(1) பக்கங்களின் எண்ணிக்கை 38

(2) புதுக்கித் திருப்பிய நாள் 8/10

(3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம்

தமிழ்நாடு ஆவணக் காப்பகம்.

(10)

தமிழ்நாடு அரசு

P. W. D. துறை

அரசாணை எண். மு. கோப்புத் தாள் எண்.	915	அச்சகம் பலவகை

நாள் : 2-4-1891 19 .

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

19-Feb-15

ஆணை. கா-1—18,006—15-6-87.

915
1

Enclosure to Director General of Railways' Circular No. 2 of 1891.

RATE LIST

CLASS F.

STATION MATERIALS AND FENCING

FOR 1889.

915/2

Enclosure to Director General of Railways' Circular No. 2 of 1891

RATE LIST

CLASS F.

STATION MATERIALS AND FENCING

FOR 1889.

Enclosure to Director General of Railways' Circular No. 2, dated 9th February 1891.

Statement showing the average rate per ton for entire sea-freight on F Class Stores imported from England at the several ports during 1889-90.

Class of stores.	Port of Bombay.	Port of Calcutta.	Port of Kurrachee.	Port of Rangoon.	Remarks.
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	
Class F.—Station Materials and Fencing	20 0	24 3	23 6	30 3	

SIMLA,
The 9th February 1891.

R. A. SARGEAUNT, Lieut.-Colonel, R.E.,
Officiating Director General of Railways.

RATE LIST.

CLASS OF STORES F.—STATION MATERIALS AND FENCING.

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3082	4-12-89	Apparatus	For washing out Locomotives, to include supply of cast iron pan, and wrought iron cover, with necessary fittings complete.	12	0	0	Set.	
			Tracings for ,, ...	0	10	6	,,	
3133	12-12-89	Clocks.	Station, in teak cases 4 feet long, I. S. R. pattern, dial 14 inches diameter ...	6	15	2	Each.	
2439	15-6-89		Timepieces, best movement, steel chain to fusee, with pendulum, suitable for Railway stations, platforms, and telegraph offices, in teak short drop cases, with 12″ dials, covered with patent plate glass.	3	15	0	Each	The dials to be graduated to 24 hours in 2 circles.
			Additional charge on account of increased cost of new dials and the necessity for additional machinery.	2	0	0		
2439A.	,,		Total cost ...	5	15	0		
2297	21-5-89	Cocks.	Iron, main, screwed, for 1¼″ piping with brass plugs	0	12	6	Each.	
,,	,,		Screw, down, ½″ brass, screwed, for iron pipe	0	2	2	,,	
,,	,,		Spring, push, ½″ brass, screwed, for iron pipe	0	3	6	,,	
,,	,,		Stop brass, screwed, for W. I. pipes ¾″ diameter, known as gland stop cock...	0	2	10	,,	
2114	12-3-89		Stop, cast iron, for 4″ piping, with brass plugs	4	6	0	,,	A suitable spanner is provided with each cock.
1841	19-1-89	Cranes water or water columns.	Pillar, 8″ (5′ 6″ gauge) with pipes, &c., complete	45	10	0	Each.	
2194	18-4-89		Pillar, 8″ with all piping, &c., complete	40	6	6	,,	Fitted with valves to resist frost.

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	Remarks.
2252	13-5-89	Cranes water or water columns—*contd.*	Pillar, 8″ diameter (5′ 6″ gauge), 7′ 6″ centre of pillar to centre of hose, complete.	46	19	6	Each.	Fitted with valve and arrangements for emptying column during frost.
3114	11-12-89		Pillar, 6″ complete, with pipes	36	10	0	,,	
2292	18-5-89	Engines, fire.	Hand power, complete with suction and delivery hose	119	15	0	Each.	
			Each engine supplied with 2 gun metal Nozzles ½ inch	...	...	...	...	
			2 Ditto ditto ditto ⅝ inch	...	...	...	...	
			1 Spreader, gun metal	...	...	...	...	
			1 Copper, branch pipe, with gun metal mounting 36″	...	...	...	...	
			1 Ditto ditto ditto 15″	...	...	...	...	
			1 Strainer, flat	...	...	...	...	
			2 pair wrenches for suction and delivery hose, shifting screw driver ...	...	...	...	...	
			300 feet hose, canvas delivery, 2½″ internal diameter	...	...	...	...	
			26 feet of hose, leather, suction, in 4 lengths of 6′ 6″	...	...	...	...	

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
2533	2-7-89	Fencing; materials for.	Bases, cast iron	4	2	6	Ton.	Each weighing 20lbs. C. qr. lbs. 100 bases = 17—3—12
1858	24-1-89		Do. do.	3	12	6	,,	
2895	26-10-89		Do. do.	4	2	6	,,	
2663	16-5-89		Do. do.	3	7	6	,,	
1842	19-1-89		Bolts, eye, straining, galvanized, with nuts and washers	17	15	0	,,	
2279	17-5-89		Do. do. do.	19	5	0	,,	Weighing 3·133 lbs. each
2908	29-10-89		Do. do. do.	20	15	0	,,	
1855	24-1-89		Double stay bars, for Barb Fencing	0	5	6	Each.	
2990	12-11-89		Do. do. do.	0	6	7	,,	
			Spare parts, consisting of flat wrought iron bars 1½×½″ × 6′ 5½″ long, bolts wrought iron ½″ with nuts, distance pieces 2½″ long and foot plates cast iron.					Estimated weight 41 lbs.

