7312

# Public Works (1896) Department.

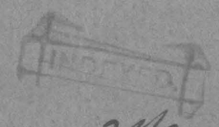
G.O., No. 2670 W

DATED 19th September 1896.

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[Despatch Abstract.]

Rate List Class C — Workshop Machinery and Heavy Tools for 1895: Circular from the Director General of Railways for warning —, Comdg Officers of the S. W. D. for information.



21/9

[P. W.—25. 1,000—5-9-96.]

# BACK PAPERS.

| G.O. | No. | Department. | Date. | G.O. | No. | Department. | Date. |
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# FURTHER PAPERS.

| G.O. | No. | Department. | Date. | G.O. | No. | Department. | Date. |
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| | | | | | | | |

P. W. CURRENT No. 7312



The Secretaries to the Government 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 at Hyderabad and in 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 Chief Engineer, Kashmir.
The Accountant General, Bengal.
The Consulting Engineers for Railways, Madras and Bombay.
The Consulting Engineers to the Government of India for railways, Calcutta, Lucknow, and Assam.

Copy forwarded to the Local Governments and Administrations and to the Officers noted in the margin for information, with the intimation that all Railway Administrations have been supplied with copies direct. Encl

Accs: 12.8.96

Colonel, R.E.,
Director General of Railways.

To THE Secretary to the Govt. of Madras Public Works Dept.

No 2670W, d/ 19th September 1896

Communicated to Mr. Thom the P. W. Dept. for information.

17/8/96

Ch. E. for I.
Supdg Engrs
Ch. Engr.

G. C. Press, Simla.—No. 493 P. W. D.—1-8-96.—48.

P.L.S. 326 12/8

[*For General Distribution.*]

Circular No. 10.

FROM

THE DIRECTOR GENERAL OF RAILWAYS,

To

THE MANAGER, NORTH WESTERN RAILWAY.
THE MANAGER, OUDH AND ROHILKHAND RAILWAY.
THE MANAGER, EASTERN BENGAL STATE RAILWAY.
THE MANAGER, EAST COAST STATE RAILWAY.
THE ENGINEER-IN-CHIEF, KOTRI-ROHRI RAILWAY.
THE ENGINEER-IN-CHIEF, MARI-ATTOCK RAILWAY AND GRADIENT IMPROVEMENT WORKS, NORTH WESTERN RAILWAY.
THE ENGINEER-IN-CHIEF, BEZWADA-MADRAS RAILWAY.
THE EXECUTIVE ENGINEER, KALKA-SIMLA RAILWAY SURVEY.
THE PORT STOREKEEPER, STATE RAILWAY DEPARTMENT, CALCUTTA.

**Rate List, Class C—Workshop Machinery and Heavy Tools for 1895.**

Simla, the 29th July 1896.

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 C State railway stores, "Workshop Machinery and Heavy Tools," contracted for by the Stores Department of the India Office during 1895.

2. A table giving the average rates of sea-freight for Class C stores imported from England to the several ports in India for State railways of both gauges during 1894 is prefixed to the Rate List, figures for 1895 not being available.

3. In order to arrive at the total cost of Class C stores landed in India, an insurance charge of* one-half per cent. on the *free on board* cost *plus* entire sea-freight, should be added in addition to other incidental charges and exchange, which latter should be calculated at the official rate for the year.

I have the honour to be,

SIR,

Your most obedient Servant,

T. GRACEY, Colonel, R.E.,
Director General of Railways.

*Documents accompanying.*

1. Statement showing the average rates per ton for entire sea-freight on Class C stores imported from England to the several ports during 1894.
2. Rate List, Class C—Workshop Machinery and Heavy Tools for 1895.

* For State Railway Stores and Irrigation Works only classed as Imperial. Stores for Provincial and Local funds, and for railways constructed by Native States are charged one-per cent. as heretofore.

Enclosure to Director General of Railways' Circular No. 10 of 1896.

# RATE LIST.

## CLASS C.

## WORKSHOP MACHINERY AND HEAVY TOOLS FOR 1895.

G. C. Press, Simla.—No. 493 P. W. D.—1-8-96.—48.

Enclosure to Director General of Railways' Circular No. 10 of 1896.

*Statement showing the average rates per ton for entire sea-freight on Class C stores sent out from England to the several Ports in India for State Railways of both gauges during 1894.*

| Class of Stores. | Kurrachee. | Bombay. | Coconada or Vizagapatam. | Calcutta. | Rangoon. | Remarks. |
|---|---|---|---|---|---|---|
| | *s.* *d.* | *s.* *d.* | *s.* *d.* | *s.* *d.* | *s.* *d.* | |
| C—Workshop Machinery and Heavy Tools ... | *... ... | 16 3 | *... ... | 23 6† | *... ... | *No material for class C stores was shipped to these ports during 1894.<br>†60 shillings for steam hammer. |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS.

