 each	a 6 a	
Do ½ Round Smooth 10"	a 1	a 8 a	
Do Do Rough 10"	a 2 each	a 9 9	
Do Parallel Safe Edge 10"	a 1	a 7 7	
Do Flat Smooth 9"	a 6 each	a 8 8	
Do Do Bastard 9"	a 8 a	a 8 2	
Do Safe Edge Bastard 9"	a 12 a	a 4 11	
Do Do Smooth 9"	a 6 a	a 6 a	
Do ½ Round Smooth 9"	a 12 a	a 6 3	
Do Do 2nd Cut 9"	a 6 a	a 5 a	
Do Do Bastard 9"	a 11 a	a 8 10	
Do Square Wedge Safe Smooth 9"	a 6 a	a 5 a	
Do Do Do 2nd Cut 9"	a 6 a	a 4 8	
Do ½ Round Smooth 8"	a 12 a	a 4 a	
Do Do Bastard 8"	a 16 a	a 9 a	
Do Do Cabinet Bastard 8"	a 17 a	a 4 5	
Do Do Rough 8"	a 1 a	a 4 a	
Do Do Do 2"	a 24 a	a 1 9	
Do Do Do Smooth Cut 2"	a 24 a	a 2 2	
Do Do Do 2½"	a 50 a	a 1 6	
Do Do Do 4"	a 18 a	a 3 7	
Horse Bell	Nos 63 each	a 16 6	
Iron Crimans Solder with Copper Bit to Straight	1	1 2 10	
Do Do Do Do Bent	1	3 7 8	
Lead White Dry	lbs 196 @ 1	a 2 7	
Machine Planing	Nos 1	768 4 3	
Do Wall Drilling	a 2 each	58 6 14 a	
Measures Pewter copper brass 10 z to 1 lbs (Set of 6)	Set 1 Each	6 a a	
Paper Glass	Sheets 2600 @ 1 Rupee	a a 6	
Picks English with handle	Nos 162 each	2 9 9	
Pillars Drilling Large	a 2	18 15 3	
Do Do Small	a 2	18 13 8	
Quiches Leather Assorted	a 9	a 6 11	
Rivets Iron ½ x 9/16 Round head	lbs 541 @ 1		

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List of articles selected from the stock of the Madras Irrigation and Canal Company for the Public Works Stores and Chepauk Workshops.

Description of Articles	No.	Irrigation and Canal Company's Price	Remarks.
Press Lithographic	No. 1	137 8 4	
Stones Do 20" x 13"	" 3/4 each	4 7 9	
Scales Canister Scoop with Steelyard	" 3 "		
Saws Cross Cut with handles 6'	" 5 "	5 6 11	
Do Bevil Metal 14"	" 10 "	2 7 11	
Do Metal Blades 14"	" 20 "	" 6 11	
Screws Brass 1/2"	Gross 6 Dozen	" " 10	
Do Do 3/4"	" 6 "	" 1 4	
Do Do 1"	" 4 "	" 2 4	
Solder Soft Grain	lbs 3 3/8 lbs	" 8 6	
Do Spelter Coarse	" 56 "	" 9 11	
Do Do Iron and Copper	" 18 3/4 "	" 9 10	
Sparrow Bidding 12"	No. 6 each	4 " "	
Do Do 18"	" 3 "	6 13 10	
Do Do 24"	" 3 "	9 2 11	
Tin Sheets Single	Sheets 53 Plates	" 1 3	
Taps Liquor Brass	No. 3 each	1 14 "	
Tar Paint	lbs 212 all	15 5 11	
Do Stockholm	Gallons 26 Gals	" 14 7	11
Tubes Glass for Boilers	No 6 each	" 3 10	
Weights Iron 56 lbs	" 52 "	3 10 2	

Public Works Stores
Chepauk 7th August 1875

J. N. Grainger
Genl Sup. Irrigation Works &c &c

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No. 2258 W. D. Accts 17c

Pro: of the Madras Govt.

Read the following:-

From the Dy Engr. Presidency (R.E. No. 2230 D/12th Aug/73)

These papers will be communicated to the Chief Engineer for Irrigation, with reference to G.O. 1st July 1873 No 1704.

2. The Government approve of the purchase of the surplus stores of the Madras Irrigation & Canal Company, shown in the list furnished by the General Superintendent P.W. Workshops and Stores, at the prices named, subject to the percentage reduction, referred to in the letter from the Acting Manager dated

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*printed in P.W.G. 1st July No 1704.

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dated 15 May 1873 N 106; and, as soon as the amount to be paid shall have been determined and reported, funds for the purchase of these stores will be appropriated.

It is observed that the lithographic Press & stones, included in Mr Grainger's list as intended for the use of the workshops, have already been purchased by the Lithographic Department of the Govt office.

3. With regard to the list of scientific instruments reported on by the Government Mathematical instrument maker, the Chief Engineer for Irrigation will ascertain whether the Chief Engineer & manager of the Company is willing to accept the valuation of Mr Dodert. If so the Govt will be prepared to purchase all the instruments named in Mr Dodert's list, except the Theodolites; of which it is considered that 6 instruments out of the 13 shown in the list will suffice for the wants of the P.W.D.

Wm. 25/8/73

GWW.

To The Chf Engr for Irrn with the enclosures of the letter of the Dist Engr Presidency.
- Dist Engr Presidency ✓
- Chf Engr & manager in Office ✓
- Controller P.W. Accts with copy of G.O. N 1704 - 1st July 73. ✓

× Debd 12/12/73
" 13/12/73 "

No. 4489

Govt. of {1873} Madras.

PUBLIC WORKS.

To The Chief Engr. for Irrigation

alea

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Encl. 4

G.O. 12 Sept. 1873, No. 2258.

Nos. 182 / 183

Stores. Passing orders

letters submitting

Mr. Presidency,

the Genl. Register &

Mathematical

ument Maker,

arding list of stores

purchased from

I & Co.

No. 182-83.