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Fees on Board. Amount. £	s.	d.	Unit.	Remarks.
2127	16-3-89	Fencing; materials for—*contd.*	Droppers, steel 3′ 3″ for No. 6 S. W. Gauge	13	12	6	°/₀₀	Weighing 1·56 lbs. each.
1858	24-1-89		Posts, W. iron, Intermediate	6	12	6	Ton.	Weighing 12·2 lbs. each.
2134	18-3-89		Ditto ditto	7	10	0	,,	
2264	16-5-89		Ditto ditto	7	5	0	,,	
2586	11-7-89		Ditto ditto	7	15	0	,,	12·2 lbs. each.
2894	26-10-89		Ditto ditto	8	5	0	,,	
1858	24-1-89		Posts, W. Iron stiffening	7	12	6	,,	Weighing 35·5 lbs. each.
2264	26-5-89		Ditto ditto	9	0	0	,,	
2586	11-7-89		Ditto ditto	9	0	0	,,	35·5 lbs. each post.
2894	26-10-89		Ditto ditto	9	10	0	,,	
1858	24-1-89		Pillars, cast iron, straining	4	2	6	,,	Weighing 2 cwt. 1 qr. 7 lbs. each.
2263	16-5-89		Ditto ditto	3	17	6	,,	
2895	26-10-89		Ditto ditto	4	12	6	,,	
2018	21-2-89		Pincer and Splicer (1 Pair)					
3080	3-12-89		Winding strainers (1 No.)	1	8	0	Pair.	
,,	,,		Lever Stretchers. (1 No.)					
2990	12-11-89		Slotted standards, for Barb Fencing	1	8	4	Doz.	

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Fees on Board. Amount. £	s.	d.	Unit.	Remarks.
1855	24-1-89	Fencing; materials for—*contd.*	Slotted standards for barb fencing, comprising standards C. I., crosses W. I. wedges 2¾″ × 1¼″	1	2	6	Doz.	
,,	,,		Screw Keys and spanners (combined) W. I.	0	2	3	Each.	
2990	12-11-89		Ditto ditto ditto	0	4	0	,,	
2586	11-7-89		Wedges, wrought iron	14	10	0	Ton.	
1858	24-1-89		Ditto ditto	13	10	0	,,	Weighing 5·8 oz each.
2134	18-3-89		Ditto ditto	14	0	0	,,	
2264	16-5-89		Ditto ditto	14	10	0	,,	
2894	26-10-89		Ditto ditto	15	10	0	,,	
2990	12-11-89		Winding Pillars, for barb fencing	1	6	5	,,	
1855	24-1-89		Winding Pillars, consisting of:	0	18	0	Each.	Estimated weight 131·7 lbs.
			Bolts W. I. ½″ with nuts					
			Channel iron sides 3″ × ½″					
			Cast iron stays 3½″ long					
			Ditto heads					
			Ditto straining rollers					
			Galvanised W. I. pins for ditto					
			Cast iron foot plates and crosses					

915/6

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number	Date	Articles	Details	Rate—Free on Board. Amount £	s.	d.	Unit	Remarks
1852	24-1-89	Fencing; materials for—*contd.*	Wire, strand, galvanized, in 450 yard coils	13	10	0	Ton.	
2129	16-3-89		Ditto ditto ditto 7 strands No. 14 S. W. G. ...	16	10	0	"	cwt. qr. lbs. 1 Coil = 1 1 24.
2301	23-5-89		Ditto ditto ditto	12	17	6	"	
2616	16-7-89		Ditto ditto ditto	13	5	0	"	
2924	30-10-89		Ditto ditto ditto	14	0	0	"	
1860	24-1-89		Wire, 4 barbed, in reels of 533 yards ... ... Made of two strands of No. 12 S. W. G. galvanized steel wire, with a cluster of four barbed points fixed round one wire at every six inches.	14	17	4	"	lbs. 1 Reel = 112.
2080	3-12-89		Wire, 4 barbed, in reels of 533 yards	16	11	6	"	
2288	18-5-89	Gates.	Field, wrought iron, 10 feet wide and 4′ 6″ high; with hinges suitable for fastening to posts of old iron, or rails with a suitable fastening ...	2	3	6	Each.	
3117	11-12-89	Hydrants.	Cast iron, each with hose and nozzle complete	8	10	9	Each.	Tracings and Photos, 10 shillings.
3119	"							
2291	18-5-89		Stand up, 3″ for engine shed, complete, with hose and pipe to connect on to 6″ main.	13	4	0	"	
2195	23-4-89		Stand pipe, twin, 2½″ bore, two hose connections in opposite directions ...	8	8	0	"	Ditto ditto.