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. | | Rate—Free on board. | | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Weight. | Unit. | Amount. | Unit. | | |
| | | | Tons cwt. qr. lbs. | | £ s. d. | | | |
| 48/368 — 22-7-95 | Bar, pinch ... | Or "easy car pusher" for moving engines in sheds—bent handle. | ... | ... | 1 5 0 | Each | Burma. | |
| 51/261 — 26-10-95 | Bear, punching | Hydraulic, with open mouth, to punch 1" holes in steel rails, with six extra punches and dies of the following sizes, *viz.* :—$\frac{5}{8}$", $\frac{11}{16}$", $\frac{3}{4}$", $\frac{13}{16}$", $\frac{7}{8}$" and $\frac{15}{16}$", to suit rails weighing 75 lbs. and 100 lbs. per yard. | ... | ... | 22 17 6 | Total | Frontier Railway Reserve. | |
| 44/205 — 20-3-95 | Blower ... | Roots patent improved rotary, No. 5 size ... | ... | ... | 143 15 9 | Each | East Coast. | |
| 53/99 — 10-10-95 | | Ditto ditto ... | ... | ... | 143 15 9 | „ | North Western. | *Similar in every respect to contract $\frac{13}{149}$ of 16th January 1895.* |
| 48/477 — 26-7-95 | | With duplex direct acting steam engine and escape valve combined, nominal H. P. of engine 8. Diameter of cylinder 10", stroke $10\frac{3}{4}$". The teeth of the gearing wheels are machine cut and carefully pitched to gear and fit accurately. | ... | ... | 165 0 0 | „ | Oudh and Rohilkhand. | |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. | | Rate—Free on board. | | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Weight. | Unit. | Amount. | Unit. | | |
| | | | Tons cwt. qr. lbs. | | £ s. d. | | | |
| 50/292 — 27-9-95 | Cranes, overhead, travelling. | Hand-power, three ton, with 210 feet H section girders, fitted with bridge rails, &c., &c. One man would hoist 3 tons at a speed of 1¼ feet per minute and 1 ton at 4 feet per minute. | 16 0 0 0 | Each | 230 0 0 | Each | Eastern Bengal State (5′ 6″ gauge) | *Includes 2 sets tracings and 6 Photographs.* |
| 53/171 — 17-12-95 | | Foundry, hand-power, to lift 5 tons. 41′ 6″ span centre to centre of rails, 13′ between walls, traveller rail level 18 feet from floor. All motions to be worked from the ground. Headway from rail level to roof 6′ 6″. | ... | ... | 235 0 0 | „ | North-Western. | |
| 48/248 — 16-7-95 | | Gearing to convert 30 ton overhead travellers from hand power, to rope power, driven. | ... | ... | 210 5 0 | „ | Eastern Bengal (5′ 6″ guage). | |
| 48/452 — 25-7-95 | Engines, stationary ... | *Spare parts of* :— | | | | | | |
| | | Tubes, water, iron, for boilers, Field's patent :— | | | | | | |
| | | 2′ 10″ × 2¼″ inside diar. 2½″ outside diar. ... | ... | ... | 0 1 7 | Each | Oudh and Rohilkhand. | |
| | | 3′ 3½″ × 2⅞″ „ „ 3¼″ „ „ ... | ... | ... | 0 3 7 | „ | | |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. | | Rate—Free on board. | | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Weight. | Unit. | Amount. | Unit. | | |
| | | | Tons cwt. qr. lbs. | | £. s. d. | | | |
| 48/174 — 11-7-95 | Gauges ... | Bourdon's, for 300 lbs. per square inch, diameter of dial 5 inches, without syphon or cocks. (Required for boiler testing pumps) | ... | Each | 1 0 0 | Each | Burma. | |
| 47/181 — 17-6-95 | Grindstones ... | Best Ayrshire, without trough, 60″ × 8″ ... | ... | ... | 3 7 6 | Each | Burma. | |
| 47/360 — 27-6-95 | | Best Ayrshire, without trough, 48″ × 8″ ... | ... | ... | 2 15 6 | „ | | |
| 47/139 — 14-6-95 | | Newcastle, Post, No. 3, without trough, 48″ × 8″... | ... | ... | 1 16 0 | „ | | |
| 48/202 — 13-7-95 | | Yorkshire, coarse grit, 66″ × 10″ × 2′ 2″ square hole | ... | ... | 6 0 0 | ... | North-Western. | |
| 44/238 — 22-3-95 | Grindstone dresser | No. 2 size, for stones up to 8″ wide, and troughs 17″ over flanges, with spanner, handle and two cutters complete. | ... | Each. | 4 10 3 | Each | Eastern Bengal. | |
| | | No. 4 size, for stones up to 15″ wide, and troughs 22½″ over flanges, with spanner, handle, and two cutters complete. | ... | ... | 7 2 6 | „ | | |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons cwt. qrs. lbs. | | £ s. d. | | | |
| 45/98 10-4-95 | Hammer, steam ... | 5 cwt. mounted on single standard, Double action, 9″ cylinder 21″ stroke, complete with top and bottom swages, fitted with combined self-acting and hand worked valve gear, steel anvil block separate from standard, arranged to rest on piles and concrete foundation. 100 feet 2″ steam pipe and 50 feet 3½″ exhaust pipe, holding down bolts, &c. | ... | ... | 138 0 0 | Each | East Coast. | |
| 46/56 4-5-95 | | Blocks, bottom, steel, for 5 cwt. steam-hammer... | ... | ... | 4 0 0 | „ | Eastern Bengal. | Average. |
| | | Blocks, top, steel, for 5 cwt. steam-hammer ... | ... | ... | 4 0 0 | „ | | |
| 45/60 6-4-95 | Hearths, annular ... | Suitable for bossing a wheel 5 feet diameter with 3 tuyeres, cisterns, air-valves and pipes, complete. | 2 5 0 0 | Each | 36 0 0 | Each | East Coast. | |
| | | Suitable for bossing a wheel 6′ 6″ diameter with 3 tuyeres, cisterns, air-valves and pipes, complete. | 3 0 0 0 | „ | 70 0 0 | „ | | |
| 45/31 4-4-95 | Lathes ... | Power, self-acting, gap, screw-cutting, height of centres 6″, and length of bed between centres 8 feet, complete. | ... | ... | 52 10 0 | Each | East Coast. | |
| 51/217 21-10-95 | | 12 inch centre, self-acting, screw cutting, and surfacing with a bed 20 feet long. | ... | ... | 118 0 0 | „ | Oudh and Rohilkhand. | *Similar in every respect to those supplied under contract ¹³/₁₅ of 1892.* |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 45/94 9-4-95 | | 6 inch centre, self-acting screw-cutting and surfacing, each with a bed 8 feet long. | ..... | ... | 145 10 0 | Each | Oudh and Rohilkhand. | |
| | | 5 inch centre, self-acting screw-cutting and surfacing, each with a bed 5 feet long. | ..... | ... | 119 0 0 | „ | | |
| 47/37 6-6-95 | | 6 inch centre, self-acting screw-cutting and surfacing to take 2′ 9″ between the centre. | 1 5 0 0 | ... | 138 0 0 | „ | East Coast. | |
| | Lathes—*contd.* ... | 8 inch centre, self-acting, screw-cutting and surfacing, to take 5 feet 9 inches between the centres. | 2 15 0 0 | ... | 178 0 0 | „ | | |
| 52/23 1-11-95 | | Sliding and screw cutting 4″ centre, 4 ft. bed, with 4″ gap driven by treadle only. To be of type known as the "Surdale" as illustrated on drawing No. C 1048 and complete in every respect as designed on page 10 of Messrs. Seleg Sonenthals Catalogue. | ..... | ... | 18 10 0 | „ | Frontier Railway Reserve. | |
| 52/7 1-11-95 | | 6′ 6″ wheel; suitable for wheels on axles up to 8′ 6″. | ..... | ... | 760 0 0 | „ | Oudh and Rohilkhand. | |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons cwt. qr. lbs. | | £ s. d. | | | |
| 44/204 20-3-95 | Lathes—*contd.* | "Turret" for brass finishing, &c., to take 5 feet between the centre, fitted with screw chasing swing over apparatus and die fitted to copying screw, worked off head stock spindle: a revolving turret slide rest to take six tools. Fitted with loose head to slide taper and 3 copying screws. Back chasing apparatus, two jaw chuck one pattern hot and die, one tap for recutting die, overhead driving gear, &c., &c. | ..... | ... | 185 0 0 | Each | East Coast. | |
| 44/206 20-3-95 | | Double stud, turning, 6 inch centre, on a cast iron planed bed 8 feet long with carriages and slide rests, two loose head stocks arranged for sliding taper. Self-acting feed motion each end independent of the other, set of change wheels, &c., &c. | ..... | ... | 158 0 0 | „ | | |
| | | *Spare parts of:—* | | | | | | |
| 43/40 5-2-95 | | Cans, steel sheet, water, for lathes, &c., capacity one gallon, with brass elbow pipe and brass tap complete. | ..... | ... | 0 3 0 | „ | Eastern Bengal. | |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 44/228 22-3-95 | Lubricators | Needle, No. 1, round, 2 oz. | ... | ... | 0 0 2¼ | Each | Eastern Bengal. | |
| | | No. 1 | ... | ... | | | | |
| | | „ 2 | ... | ... | | | | |
| | | „ 3 | ... | ... | 0 0 2¼ | „ | North Western. | |
| | | „ 4 | ... | ... | | | | |
| | | Glass, needle, No. 2, flat | ... | ... | | | | |
| 47/62 10-6-95 | | „ „ 4 „ | ... | ... | | | | |
| | | „ „ 3 round | ... | ... | 0 0 2¼ | „ | Eastern Bengal. | |
| | | „ „ 5 „ | ... | ... | | | | |
| | | Lieuvains patent. | | | | | | |
| 52/205 15-11-95 | Machines | Bolt, screwing, suitable for screwing bolts ½″, ⅝″, ¾″, ⅞″, 1″, 1⅛″, 1¼″, 1⅜″, and 1½″, to Whitworths' standard thread. | ... | ... | 25 15 0 | Each | Frontier Railway Reserve. | |
| 47/36 6-6-95 | | Boring, cylinder | 5 12 0 0 | ... | 225 0 0 | „ | Oudh and Rohilkhand. | |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons cwt. qrs. lbs. | | £ s. d. | | | |
| 47/37 — 6-6-95 | | Combined rolling, centring, and chasing, for fire-box stays. | 0 17 0 0 | Each | 154 0 0 | Each | Oudh & Rohilkhand. | |
| 43/63 — 7-3-95 | | Crank pin, trueing, self-acting, portable, adapted for trueing crank pins in place up to 9″ long and capable of being driven either by hand or power. | ... | ... | 80 0 0 | „ | Eastern Bengal. | |
| 44/196 — 19-3-95 | | Crank pin, trueing ... ... ... | 0 5 0 0 | ... | 80 0 0 | „ | East Coast. | |
| 45/94 — 9-4-95 | | Drilling ... ... ... ... | ... | ... | 579 10 0 | „ | East Coast. | |
| 51/233 — 24-10-95 | Machines—*contd* ... | Drilling, bench, double geared, with table vice and 6 drills rising as follows:—$\frac{1}{2}$″, $\frac{5}{8}$″ $\frac{3}{4}$″ 1″, $1\frac{1}{4}$″ and $1\frac{1}{2}$″. | ... | ... | 11 10 0 | „ | Eastern Bengal. | |
| 44/158 — 14-3-95 | | Drilling, bench, double geared ... ... | ... | — | 126 0 0 | „ | East Coast. | |
| 45/94 — 9-4-95 | | Drilling, slot, (single), arranged for cutting automatically slots or keybeds from $\frac{1}{4}$ to $1\frac{1}{2}$″ wide, 12″ long and 8″ deep to admit work on the table 19 inches under the drills. | ... | ... | 350 0 0 | „ | Oudh and Rohilkhand. | |
| 43/65 — 7-2-95 | | Genuine, stow, flexible shaft, No. 6 size ... | ... | ... | 26 10 0 | „ | Eastern Bengal. | |

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## CLASS OF STORES C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Subject. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons. Cwt. qr. lbs. | | £ s. d. | | | |
| 44/158 — 14-3-95 | | Grinding, emery, special for motion bars of Locomotives. | ... | ... | 260 0 0 | Each | East Coast. | |
| 48/368 — 22-7-95 | | Grinder, for hardened lathe centres with one spare emery disc. | ... | ... | 4 10 0 | „ | Burma. | |
| | | Grinding, emery of sorts— | | | | | | |
| | | *Spare discs for*:— | | | | | | |
| 47/262 — 22-6-95 | | 22″ diar. × 3″ thick with 10″ diar. centre hole (4) | ... | ... | 22 0 0 | Total | Eastern Bengal. | *Total price for 16 discs.* |
| | | 8″ diar. × $1\frac{1}{2}$″ thick with $1\frac{1}{2}$″ diar. centre hole (12) | ... | ... | | | | |
| | Machines—*contd.* ... | 12″ × $\frac{1}{4}$″ with $\frac{1}{4}$″ hole ... | ... | ... | 0 3 0 | „ | Oudh and Rohilkhand. | |
| | | 12″ × $\frac{3}{8}$″ „ ... | ... | ... | 0 4 6 | „ | | |
| | | 12″ × $\frac{1}{2}$″ „ ... round edge ... | ... | ... | 0 6 0 | „ | | |
| | | 12″ × $\frac{5}{8}$″ „ ... | ... | ... | 0 7 6 | „ | | |
| 48/508 — 31-7-95 | | 12″ × $\frac{3}{4}$″ „ ... | ... | ... | 0 9 0 | „ | | |
| | | $4\frac{1}{2}$″ × $1\frac{1}{2}$″ with $\frac{5}{8}$″ hole; hard ... | ... | ... | 0 2 6 | „ | | |
| | | 9″ × $2\frac{1}{2}$″ „ $2\frac{3}{4}$″ „ „ ... square edge. | ... | ... | 0 16 0 | „ | | |
| | | $2\frac{1}{4}$″ × $\frac{1}{2}$″ „ $\frac{5}{8}$″ „ medium hard | ... | ... | 0 1 0 | „ | | |

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## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railways. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | Grinding, emery, of sorts—*contd.* | Tons. Cwt. qr. lbs. | | £ s. d. | | | |
| | | *Spare discs for* :—contd. | | | | | | |
| | | $2\frac{1}{2}'' \times 1\frac{1}{2}''$ with $\frac{5}{8}''$ hole medium ... | ... | ... | 0 1 0 | Each | | |
| | | $4\frac{1}{2}'' \times 1\frac{1}{2}''$ „ $\frac{5}{8}''$ „ hard ... (square edge) | ... | ... | 0 2 6 | „ | | |
| 48/508 | 31-7-95 | $4'' \times 1\frac{1}{2}''$ „ $\frac{5}{8}''$ „ „ ... (square edge) | ... | ... | 0 2 0 | „ | | |
| | | $1\frac{1}{2}'' \times 1\frac{1}{2}''$ „ $\frac{5}{8}''$ „ ... | ... | ... | 0 0 9 | „ | | |
| | Machines—*contd.* ... | $1\frac{3}{4}'' \times 1\frac{1}{2}''$ „ ... | ... | ... | 0 0 9 | „ | Oudh and Rohilkhand. | |
| | | $2'' \times 1\frac{1}{2}''$ „ ... | ... | ... | 0 0 9 | „ | | |
| | | $2\frac{3}{4}'' \times 1\frac{1}{2}''$ „ ... (Medium hard square edge) | ... | ... | 0 1 0 | „ | | |
| | | $3'' \times 1\frac{1}{2}''$ „ ... | ... | ... | 0 1 0 | „ | | |
| | | $3\frac{1}{2}'' \times 1\frac{1}{2}''$ „ ... | ... | ... | 0 1 6 | „ | | |
| 47/246 | 22-6-95 | Discs emery 12″ diameter × $\frac{3}{8}''$ thick with hole in centre $\frac{3}{4}''$ diameter No. 24 Crown Brand for emery grinding machine. | ... | ... | 0 5 2 | „ | Burma. | |



## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Amount. | Unit. | Rate—Free on board. Amonnt. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons. Cwt. qr. lbs. | | £ s. d. | | | |
| 44/210 | 21-3-95 | Magnetic, for separating iron or steel filings from brass and copper, largest size containing 60 magnets and capable of cleaning 10 cwts. of metal borings per day of 8 hours. | ... | ... | 20 5 0 | Each | East Coast. | |
| 47/37 | 6-6-95 | Milling, universal ... ... ... | ... | ... | 313 10 0 | „ | Oudh and Rohilkhand. | |
| 46/194 | 13-5-95 | Portable hydraulic rivetter, with adjustable suspending gear, for boiler shop. Capable of closing rivets up to $1\frac{1}{4}''$ diameter with a working pressure of 1,600 lbs. per square inch and with a gap 12″ wide and 27″ long from the centre of the discs. The machine is complete in every respect. | ... | ... | * 128 0 0 | „ | Eastern Bengal. | *Includes £3 extra cost of 30 ft. length of flexible copper pipe with coupling. |
| 44/158 | 14-3-95 | Punching, shearing, and angle cutting, capable of punching 1″ holes through 1″ steel plate and shearing, 1″ steel plate 19″ deep from edge, cutting angle bars 6′ × 6″ × $\frac{3}{4}''$ thick to any required length. | ... | ... | 240 0 0 | „ | East Coast. | |
| 51/262 | 26-10-95 | Punching, shearing and up-setting worked by hand, to cut $\frac{3}{4}''$ square iron, 2″ × $\frac{1}{2}''$ flat iron, and to punch iron $\frac{3}{8}''$ thick, $\frac{3}{4}''$ holes in $\frac{5}{16}''$ iron, and upset iron up to 1″ thick dies complete with stand, ripping shear attachment dies, spare punches, &c. | 0 4 0 0 | Each | 12 17 6 | „ | Frontier Railway Reserve. | |