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number	Date	Articles	Details	Rate—Free on Board. Amount £	s.	d.	Unit	Remarks
2158	22-3-89	Pipes, iron, cast.	Faucit and Spigot, 9 feet long, 6″ bore, $\frac{7}{16}$″ thick	4	6	6	Ton.	Weight of 1 pipe = 280 lbs.
2344	30-5-89		Ditto ditto ditto	0	11	5	Each.	
2158	22-3-89		Faucit flanged, 9 feet long, 6″ bore, $\frac{7}{16}$″ thick, one end faucit and the other flanged.	1	2	4	"	Ditto 2¼ cwts.
2324	23-5-89		Flange and socket, 9 feet long, 6″ diameter, flange at one end and socket bored at the other.	6	15	0	Ton.	Ditto 297 lbs.
				0	17	11	Each.	
2158	22-3-89		Flange and spigot, 9 feet long, 6 inches bore, $\frac{7}{16}$″ thick	5	5	0	Ton.	Ditto 266 lbs.
2324	23-5-89		Ditto ditto ditto	6	15	0	"	Ditto 269 lbs.
				0	16 or	2	Each.	
3109	7-12-89		Flanged both ends ditto ditto	8	5	0	Ton.	Ditto 276 lbs.
"	"		Ditto ditto 3″ diameter	10	7	6	"	Ditto 124 lbs.
2188	15-4-90		Spigot and socket, turned and bored, 9 feet long, 6″ bore	4	5	0	"	Ditto 279 lbs.
2324	23-5-89		Ditto ditto ditto	4	9	6	"	Ditto 281 lbs.
2412	13-6-89		Ditto ditto ditto 4″ bore	4	11	6	"	

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	Remarks.
2158	22-3-89	Pipes, cast; connections for—	Bends, right angle, flange, and spigot, 6″ bore, $\frac{1}{16}$″ thick	8	10	0	Ton.	1 bend = 84 lbs.
2324	23-5-89		„ quarter, for flange, spigot, and socket, turned and bored	8	10	0	„	„ = 140 lbs.
				or 10	7		Each.	
2684	21-8-89		„ 90°, turned and bored, 4″ diameter	0	6	0	Piece.	„ = 67 lbs.
„	„		„ 120° ditto ditto	0	5	6	„	„ = 59 lbs.
3109	7-12-89		„ flanged at both ends, for 6″ pipes	14	12	6	Ton.	„ = 105 lbs.
„	„		„ ditto ditto 3″ „					„ = 42 lbs.
2158	22-3-89		Bolts and nuts, wrought iron, $\frac{3}{8}$″ diameter, with hexagonal heads and nuts, for flanges.	0	0	3	Each.	
2324	23-5-89		Tee pieces, for flanges, spigot, and socket, turned and bored	8	10	0	Ton.	„ = 140 lbs.
				or 10	7		Each.	
3109	7-12-89		Ditto flanged at both ends 6″	14	12	6	Ton.	„ = 146 lbs.
3109	„		Ditto ditto 3″					„ = 67 lbs.
2684	21-8-89		Ditto ditto	0	9	3	Each.	1 „ = 100 lbs.

CLASS OF STORES F.—STATION MATEIRALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	Remarks.
2093	5-3-89	Pipes, iron, wrought.	Gas, butt welded, in lengths of 2-6-8-10-12-13 and 14 feet, 2″ internal diameter, No. 8 S. W. G., thick.	0	0	5½	Foot.	
2261	16-5-89		Lapwelded, in lengths of 2-4-6-8-10 and 12 feet, 1½″ internal diameter, No. 7 S. W. G., thick.	0	0	4¾	„	
2261	16-5-89		Lapwelded, in lengths of 2-4-6-8-10 and 12 feet, 1½″ internal diameter, No. 9 S. W. G., thick.	0	0	1¾	„	
2059	5-3-89		Lapwelded, in lengths of 12 feet, with screwed ends and collars, 5″ internal diameter No. 5 I. W. G.	0	1	9½	„	
2059	5-3-89		Lapwelded, in lengths of 12 feet, with screwed ends and collars, 2″ internal diameter No. 7 I. W. G., easy.	0	0	5½	„	
2187	10-4-89		Lapwelded in lengths of 12 feet, with screwed, ends and collars, 1½″ internal diameter No. 7 S. W. G., thick.	0	0	4½	„	
2187	10-4-89		Lapwelded, in lengths of 12 feet, with screwed ends and collars, 3″ internal diameter No. 4 S. W. G., thick.	0	1	2	„	
2892	26-10-89		Lapwelded, in lengths of 15 feet, with screwed ends and collars, 2½″ internal diameter No. 5 S. W. G., thick.	0	1	0	„	
2184	5-4-89		Lapwelded, in lengths of 15 feet, with screwed ends and collars, 1½″ internal diameter, with screwed ends and sockets.	0	0	5½	„	

8/15

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £.	s.	d.	Unit.	Remarks.
2423	14-6-89	Pipes, iron, wrought; connections for.	Bends, W. I. Gas, with sockets—					
			¼″	0	0	8	Each.	
			⅜″	0	0	11	,,	
			½″	0	0	11	,,	
			1″	0	1	3	,,	
			1¼″	0	1	9	,,	
			1½″	0	1	9	,,	
			1½″	0	2	3	,,	
			1¾″	0	3	3	,,	
			2″	0	4	3	,,	
			2½″	0	10	0	,,	
			3″	0	16	0	,,	
2093	5-3-89		Bends, 90° for 2″ gas piping, 2″ internal Diameter, No. 8 S. W. G. ...	0	17	0	,,	
,,	,,		,, 120° ,, ,, ,, ...	0	1	0½	,,	
2059	25-2-89		,, quarter, for 4″ pipe, with screwed ends and collars	0	0	9½	,,	

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £.	s.	d.	Unit.	Remarks.
2059	25-2-89	Pipes, iron, wrought; connections for—*contd.*	Bends, quater, 2″ pipe, with screwed ends and collars	0	1	0½	Each.	
2184	5-4-89		,, right angle, with screwed ends and sockets	0	0	10½	,,	
,,	,,		,, 135° ,, ,, ,, ...	0	0	10½	,,	
2261	16-5-89		,, right angle, for 1¼″ pipes with sockets	0	0	8	,,	
,,	,,		,, ,, ¾″ ,, ...	0	0	3	,,	
2059	22-5-89		Cocks, stop, cast iron, for 2″ piping	0	4	3	,,	
2184	5-4-89		Connecting tubes, or long screws, with back nuts 6″	0	0	10	,,	
,,	,,		,, ,, ,, ,, 9″	0	0	10	,,	
,,	,,		,, ,, ,, ,, 12″	0	1	3	,,	
,,	,,		,, ,, ,, ,, 15″	0	1	3	,,	
2261	16-5-89		Diminishing sockets, 1¼″ to ¾″ internal diameter	0	0	2¾	,,	
2423	14-6-89		Elbows, for pipes W. I. gas ¼″	0	0	8	,,	
,,	,,		,, ,, ⅜″ and ½″	0	0	10	,,	
,,	,,		,, ,, 1″	0	1	2	,,	
,,	,,		,, ,, 1¼″ and 1½″	0	1	9	,,	
,,	,,		,, ,, 1½″	0	2	3	,,	
,,	,,		,, ,, 1¾″ and 2½″	0	3	0	,,	

715/9

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
2423	14-6-89	Pipes, iron, wrought; connections for—*contd.*	Elbows, for pipes W. I. gas 2″	0	3	6	Each.	
,,	,,		,, ,, 2½″	0	8	6	,,	
,,	,,		,, ,, 3″	0	14	0	,,	
2261	16-5-89		Do. for 1½″ right angle bends, with sockets	0	0	6½	,,	
,,	,,		Do. ¾″ Do. Do.	0	0	2¼	,,	
2059	25-2-89		Flanged pieces, for 4″ piping, one end flanged the other screwed, one foot long, with collars.	0	6	2	,,	
2093	5-3-89		Sockets, spare	0	0	2½	,,	
,,	,,		T pieces, for W. I. gas pipes	0	0	10½	,,	
			,, ,, ½″	0	0	9	,,	
			,, ,, ¾″ and ⅞″	0	1	0	,,	
			,, ,, 1″	0	1	3	,,	
			,, ,, 1¼″ and 1½″	0	1	9	,,	
			,, ,, 1½″	0	2	6	,,	
			,, ,, 1¾″ and 1⅞″	0	3	0	,,	
			,, ,, 2″	0	3	9	,,	
			,, ,, 2½″	0	9	6	,,	
			,, ,, 3″	0	16	0	,,	

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
2261	16-5-89	Pipes, iron, wrought; connections for—*contd.*	T pieces, for 1½″ pipes	0	0	7	Each.	
			,, ¾″ ,, ...	0	0	3	,,	
2184	5-4-89		T pieces, for 1¼″ pipes	0	0	10	,,	
2059	25-2-89		,, ,, 2″ ,, ...	0	0	10	,,	
,,	,,		,, ,, 4″ ,, ...	0	7	1	,,	
2760	18-9-89	Presses, dating.	To cut date, with type in box, complete	2	0	0	Each.	
2641 and 2844	31-7-89 and 15-10-89		To ink and indent at one operation, complete, with box of type and one pint of Ink.	2	5	0	,,	
3121	11-12-89		Indenting, with type and box, complete	2	0	0	,,	
2004 and 2475	18-2-89 and 22-6-89		To print date, with type complete	2	0	3	,,	
3081	3-12-89		Ditto	1	12	3	,,	Packing and delivery £2-6-6 for 20.
,,	,,		Box of type for ditto	0	16	6	,,	
2475	22-6-89		Spare type in boxes for ditto	0	8	8	Set.	