## CLASS OF STORES C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons. cwt. qr. lbs | | £ s. d. | | | |
| 48/461 25 7-95 | Machines—*contd.* ... | Portable rail sawing, with 3 saws for each, "Bryants." | ... | ... | 37 0 0 | Each | North Western. | |
| 46/42 3-5-95 | | Sand blast apparatus, for cleaning, casting, and for frosting glass, Mathewson's patent, Size B type, No. 4 A. | ... | ... | 26 1 6 | „ | Burma. | |
| 44/196 19-3-95 | | Shaping, 12" stroke, 8 feet bed, self-acting in all movements. | 5 10 0 0 | Each | 291 10 6 | „ | East Coast. | |
| 47/36 6-6-95 | | Shaping, 12" stroke ... ... ... | 3 10 0 0 | ... | 173 0 0 | „ | East Coast. | |
| 47/33 6-6-95 | | Ditto 16" „ ... ... ... | ... | ... | 209 0 0 | „ | Oudh & Rohilkhand. | |
| 51/231 24-10-95 | | Slotting, 8 inch stroke, complete with countershaft, belting, &c. | ... | ... | 140 0 0 | „ | Jorhat. | |
| 46/205 14-5-95 | | Universal turning, to take in work 32" diameter and 18" height, complete. | 2 8 0 0 | Each | 160 0 0 | „ | Burma. | |
| | | *Spare parts of*— | | | | | | |
| 43/48 7-2-95 | | Cams, cast iron, for Horsefall's patent bolt and nut making machine. | ... | ... | 2 5 0 | „ | Eastern Bengal. | |



## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | *Spare parts of*—concld. | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 52/12 1-11-95 | Machines—*concld* ... | Cams, chilled, C. I. for Horsefall's patent bolt and nut machine figure No. 1 to 4. | ... | ... | 3 5 6 | Set | North-Western. | Average. |
| 48/401 23-7-95 | | Circular, saw, 15½" diameter, for rail cutting machines. | ... | ... | 1 10 0 | Each | North-Western. | |
| 45/94 9-4-95 | Presses ... ... | Hydraulic wheel, and pumps, &c., complete ... | ... | ... | 621 0 0 | Each | East Coast. | |
| 46/360 24-5-95 | Pumps ... | Boiler testing, suitable for testing boilers by hydraulic pressure up to 200 lbs. | ... | ... | 12 3 0 | Each. | North Western. | |
| 49/139 10-8-95 | Pulsometer ... | No. 5, with fittings complete ... ... | 0 7 0 0 | Each | 93 15 5 | Each. | Kotri-Rohri. | |
| | | No. 6, with fittings complete ... ... | 0 8 0 0 | „ | 117 10 0 | „ | | |
| 10-8-95 | | *Spare parts*— For Pulsometer, No. 5 ... ... | ..... | ... | 4 14 0 | Set | | |
| | | „ „ No. 6 ... ... | ..... | ... | 5 7 0 | „ | | |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 49/376 30-8-95 | Pulsometer—*contd.* | Boiler for— | | | | | | |
| | | 12 H. P. vertical boiler capable of working at 120 lbs. pressure, to be provided with all fittings, steam gauges, &c., &c. | 4 10 0 0 | „ | 116 0 0 | Each | Kotri-Rohri. | |
| 48/23 1-7-95 | Saws ... ... | Circular, for cutting cold metal, diameter 3′ 0″, thickness at teeth No. 5 S. W. G., number of teeth 226. | ... | ... | 4 15 0 | Each | Eastern Bengal. | |
| | | Circular, for cutting wood, 12″ diameter, No. 14 S. W. G., $1\frac{1}{4}$″ hole, London tooth, $\frac{7}{8}$″ pitch. | ... | ... | 0 4 0 | „ | Oudh and Rohilkhand. | |
| | | Circular, for cutting wood, 36″ diameter, No. 10 S. W. G., 2″ hole, London tooth, $1\frac{3}{4}$″ pitch. | ... | ... | 1 7 0 | „ | | |
| | | Circular, for general joiner, 18″ diameter × $\frac{7}{64}$″ thick, pitch of teeth from point to point about 1.″ | ... | ... | 0 9 0 | „ | Eastern Bengal. | |
| | | Circular, for general joiner, $10\frac{1}{2}$″ diameter × $\frac{1}{16}$″ thick, pitch of teeth about $\frac{5}{16}$″ for grooving, to suit hoop iron tongues. | ... | ... | 0 4 0 | „ | | |



## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*concld.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 51/163 15-10-95 | Saw-sharpener ... | Machine for sharpening rail cutting saws, suitable for sharpening the saws of the machine for cutting 75 lbs. and 100 lbs. steel rails. | ... | ... | 4 7 6 | Each | Frontier Railway Reserve. | |
| | | Extra disc for above ... ... ... | ... | ... | 0 6 0 | „ | | |
| 47/246 22-6-95 | | Emery discs for above, crown brand No. 24:— | | | | | | |
| | | 12″ diameter × $\frac{1}{4}$″ thick × $\frac{3}{4}$″ hole ... | ... | ... | 0 3 1 | „ | North Western. | |
| | | 12″ „ × $\frac{5}{8}$″ „ × $\frac{3}{4}$″ „ ... | ... | ... | 0 4 7 | „ | | |
| | | 12″ „ × $\frac{1}{2}$″ „ × $\frac{3}{4}$″ „ ... | ... | ... | 0 6 1 | „ | | |
| 43/20 2-2-96 | | *Spare parts of—* | | | | | | |
| | | Wheels, emery, 12″ × $\frac{1}{4}$″ × 1″ hole in the centre | ... | ... | 0 2 6 | „ | Eastern Bengal. | |
| | | „ „ 12″ × $\frac{3}{8}$″ × 1″ „ „ „ | ... | ... | 0 3 7 | „ | | |

Enclosure to Director General of Railways' Circular No. 10 of 1896.

Go. 2670 W
19-9-96

# RATE LIST.

## CLASS C.

## WORKSHOP MACHINERY AND HEAVY TOOLS

FOR 1895.

G. C. Press, Simla.—No. 493 P. W. D.—14-8-96.—884.

Enclosure to Director General of Railways' Circular No. 10 of 1896.

*Statement showing the average rates per ton for entire sea-freight on Class C stores sent out from England to the several Ports in India for State Railways of both gauges during 1894.*

| Class of Stores. | Kurrachee. | Bombay. | Coconada or Vizagapatam. | Calcutta. | Rangoon. | Remarks. |
|---|---|---|---|---|---|---|
| | *s.* *d.* | *s.* *d.* | *s.* *d.* | *s.* *d.* | *s.* *d.* | |
| C—Workshop Machinery and Heavy Tools ... | *... ... | 16 3 | *... ... | 23 6† | *... ... | *No material for class C stores was shipped to these ports during 1894.<br>†60 shillings for steam hammer. |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS.