915/10

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	Remarks.
3125	11-12-89	Pumps.	Hand Power, double cylinder	27	8	0	Each.	Tracings and Photos £ 1-1 Lot.
2262	16-5-89	Pumps, steam.	Engine, 6 H. P. with boiler, with piping, &c., &c., complete, and 2 right angle bends, extra.	280	0	0	Each.	
			The general dimensions of the engines, boilers, and pumps, are as follows :—					
			Diameter of Cyliner, 9 inches	...	...	...	...	
			Length of stroke 10 inches	...	...	...	...	
			Diameter of boiler, 3 feet 2 inches	...	...	...	...	
			Height of boiler, 7 feet	...	...	...	...	
			Number of conical water tubes in ditto, two	...	...	...	...	
			Diameter of pump barrel, 6 inches	...	...	...	..	
			Stroke of pumps (double acting) 12" changeable to 8"	...	...	...	...	
			Number of pumps (double acting) two	...		...	...	
			Each pump is to have 27 feet of section and 99 feet of delivery pipes, in 9 feet lengths.	...	...	...	...	
2236	16-5-89		Engine, vertical, 6. H. P. complete, general dimensions same as contract No. 2262	278	0	0	Each.	

14

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
3038	26-11-89	Pumps, steam—*contd.*	6 H. P. Engines, and Boilers, with suitable pumps for supplying water, for use of Locomotives, from wells 100' deep.	359	15	0	Each.	
			General dimensions of Engines, Boilers and Pumps.					
			Diameter of steam cylinder, 9 inches					
			Length of stroke, 10 inches					
			Diameter of boiler, 3 feet 2 inches					
			Height of boiler, 7 feet					
			Number of conical water tubes boiler, 2					
			Diameter of pump barrel, 6 inches					
			Stroke of pumps (double acting), 12 inches changeable to 8 inches ...					
			Number of pumps (double acting), two					

15

915/11

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
1984	15-2-89	Pumps, steam—*contd.*	One Worthington compound pressure pumping Engine, having two high pressure steam cylinders, each 12 inches in diameter, two low pressure cylinders, each 17 inches in diameter, and all of 15 inches stroke (size 12" and 17" × 5½" × 15"). High lift, with locomotive type boiler, to deliver 10,000 gallons per hour through single 4" pipe head 400 feet (or to a height of 400 feet), length of piping 16,450 feet, boiler to burn coal.	1124	17	6	Each.	
			Details of prices.					
			Pumping engine	550	0	0		
			Extra for lagging pump	40	0	0		
			High class locomotive multitubular boiler	395	0	0		
			Extra for lagging boiler	15	10	0		
			Worthington boiler feed Pump (3" × 2" × 3" with connections) ...	30	15	0		
			Steam connections between Boiler and Worthington compound Pressure Pump, also 18 feet of Exhaust Piping.	13	10	0		
			End feed connections and 2½" valve	2	12	6		
			Feed water heater	67	10	0		
			Extra for packing boiler if lagged	10	0	0		
2284	18-5-89	Pumps, steam, spare parts of:	Injectors, gun metal, Gresham's patent, for pumping engine, 5" *M—M* ...	5	4	6	Each.	

16

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
2989	12-11-89	Roofing, iron, complete.	Galvanized, wrought iron work, for roofing of Engine Shed, 111 feet long × 40 feet wide; and spare part of galvanized iron roofing together with all rivets, burrs, clips, &c., *viz.*	486	12	6	Shed.	Estimated weight of roof ... T. c. qr. lbs. 11 2 2 27 Spare parts 13 18 3 9 25 1 1 27
"	"		Galvanized, wrought iron, corrugated sheets 6' 4½" × 2' 6" (centres) 5" pitch, 1½" deep over all, 45·9 lbs. each.	15	5	0	Ton.	Total cost of Galvanized and Ungalvanized wrought ironwork for 1 roof complete £ 680-19-7.
"	"		Galvanized, wrought iron, corrugated sheets 6' 7½" × 2' 6" centres, 5" pitch, 1½" deep over all, 47·7 lbs. each.	16	0	0	"	
2989	...		Galvanized, wrought iron, ridge plates	22	0	0	Ton.	
			Do. do. capping	32	0	0	"	
			Do. do. Wind Ties	13	10	0	"	
			Do. do. Clips and sheets	0	0	2½	lb.	
			Do. do. Gutters	32	0	0	Ton.	
			Do. do. Bolts and nuts	42	0	0	"	
			Do. do. Rivtes	0	0	3	lb.	
			Do. do Washers	0	0	3	"	
			Do. do. Screws, cone headed	0	0	4	"	
			Do. do. Zinc flashing	0	0	3	"	
2897	28-10-89		Ungalvanized, wrought iron work, for roof of Engine Shed 111 feet long × 40 feet wide, including all bolts, nuts, washers, &c., complete, *viz.*	194	7	3	Roof.	Estimated weight of roof including service bolts and washers ... T. c. q. lbs. 14 13 0 22

17

915/12

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
2897	28-10-89	Roofing, iron, complete—*concld.*	For all wrought iron, except bolts, nuts, and washers	13	0	0	Ton.	
"	"		Do. do. in bolts, nuts, and washers	22	0	0	"	
3144	19-12-89	Roofing, iron, spare parts of.	Angle iron purlins	12	0	0	Ton.	
"	"		Bearing plates	14	10	0	"	
"	"		Bolts and nuts, &c.	31	0	0	"	
"	"		Forged wind ties	26	0	0	"	
"	"		Flat tension bars	14	10	0	"	
"	"		Gusset plates	14	10	0	"	
2144	21-3-89		Iron, corrugated, galvanized, length 7′ 0″, to cover a width of 2′ 6″ ...	16	2	6	"	
"	"		" plain, galvanized, 6′ × 2′ 6″	13	2	6	"	
"	"		" ridging " No. 18 S. W. G. after being galvanized, in lengths of 6 feet.	0	4	3	Length.	