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. | | Rate—Free on board. | | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Weight. | Unit. | Amount. | Unit. | | |
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 48/368 — 22-7-95 | Bar, pinch ... | Or "easy car pusher" for moving engines in sheds—bent handle. | ... | ... | 1 5 0 | Each | Burma. | |
| 51/261 — 26-10-95 | Bear, punching | Hydraulic, with open mouth, to punch 1″ holes in steel rails, with six extra punches and dies of the following sizes, *viz.* :—$\frac{5}{8}$″, $\frac{11}{16}$″, $\frac{3}{4}$″, $\frac{13}{16}$″, $\frac{7}{8}$″ and $\frac{15}{16}$″, to suit rails weighing 75 lbs. and 100 lbs. per yard. | ... | ... | 22 17 6 | Total | Frontier Railway Reserve. | |
| 44/205 — 20-3-95 | Blower ... | Roots patent improved rotary, No. 5 size ... | ... | ... | 143 15 9 | Each | East Coast. | |
| 53/99 — 10-10-95 | | Ditto ditto ... | ... | ... | 143 15 9 | „ | North Western. | *Similar in every respect to contract* $\frac{43}{149}$ *of 16th January 1895.* |
| 48/477 — 26-7-95 | | With duplex direct acting steam engine and escape valve combined, nominal H. P. of engine 8. Diameter of cylinder 10″, stroke 10$\frac{3}{4}$″. The teeth of the gearing wheels are machine cut and carefully pitched to gear and fit accurately. | ... | ... | 165 0 0 | „ | Oudh and Rohilkhand. | |

CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. | | Rate—Free on board. | | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Weight. | Unit. | Amount. | Unit. | | |
| | | | Tons cwt. qr. lbs. | | £ s. d. | | | |
| 50/292 — 27-9-95 | Cranes, overhead, travelling. | Hand-power, three ton, with 210 feet H section girders, fitted with bridge rails, &c., &c. One man would hoist 3 tons at a speed of 1¼ feet per minute and 1 ton at 4 feet per minute. | 16 0 0 0 | Each | 230 0 0 | Each | Eastern Bengal State (5′ 6″ gauge) | *Includes 2 sets tracings and 6 Photographs.* |
| 53/171 — 17-12-95 | | Foundry, hand-power, to lift 5 tons. 41′ 6″ span centre to centre of rails, 13′ between walls, traveller rail level 18 feet from floor. All motions to be worked from the ground. Headway from rail level to roof 6′ 6″. | ... | ... | 235 0 0 | „ | North-Western. | |
| 48/248 — 16-7-95 | | Gearing to convert 30 ton overhead travellers from hand power, to rope power, driven. | ... | ... | 210 5 0 | „ | Eastern Bengal (5′ 6″ guage). | |
| 48/452 — 25-7-95 | Engines, stationary ... | *Spare parts of* :— | | | | | | |
| | | Tubes, water, iron, for boilers, Field's patent :— | | | | | | |
| | | 2′ 10″ × 2¼″ inside diar. 2½″ outside diar. ... | ... | ... | 0 1 7 | Each | Oudh and Rohilkhand. | |
| | | 3′ 3½″ × 2⅞″ „ „ 3¼″ „ „ ... | ... | ... | 0 3 7 | „ | | |

CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. | | Rate—Free on board. | | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Weight. | Unit. | Amount. | Unit. | | |
| | | | Tons. cwt. qr. lbs. | | £. s. d. | | | |
| 48/174 — 11-7-95 | Gauges ... | Bourdon's, for 300 lbs. per square inch, diameter of dial 5 inches, without syphon or cocks. (Required for boiler testing pumps). | ... | Each | 1 0 0 | Each | Burma. | |
| 47/181 — 17-6-95 | Grindstones ... | Best Ayrshire, without trough, 60″ × 8″ ... | ... | ... | 3 7 6 | Each | Burma. | |
| 47/360 — 27-6-95 | | Best Ayrshire, without trough, 48″ × 8″ ... | ... | ... | 2 15 6 | „ | | |
| 47/139 — 14-6-95 | | Newcastle, Post, No. 3, without trough, 48″ × 8″... | ... | ... | 1 16 0 | „ | | |
| 48/202 — 13-7-95 | | Yorkshire, coarse grit, 66″ × 10″ × 2′ 2″ square hole | ... | ... | 6 0 0 | ... | North-Western. | |
| 44/228 — 22-3-95 | Grindstone dresser | No. 2 size, for stones up to 8″ wide, and troughs 17″ over flanges, with spanner, handle and two cutters complete. | ... | Each. | 4 10 3 | Each | Eastern Bengal. | |
| | | No. 4 size, for stones up to 15″ wide, and troughs 22½″ over flanges, with spanner, handle, and two cutters complete. | ... | ... | 7 2 6 | „ | | |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons. cwt. qrs. lbs. | | £ s. d. | | | |
| 45/98 10-4-95 | **Hammer,** steam ... | 5 cwt. mounted on single standard, Double action, 9″ cylinder 21″ stroke, complete with top and bottom swages, fitted with combined self-acting and hand worked valve gear, steel anvil block separate from standard, arranged to rest on piles and concrete foundation. 100 feet 2″ steam pipe and 50 feet 3½″ exhaust pipe, holding down bolts, &c. | ... | ... | 138 0 0 | Each | East Coast. | |
| 46/56 4-5-95 | | Blocks, bottom, steel, for 5 cwt. steam-hammer... | ... | ... | 4 0 0 | ,, | Eastern Bengal. | Average. |
| | | Blocks, top, steel, for 5 cwt. steam-hammer ... | ... | ... | 4 0 0 | ,, | | |
| 45/60 6-4-95 | **Hearths,** annular ... | Suitable for bossing a wheel 5 feet diameter with 3 tuyeres, cisterns, air-valves and pipes, complete. | 2 5 0 0 | Each | 36 0 0 | Each | East Coast. | |
| | | Suitable for bossing a wheel 6′ 6″ diameter with 3 tuyeres, cisterns, air-valves and pipes, complete. | 3 0 0 0 | ,, | 70 0 0 | ,, | | |
| 45/31 4-4-95 | **Lathes** ... | Power, self-acting, gap, screw-cutting, height of centres 6″, and length of bed between centres 8 feet, complete. | ... | ... | 52 10 0 | Each | East Coast. | |
| 51/217 21-10-95 | | 12 inch centre, self-acting, screw cutting, and surfacing with a bed 20 feet long. | ... | ... | 118 0 0 | ,, | Oudh and Rohilkhand. | *Similar in every respect to those supplied under contract 13/78 of 1892.* |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 45/94 9-4-95 | **Lathes**—*contd.* ... | 6 inch centre, self-acting screw-cutting and surfacing, each with a bed 8 feet long. | ..... | ... | 145 10 0 | Each | Oudh and Rohilkhand. | |
| | | 5 inch centre, self-acting screw-cutting and surfacing, each with a bed 5 feet long. | ..... | ... | 119 0 0 | ,, | | |
| 47/37 6-6-95 | | 6 inch centre, self-acting screw-cutting and surfacing to take 2′ 9″ between the centre. | 1 5 0 0 | ... | 138 0 0 | ,, | East Coast. | |
| | | 8 inch centre, self-acting, screw-cutting and surfacing, to take 5 feet 9 inches between the centres. | 2 15 0 0 | ... | 178 0 0 | ,, | | |
| 52/23 1-11-95 | | Sliding and screw cutting 4″ centre, 4 ft. bed, with 4″ gap driven by treadle only. To be of type known as the "Surdale" as illustrated on drawing No. C 1048 and complete in every respect as designed on page 10 of Messrs. Seleg Sonenthals Catalogue. | ..... | ... | 18 10 0 | ,, | Frontier Railway Reserve. | |
| 52/7 1-11-95 | | 6′ 6″ wheel; suitable for wheels on axles up to 8′ 6″. | ..... | ... | 760 0 0 | ,, | Oudh and Rohilkhand. | |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 44/204 20-3-95 | Lathes—*concld.* ... | "Turret" for brass finishing, &c., to take 5 feet between the centre, fitted with screw chasing swing over apparatus and die fitted to c opying screw, worked off head stock spindle: a revolving turret slide rest to take six tools. Fitted with loose head to slide taper and 3 copying screws. Back chasing apparatus, two jaw chuck one pattern hot and die, one tap for recutting die, overhead driving gear, &c., &c. | ..... | ... | 185 0 0 | Each | East Coast. | |
| 44/206 20-3-95 | | Double stud, turning, 6 inch centre, on a cast iron planed bed 8 feet long with carriages and slide rests, two loose head stocks arranged for sliding taper. Self-acting feed motion each end independent of the other, set of change wheels, &c., &c. | ..... | ... | 158 0 0 | ,, | | |
| | | *Spare parts of:—* | | | | | | |
| 43/40 5-2-95 | | Cans, steel sheet, water, for lathes, &c., capacity one gallon, with brass elbow pipe and brass tap complete. | ..... | ... | 0 3 0 | ,, | Eastern Bengal. | |



## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 44/228 22-3-95 | Lubricators ... | Needle, No. 1, round, 2 oz. ... ... | ... | ... | 0 0 2¼ | Each | Eastern Bengal. | |
| | | No. 1 ... ... ... | ... | ... | | | | |
| | | ,, 2 ... ... ... | ... | ... | 0 0 2¼ | ,, | North Western. | |
| | | ,, 3 ... ... ... | ... | ... | | | | |
| | | ,, 4 ... ... ... | ... | ... | | | | |
| 47/62 10-6-95 | | Glass, needle, No. 2, flat ... ... | ... | ... | | | | |
| | | ,, ,, 4 ,, ... ... | ... | ... | 0 0 2¼ | ,, | Eastern Bengal. | |
| | | ,, ,, 3 round ... ... | ... | ... | | | | |
| | | ,, ,, 5 ,, ... ... | ... | ... | | | | |
| | | (Lieuvains patent.) | | | | | | |
| 52/205 15-11-95 | Machines ... | Bolt, screwing, suitable for screwing bolts ½″, ⅝″, ¾″, ⅞″, 1″, 1⅛″, 1¼″. 1⅜″, and 1½″, to Whitworths' standard thread. | ... | ... | 25 15 0 | Each | Frontier Railway Reserve. | |
| 47/36 6-6-95 | | Boring, cylinder ... ... ... | 5 12 0 0 | ... | 225 0 0 | ,, | Oudh and Rohilkhand. | |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons cwt. qrs. lbs. | | £ s. d. | | | |
| 47/37 6-6-95 | | Combined rolling, centring, and chasing, for fire-box stays. | 0 17 0 0 | Each | 154 0 0 | Each | Oudh and Rohilkhand. | |
| 43/63 7-3-95 | | Crank pin, trueing, self-acting, portable, adapted for trueing crank pins in place up to 9″ long and capable of being driven either by hand or power. | ... | ... | 80 0 0 | ,, | Eastern Bengal. | |
| 44/196 19-3-95 | | Crank pin, trueing ... ... ... | 0 5 0 0 | ... | 80 0 0 | ,, | East Coast. | |
| 45/94 9-4-95 | | Drilling ... ... ... ... | ... | ... | 579 10 0 | ,, | East Coast. | |
| 51/233 24-10-95 | **Machines**—*contd* ... | Drilling, bench, double geared, with table vice and 6 drills rising as follows:—½″, ⅝″ ¾″ 1″, 1¼″ and 1½″. | ... | ... | 11 10 0 | ,, | Eastern Bengal. | |
| 44/158 14-3-95 | | Drilling, bench, double geared ... ... | ... | ... | 126 0 0 | ,, | East Coast. | |
| 45/94 9-4-95 | | Drilling, slot, (single), arranged for cutting automatically slots or keybeds from ¼ to 1½″ wide, 12″ long and 8″ deep to admit work on the table 19 inches under the drills. | ... | ... | 350 0 0 | ,, | Oudh and Rohilkhand. | |
| 43/65 7-2-95 | | Genuine, stow, flexible shaft, No. 6 size ... | ... | ... | 26 10 0 | ,, | Eastern Bengal. | |



## CLASS OF STORES C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 44/158 14-3-95 | | Grinding, emery, special for motion bars of Locomotives. | ... | ... | 260 0 0 | Each | East Coast. | |
| 48/368 22-7-95 | | Grinder, for hardened lathe centres with one spare emery disc. | ... | ... | 4 10 0 | ,, | Burma. | |
| | | Grinding, emery of sorts— | | | | | | |
| | | *Spare discs for*:— | | | | | | |
| 47/262 22-6-95 | | 22″ diar. × 3″ thick with 10″ diar. centre hole (4) | ... | ... | 22 0 0 | Total | Eastern Bengal. | *Total price for 16 discs.* |
| | | 8″ diar. × 1½″ thick with 1½″ diar. centre hole (12) | ... | ... | | | | |
| | **Machines**—*contd.* ... | 12″ × ¼″ with ¼″ hole ... | ... | ... | 0 3 0 | ,, | Oudh and Rohilkhand. | |
| | | 12″ × ⅜″ ,, ... | ... | ... | 0 4 6 | ,, | | |
| | | 12″ × ½″ ,, ... round edge ... | ... | ... | 0 6 0 | ,, | | |
| | | 12″ × ⅝″ ,, ... | ... | ... | 0 7 6 | ,, | | |
| 48/508 31-7-95 | | 12″ × ¾″ ,, ... | ... | ... | 0 9 0 | ,, | | |
| | | 4½″ × 1½″ with ⅝″ hole; hard ... | ... | ... | 0 2 6 | ,, | | |
| | | 9″ × 2½″ ,, 2¾″ ,, ,, ... square edge. | ... | ... | 0 16 0 | ,, | | |
| | | 2¼″ × ½″ ,, ⅝″ ,, medium hard | ... | ... | 0 1 0 | ,, | | |

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| | | Grinding, emery, of sorts—*contd.* | | | | | | |
| | | *Spare discs for* :—contd. | | | | | | |
| | | $2\frac{1}{2}'' \times 1\frac{1}{2}''$ with $\frac{5}{8}''$ hole medium ... (square edge.) | ... | ... | 0 1 0 | Each | | |
| | | $4\frac{1}{2}'' \times 1\frac{1}{2}''$ „ $\frac{5}{8}''$ „ hard ... (square edge.) | ... | ... | 0 2 6 | „ | | |
| | | $4'' \times 1\frac{1}{2}''$ „ $\frac{5}{8}''$ „ „ ... (square edge.) | ... | ... | 0 2 0 | „ | | |
| 48/508 | 31-7-95 | $1\frac{1}{2}'' \times 1\frac{1}{2}''$ „ $\frac{5}{8}''$ „ ... (Medium hard square edge.) | ... | ... | 0 0 9 | „ | | |
| | | **Machines**—*contd.* ... $1\frac{3}{4}'' \times 1\frac{1}{2}''$ „ ... (Medium hard square edge.) | ... | ... | 0 0 9 | „ | Oudh and Rohilkhand. | |
| | | $2'' \times 1\frac{1}{2}''$ „ ... (Medium hard square edge.) | ... | ... | 0 0 9 | „ | | |
| | | $2\frac{3}{4}'' \times 1\frac{1}{2}''$ „ ... (Medium hard square edge.) | ... | ... | 0 1 0 | „ | | |
| | | $3'' \times 1\frac{1}{2}''$ „ ... (Medium hard square edge.) | ... | ... | 0 1 0 | „ | | |
| | | $3\frac{1}{2}'' \times 1\frac{1}{2}''$ „ ... (Medium hard square edge.) | ... | ... | 0 1 6 | „ | | |
| 47/246 | 22-6-95 | Discs emery 12″ diameter × $\frac{3}{8}''$ thick with hole in centre $\frac{3}{4}''$ diameter No. 24 Crown Brand for emery grinding machine. | ... | ... | 0 5 2 | „ | Burma. | |