18

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
2144	21-3-89	Roofing, iron, spare parts of.—*concld.*	Rivets and washers, ¼″ diameter, length ⅜″ under head	1	5	0	cwt.	
3144	19-12-89		Rivet heads, &c.	14	10	0	Ton.	
			Service bolts, &c.	21	0	0	"	
			Tee iron rafters, &c.	14	10	0	"	
1901	1-2-89	Safety Appliances.	Saxby and Farmers, ground disc signals	7	0	0	Each.	
			Ditto ditto	3	4	0	"	
			Point Indicators, fittings only	5	8	0	"	
1881	26-1-89	Signals, Semaphore, complete.	Signals, Distant, 26 feet high from ground level to centre of spectacle, complete	19	10	0	Set.	For detail see Appendix A.
2201	27-4-89		Signals, Distant, with wrought iron double lattice standards, complete ...	17	10	0	"	
1881	26-1-89		Do. Main, with fittings complete, 30 feet high from ground level to centre of spectacle	21	10	0	"	Ditto ditto B.
2201	27-4-89		Signals, Station, with wrought iron double lattice standards, complete ...	17	10	0	"	

19

915/13

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	Remarks.
2873	19-10-89	Signals, Semaphore, fittings for.	Signals, Distant, complete except posts	16	10	0	Set.	The Distant, and Station Signal arms to be weighted with a cast iron balance weight fitted to the end of the arm, and so arranged that the arm will go to danger if the rod breaks.
1838	17-1-89		Ditto ditto ditto ditto	14	1	4	,,	Each set to have a Windlass instead of a Lever 60' of 4" chain, 900 yards of signal wire with 36 pulley standards, 2 crossing wheels, and 40 feet of 2" gas pipes; also spare glasses of each color and one Lense-Lamp, to burn kerosine oil.
2035	23-2-89		Ditto ditto ditto ditto	15	3	0	,,	
3115	11-12-89		Ditto ditto ditto ditto with lamps and wire, &c. ...	16	8	8	,,	
,,	,,		Ditto ditto ditto ditto and lamps	15	6	11	,,	The Distant, and Station Signal arms, are each to be weighted with a cast iron balance weight, fitted to the end of the arm, and so arranged that the arm will go to danger if the rod breaks.
,,	,,		Ditto Station, except posts, with lamps, &c.	7	7	8	,,	
,,	,,		Ditto ditto ditto ditto and lamps	6	12	5	,,	
2035	23-2-89		Ditto ditto ditto ditto ditto	6	19	0	,,	
2873	19-10-89		Ditto ditto ditto ditto ditto	6	15	0	,,	*Vide* remark against Signals Distant, contract No. 2873 above.
1838	17-1-89		Ditto ditto ditto ditto ditto	9	5	9	,,	Each set to have 2 spare glasses of each color and one spare lense. The lamps to burn kerosine oil.

20

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
2205	27-4-89	Signals, Semaphore, spare parts of—*contd.*	Barrels or hoists, without chains	0	15	0	Each.	
,,	,,		Brackets, G. I. with bolts and nuts for stakes	0	0	5	,,	
2035	23-2-89		Ditto ditto	0	0	5½	,,	
2205	27-4-89		Lever balance, complete	0	18	6	,,	
,,	,,		Wheels, pulley, G. I. with bolts and nuts, for stakes	0	0	5	,,	
2035	23-2-89		Ditto ditto ditto	0	0	5½	,,	
1840	19-1-89	Tanks.	Water, steel, travelling, complete	46	11	6	Each.	For 8 sets tracings £5 drawing E 1980, weight of one tank, 3 tons, 9 cwt.
3112	7-12-89		Do. ditto W. I. for watering stations, and C. I. connecting pipes, with bolts and nuts	16	5	0	Tank.	£ s. d. Cost of piping, with bolts and nuts 0 5 0 each.
2185	8-4-89		Water W. I. 8' 1½" × 8' 1½" × 4' 1½" with piping	14	16	0	Each.	
3013	...	Traversers.	Carriage, and Wagon, M. G. 25 feet length, to take Bogie vehicles ...	180	0	0	Each.	