*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 44/210 | 21-3-95 | Magnetic, for separating iron or steel filings from brass and copper, largest size containing 60 magnets and capable of cleaning 10 cwts. of metal borings per day of 8 hours. | ... | ... | 20 5 0 | Each | East Coast. | |
| 47/37 | 6-6-95 | Milling, universal ... ... ... | ... | ... | 313 10 0 | „ | Oudh and Rohilkhand. | |
| 46/194 | 13-5-95 | Portable hydraulic rivetter, with adjustable suspending gear, for boiler shop. Capable of closing rivets up to $1\frac{1}{4}''$ diameter with a working pressure of 1,600 lbs. per square inch and with a gap 12″ wide and 27″ long from the centre of the discs. The machine is complete in every respect. | ... | ... | * 128 0 0 | „ | Eastern Bengal. | **Includes £3 extra cost of 30 ft. length of flexible copper pipe with coupling.* |
| 44/158 | 14-3-95 | **Machines**—*contd.* ... Punching, shearing, and angle cutting, capable of punching 1″ holes through 1″ steel plate and shearing, 1″ steel plate 19″ deep from edge, cutting angle bars 6′ × 6″ × $\frac{3}{4}''$ thick to any required length. | ... | ... | 240 0 0 | „ | East Coast. | |
| 51/262 | 26-10-95 | Punching, shearing and up-setting worked by hand, to cut $\frac{3}{4}''$ square iron, 3″ × $\frac{1}{2}''$ flat iron, and to punch iron $\frac{3}{8}''$ thick, $\frac{3}{4}''$ holes in $\frac{5}{16}''$ iron, and upset iron up to 1″ thick dies complete with stand, ripping shear attachment dies, spare punches, &c. | 0 4 0 0 | Each | 12 17 6 | „ | Frontier Railway Reserve. | |

## CLASS OF STORES C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons. cwt. qr. lbs | | £ s. d. | | | |
| 48/461 25-7-95 | Machines—*contd.* ... | Portable rail sawing, with 3 saws for each, "Bryants." | ... | ... | 37 0 0 | Each | North Western. | |
| 46/42 3-5-95 | | Sand blast apparatus, for cleaning, casting, and for frosting glass, Mathewson's patent. Size B type, No. 4 A. | ... | ... | 26 1 6 | ,, | Burma. | |
| 44/196 19-3-95 | | Shaping, 12″ stroke, 8 feet bed, self-acting in all movements. | 5 10 0 0 | Each | 291 10 6 | ,, | East Coast. | |
| 47/36 6-6-95 | | Shaping, 12″ stroke ... ... ... | 3 10 0 0 | ... | 173 0 0 | ,, | East Coast. | |
| 47/33 6-6-95 | | Ditto 16″ ,, ... ... ... | ... | ... | 209 0 0 | ,, | Oudh and Rohilkhand. | |
| 51/231 24-10-95 | | Slotting, 8 inch stroke, complete with countershaft, belting, &c. | ... | ... | 140 0 0 | ,, | Jorhat. | |
| 46/205 14-5-95 | | Universal turning, to take in work 32″ diameter and 18″ height, complete. | 2 8 0 0 | Each | 160 0 0 | ,, | Burma. | |
| 43/48 7-2-95 | | *Spare parts of*— Cams, cast iron, for Horsefall's patent bolt and nut making machine. | ... | ... | 2 5 0 | ,, | Eastern Bengal. | |



## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | *Spare parts of*—concld. | Tons, cwt. qr. lbs. | | £ s. d. | | | |
| 52/12 1-11-95 | Machines—*concld* ... | Cams, chilled, C. I. for Horsefall's patent bolt and nut machine figure No. 1 to 4. | ... | ... | 3 5 6 | Set | North Western. | Average. |
| 48/401 23-7-95 | | Circular, saw, 15½″ diameter, for rail cutting machines. | ... | ... | 1 10 0 | Each | North Western. | |
| 45/94 9-4-95 | Presses ... ... | Hydraulic wheel, and pumps, &c., complete ... | ... | ... | 621 0 0 | Each | East Coast. | |
| 46/360 24-5-95 | Pumps ... | Boiler testing, suitable for testing boilers by hydraulic pressure up to 200 lbs. | ... | ... | 12 3 0 | Each | North Western. | |
| 49/139 10-8-95 | Pulsometer ... | No. 5, with fittings complete ... ... | 0 7 0 0 | Each | 93 15 5 | Each | Kotri-Rohri. | |
| | | No. 6, with fittings complete ... ... | 0 8 0 0 | ,, | 117 10 0 | ,, | | |
| 10-8-95 | | *Spare parts*— For Pulsometer, No. 5 ... ... | ..... | ... | 4 14 0 | Set | | |
| | | ,, ,, No. 6 ... ... | ..... | ... | 5 7 0 | ,, | | |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. | | Rate—Free on board. | | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Weight. | Unit. | Amount. | Unit. | | |
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 49/376 30-8-95 | Pulsometer—*contd.* | Boiler for— | | | | | | |
| | | 12 H. P. vertical boiler capable of working at 120 lbs. pressure, to be provided with all fittings, steam gauges, &c., &c. | 4 10 0 0 | Each | 116 0 0 | Each | Kotri-Rohri. | |
| 48/23 1-7-95 | Saws ... ... | Circular, for cutting cold metal, diameter 3′ 0″, thickness at teeth No. 5 S. W. G., number of teeth 226. | ... | ... | 4 15 0 | Each | Eastern Bengal. | |
| | | Circular, for cutting wood, 12″ diameter, No. 14 S. W. G., 1¼″ hole, London tooth, ⅞″ pitch. | ... | ... | 0 4 0 | ,, | Oudh and Rohilkhand. | |
| | | Circular, for cutting wood, 36″ diameter, No. 10 S. W. G., 2″ hole, London tooth, 1¾″ pitch. | ... | ... | 1 7 0 | ,, | | |
| | | Circular, for general joiner, 18″ diameter × 7/64″ thick, pitch of teeth from point to point about 1.″ | ... | ... | 0 9 0 | ,, | Eastern Bengal. | |
| | | Circular, for general joiner, 10½″ diameter × 1/16″ thick, pitch of teeth about 5/16″ for grooving, to suit hoop iron tongues. | ... | ... | 0 4 0 | ,, | | |



## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*concld.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. | | Rate—Free on board. | | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Weight. | Unit. | Amount. | Unit. | | |
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 51/163 15-10-95 | Saw-sharpener ... | Machine for sharpening rail cutting saws, suitable for sharpening the saws of the machine for cutting 75 lbs. and 100 lbs. steel rails. | ... | ... | 4 7 6 | Each | Frontier Railway Reserve. | |
| | | Extra disc for above ... ... ... | ... | ... | 0 6 0 | ,, | | |
| 47/246 22-6-95 | | Emery discs for above, crown brand No. 24:— | | | | | North Western. | |
| | | 12″ diameter × ¼″ thick × ¾″ hole ... | ... | ... | 0 3 1 | ,, | | |
| | | 12″ ,, × ⅜″ ,, × ¾″ ,, ... | ... | ... | 0 4 7 | ,, | | |
| | | 12″ ,, × ½″ ,, × ¾″ ,, ... | ... | ... | 0 6 1 | ,, | | |
| 43/20 2-2-96 | | *Spare parts of*— | | | | | | |
| | | Wheels, emery, 12″ × ¼″ × 1″ hole in the centre | ... | ... | 0 2 6 | ,, | Eastern Bengal. | |
| | | ,, ,, 12″ × ⅜″ × 1″ ,, ,, ,, | ... | ... | 0 3 7 | ,, | | |

Circular No. 10.