21

GLS 14

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*contd.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	Remarks.
1824	11-1-89	Turn tables.	Engine, 50 feet diameter, 5′ 6″ gauge, capable of turning an engine and tender weighing 80 tons	390	0	0	Each.	With steel rails 70 lbs. per yard.
1845	19-1-89		Ditto 36 feet diameter, metre gauge, capable of turning an engine and tender weighing 38 tons	207	10	0	,,	With steel rails weighing 50 lbs. per yard.
3120	11-12-89		Ditto ditto ditto ditto	235	0	0	,,	
2303	22-5-89	Valves.	Back, pressure, for No. 5 Pulsometer	3	5	0	Each.	
2114	12-3-89		Reflux 4″, to prevent water running back (or back pressure valves) ...	3	19	0	,,	
2297	21-5-89		Sluice, for 6″ pipes. The valves to be tested to 260 lbs. per square inch	2	6	0	,,	
3138	17-12-89	Weighbridges.	Metre gauge, 25 feet platform, fitted with 41¼ lb. steel rails, to weigh up to 25 tons, for Bogie stock	160	0	0	Each.	
2677	14-8-89		Wagon, complete, fitted with English and Indian weights—25 tons, 5′ 6″ gauge, platform 18 feet long, fitted with steel rails of Vignoles Section weighing 75 lbs. per yard	122	0	0	,,	
2289	18-5-89		Complete, to weigh up to 18 tons, 5′ 6″ gauge. The platforms are 16 feet long and 6 feet 6 inches wide, fitted with steel rails of Vignoles type weighing 62 lbs. per yard	112	0	0	,,	

CLASS OF STORES F.—STATION MATERIALS AND FENCING—*concld.*

Contracted for in 1889.

Contract number and date.		Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
1687	29-1-89.	Weighing Machines.	Locomotive, Erhardts patent with double dial for weighing from 16 to 35 cwt. and from 35 cwt. to 7¼ tons	141	0	0	Each.	For weighing M. G. Locomotives, and the Bogies of O class Engines. They are suitable for a rail of Vignole's section weighing 41¼ lbs. per yard.
2564	8-7-89		Platform, 250 kilogramme, with steel yards graduated for English and Burma weight, *viz.*, cwts. qrs. lbs. and viss	8	10	0	,,	1 Kilogramme = 2·20,462 lbs. and 1 Viss = 3·65 lbs. Tracings 10 shillings set.
			Platform, 500 kilogramme, with steel yards graduated for English and Burma weights, *viz.*, cwts. qrs. lbs. and viss	10	10	0	,,	Photos. 1 shilling each.
2290	18-5-89		Platform, (for goods) with steel yards graduated for both Indian and English weights, to weigh up to 1 ton and 28 maunds	11	10	0	,,	
,,	,,		Platform, (for luggage) with steel yards graduated for both Indian and English weights, to weigh up to 10 cwts. and 14 maunds	10	0	0	,,	
2286	18-5-89		Platform, graduated for English weights only, to weigh ½ ton	9	10	0	,,	
,			Platform, graduated for English weights only, to weigh 1 ton	11	0	0	,,	The levers for the disengaging apparatus to be made of wrought iron.
3136	,,		Platform, 5 cwts. with steel yards graduated for English and Burma weights, not metric, *viz.*, cwt. qrs. lbs. and viss	8	8	0	,,	

C/5/15

915/16

Appendix A.

Statement showing detail of Signals, Distant, with fittings complete, as supplied under Contract No. 1881, datad 26th January 1889.

1	Lattice Iron Post, with two W. I. Bands for fixing on Base, and C. I. grate, fitted on top of Post to take finial.
1	C. I. Base in 2 pieces 5' 8½" long weighing 2¾ cwt. each.
1	C. I. Signal top in two pieces.
1	Cedar arm, with W. I. stiffening plate, and fish tail ends.
1	W. I. Spindle, turned, drilled and fitted for outside Arm.
1	C. I. Arm plate, fitted with W. I. washer.
1	W. I. Crank 4¼", drilled and fitted with ⅝" set screw.
1	Set of C. I. Front and Back specs, glazed, bored, drilled and fitted.
1	C. I. Bush for Spindle, bored and fitted with 4 hook bolts.
1	C. I. Lamp Bracket, each fitted with 4 hook bolts.
1	Single Lever Plate.
1	W. I. Lever, fitted with Shackle pin and [illegible] turned pin.
1	C. I. Rod Guide.
1	26 feet W. I. Ladder.
1	W. I. Ladder Bracket, with 2⅝" Hooks and Bolts.
2	Ladder Stays.
1	23 feet ⅝" Down Rods, fitted with 2¾" Joints and turned Pins and 1¾" adjusting screw.
1	C. I. 8" Single Swivel Pulley, fitted with ⅝" Pin and Split Pin.
1	C. I. Balance Weight for Lever Plate, with 1⅝" set screw.
4 Feet	¼" Signal Chain.
1	Lamp, with 1-6" Adjustable Lens and 1-2" Adjustable Lens.
1	Lamp Interior.

915/17

Appendix B.

Statement showing detail of Signals, Main, with fittings complete, as supplied under Contract No. 1881, dated 26th January 1889.

1	Lattice Iron Post, with 2 W. I. Bands for fixing on base, &c.
1	C. I. grate, fitted to top of post to take finial.
1	C. I. Base in 2 pieces 5' 8½" long weighing 2¾ cwt. each.
1	C. I. Signal top in 2 pieces.
1	Cedar Arm, with W. I. stiffening plate and plain ends.
1	W. I. Spindle, turned drilled and fitted for outside arm.
1	C. I. Arm plate, fitted with W. I. washer.
1	W. I. Crank 4¼", drilled and fitted with ⅝" set screw.
1	Set of C. I. Front and Back specs, glazed, bored, drilled and fitted.
1	C. I. Bush for spindle bored and fitted with 4 Hook Bolts.
1	C. I. lamp bracket, fitted each with 4 Hook Bolts.
1	Single Lever Plate.
1	W. I. Lever, fitted with Shackle pin and turned pin.
1	C. I. Rod Guide.
1	30 feet W. I. Ladder.
1	W. I. Ladder Bracket, with 2⅝" Hooks and Bolts.
2	Ladder Stays.
1	27 feet ¾" Down Rod. fitted with 2¾" Joints and turned Pins, and 1¾" adjusting screw.
1	C. I. 8" Single Swivel Pulley fitted with ⅝" Pin and Split Pin.
1	C. I. Balance Weight, for Lever Plate, with 1⅝" set screw.
4 Feet	¼" Signal Chain.
1	Lamp, with 1-6" Adjustable Lens and 1-2" Adjustable Lens.
1	Lamp Interior.

[*General Distribution.*]

915/18

Circular No. 2.

FROM

THE DIRECTOR GENERAL OF RAILWAYS,

TO

THE MANAGER, NORTH WESTERN RAILWAY.
THE MANAGER, OUDH AND ROHILKHAND RAILWAY.
THE SUPERINTENDENT OF WORKS, CHAMAN EXTENSION.
THE ENGINEER-IN-CHIEF, MOGHAL SARAI-HOWRAH RAILWAY SURVEY.
THE ENGINEER-IN-CHIEF, MOGHAL SARAI-DALTONGUNGE SECTION OF THE MOGHAL SARAI-HOWRAH RAILWAY SURVEY.
THE ENGINEER-IN-CHIEF, FRONTIER RAILWAY SURVEY.
THE ENGINEER-IN-CHIEF, KASHMIR RAILWAY SURVEY.
THE ENGINEER-IN-CHIEF, ZHOB VALLEY RAILWAY SURVEY.
THE ENGINEER-IN-CHIEF, JEYPORE-CHUMBAL RAILWAY SURVEY.
THE ENGINEER-IN-CHIEF, GOONA-BINA RAILWAY SURVEY.
THE ENGINEER-IN-CHIEF, UJAIN-BHOPAL RAILWAY SURVEY.
THE PORT STOREKEEPER, STATE RAILWAY DEPARTMENT, CALCUTTA.

Rate List—Class F.—"Station Materials and Fencing" for 1889.

Simla, the 9th February 1891.

SIR,

I have the honour to forward, for information and guidance, a printed statement showing the actual English rates, *free on board* in England, for class F stores, "Station Materials and Fencing," contracted for by the Stores Department of the India Office during 1889.

2. A table giving the average rate per ton, of sea-freight for Class F stores imported from England to the several ports in India for State Railways during 1889-90 is prefixed to the Rate List.

I have the honour to be,

SIR,

Your most obedient Servant,

R. A. SARGEAUNT, Lieut.-Colonel, R.E.,
Officiating Director General of Railways.

Documents accompanying.

1. Statement showing the average rate per ton for entire sea-freight on Class F. Stores imported from England at the several ports during 1889-90.

2. Rate List—Class F.—Station Materials and Fencing for 1889.

The Secretaries to the Governments of Madras, Bombay, Bengal, the North-Western Provinces and Oudh, and the Punjab, Public Works Department.
The Secretaries to the Chief Commissioners of the Central Provinces, Burma and Assam, Public Works Department.
The Secretaries to the Residents, Hyderabad and Mysore, Public Works Department.
The Secretaries to the Agents to the Governor General, Rajputana and Central India, and Baluchistan, Public Works Department.
The Superintendent of Port Blair and Chief Commissioner, Andaman and Nicobar Islands.
The Director General of Telegraphs.
The Director General of Military Works.
The Accountant General, Public Works Department.
The Comptroller General.
The Accountant General, Bengal.
The Consulting Engineer for Railway, Madras.
The Consulting Engineers to the Government of India for Railways, Calcutta, Lucknow and Central Division.
The Agent and General Manager, Assam Railways and Trading Company, Limited.

Copy forwarded to the Local Governments, Administrations and Officers noted in the margin for information.

Lieut.-Colonel, R.E.,
Officiating Director General of Railways.

To
The Secretary to the Government of Madras
Public Works Department.

915/19

FROM

THE DIRECTOR GENERAL
OF RAILWAYS,

To

Circular No. 2.

Dated Simla, 9th February 1891.

Received

RATE LIST, CLASS F.

Station Materials and Fencing for 1889.

G. C. Press, Simla.—No. 1197 P. W. D.—20-2-91—974.