FROM

THE DIRECTOR GENERAL OF RAILWAYS,

TO

THE MANAGER, NORTH WESTERN RAILWAY.
THE MANAGER, OUDH AND ROHILKHAND RAILWAY.
THE MANAGER, EASTERN BENGAL STATE RAILWAY.
THE MANAGER, EAST COAST STATE RAILWAY.
THE ENGINEER-IN-CHIEF, KOTRI-ROHRI RAILWAY.
THE ENGINEER-IN-CHIEF, MARI-ATTOCK RAILWAY AND GRADIENT IMPROVEMENT WORKS, NORTH WESTERN RAILWAY.
THE ENGINEER-IN-CHIEF, BEZWADA-MADRAS RAILWAY.
THE ENGINEER-IN-CHIEF, MANDALAY KUNLON RAILWAY.
THE ENGINEER-IN-CHIEF, RAE BAREILLY-BENARES EXTENSION RAILWAY.
THE PORT STOREKEEPER, STATE RAILWAY DEPARTMENT, CALCUTTA.

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## Rate List, Class C—Workshop Machinery and Heavy Tools for 1895.

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Simla, the 29th July 1896.

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 C State railway stores, "Workshop Machinery and Heavy Tools," contracted for by the Stores Department of the India Office during 1895.

2. A table giving the average rates of sea-freight for Class C stores imported from England to the several ports in India for State railways of both gauges during 1894 is prefixed to the Rate List, figures for 1895 not being available.

3. In order to arrive at the total cost of Class C stores landed in India, an insurance charge of* one-half per cent. on the *free on board* cost *plus* entire sea-freight, should be added in addition to other incidental charges and exchange, which latter should be calculated at the official rate for the year.

I have the honour to be,

SIR,

Your most obedient Servant,

T. GRACEY, Colonel, R.E.,

Director General of Railways.

*Documents accompanying.*

1. Statement showing the average rates per ton for entire sea-freight on Class C stores imported from England to the several ports during 1894.

2. Rate List, Class C—Workshop Machinery and Heavy Tools for 1895.

* For State Railway Stores and Irrigation Works only classed as Imperial. Stores for Provincial and Local funds, and for railways constructed by Native States are charged one-per cent. as heretofore.

The Secretaries to the Government 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 at Hyderabad and in 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 Chief Engineer, Kashmir.
The Accountant General, Bengal.
The Consulting Engineers for Railways, Madras and Bombay.
The Consulting Engineers to the Government of India for railways, Calcutta, Lucknow, and Assam.

Copy forwarded to the Local Governments and Administrations and to the Officers noted in the margin for information, with the intimation that all Railway Administrations have been supplied with copies direct.

T. GRACEY, Colonel, R.E.,
Director General of Railways.

To

THE

G. C. Press, Simla.—No. 493 P. W. D.—13-8-96.—884.

Enclosure to Director General of Railways' Circular No. 10 of 1896.

# RATE LIST.

## CLASS C.

## WORKSHOP MACHINERY AND HEAVY TOOLS FOR 1895.

G. C. Press, Simla.—No. 493 P. W. D.—14-8-96.—884.

Enclosure to Director General of Railways' Circular No. 10 of 1896.

*Statement showing the average rates per ton for entire sea-freight on Class C stores sent out from England to the several Ports in India for State Railways of both gauges during 1894.*

| Class of Stores. | Kurrachee. | Bombay. | Coconada or Vizagapatam. | Calcutta. | Rangoon. | Remarks. |
|---|---|---|---|---|---|---|
| | *s.* *d.* | *s.* *d.* | *s.* *d.* | *s.* *d.* | *s.* *d.* | |
| C—Workshop Machinery and Heavy Tools ... | *... ... | 16 3 | *... ... | 23 6† | *... ... | *No material for class C stores was shipped to these ports during 1894.<br>†60 shillings for steam hammer. |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS.

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. | | Rate—Free on board. | | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Weight. | Unit. | Amount. | Unit. | | |
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 48/368 22-7-95 | **Bar,** pinch ... | Or "easy car pusher" for moving engines in sheds—bent handle. | ... | ... | 1 5 0 | Each | Burma. | |
| 51/261 26-10-95 | **Bear,** punching | Hydraulic, with open mouth, to punch 1″ holes in steel rails, with six extra punches and dies of the following sizes, *viz.* :—$\frac{5}{8}$″, $\frac{11}{16}$″, $\frac{3}{4}$″, $\frac{13}{16}$″, $\frac{7}{8}$″ and $\frac{15}{16}$″, to suit rails weighing 75 lbs. and 100 lbs. per yard. | ... | ... | 22 17 6 | Total | Frontier Railway Reserve. | |
| 44/205 20-3-95 | **Blower** ... | Roots patent improved rotary, No. 5 size ... | ... | ... | 143 15 9 | Each | East Coast. | |
| 53/99 10-10-95 | | Ditto ditto ... | ... | ... | 143 15 9 | „ | North Western. | *Similar in every respect to contract 43/145 of 16th January 1895.* |
| 48/477 26-7-95 | | With duplex direct acting steam engine and escape valve combined, nominal H. P. of engine 8. Diameter of cylinder 10″, stroke 10$\frac{3}{4}$″. The teeth of the gearing wheels are machine cut and carefully pitched to gear and fit accurately. | ... | ... | 165 0 0 | „ | Oudh and Rohilkhand. | |

CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons cwt. qr. lbs. | | £ s. d. | | | |
| 50/292 — 27-9-95 | Cranes, overhead, travelling. | Hand-power, three ton, with 210 feet H section girders, fitted with bridge rails, &c., &c. One man would hoist 3 tons at a speed of 1¼ feet per minute and 1 ton at 4 feet per minute. | 16 0 0 0 | Each | 230 0 0 | Each | Eastern Bengal State (5′ 6″ gauge) | *Includes 2 sets tracings and 6 Photographs.* |
| 53/171 — 17-12-95 | | Foundry, hand-power, to lift 5 tons. 41′ 6″ span centre to centre of rails, 13′ between walls, traveller rail level 18 feet from floor. All motions to be worked from the ground. Headway from rail level to roof 6′ 6″. | ... | ... | 235 0 0 | „ | North-Western. | |
| 48/248 — 16-7-95 | | Gearing to convert 30 ton overhead travellers from hand power, to rope power, driven. | ... | ... | 210 5 0 | „ | Eastern Bengal (5′ 6″ guage). | |
| 48/452 — 25-7-95 | Engines, stationary ... | *Spare parts of* :— | | | | | | |
| | | Tubes, water, iron, for boilers, Field's patent :— | | | | | | |
| | | 2′ 10″ × 2¼″ inside diar. 2½″ outside diar. ... | ... | ... | 0 1 7 | Each | Oudh and Rohilkhand. | |
| | | 3′ 3½″ × 2⅞″ „ „ 3¼″ „ „ ... | ... | ... | 0 3 7 | „ | | |

CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons. cwt. qr. lbs. | | £. s. d. | | | |
| 48/174 — 11-7-95 | Gauges ... | Bourdon's, for 300 lbs. per square inch, diameter of dial 5 inches, without syphon or cocks. (Required for boiler testing pumps). | ... | Each | 1 0 0 | Each | Burma. | |
| 47/181 — 17-6-95 | Grindstones ... | Best Ayrshire, without trough, 60″ × 8″ ... | ... | ... | 3 7 6 | Each | Burma. | |
| 47/360 — 27-6-95 | | Best Ayrshire, without trough, 48″ × 8″ ... | ... | ... | 2 15 6 | „ | | |
| 47/139 — 14-6-95 | | Newcastle, Post, No. 3, without trough, 48″ × 8″... | ... | ... | 1 16 0 | „ | | |
| 48/202 — 13-7-95 | | Yorkshire, coarse grit, 66″ × 10″ × 2′ 2″ square hole | ... | ... | 6 0 0 | ... | North-Western. | |
| 44/228 — 22-3-95 | Grindstone dresser | No. 2 size, for stones up to 8″ wide, and troughs 17″ over flanges, with spanner, handle and two cutters complete. | ... | Each. | 4 10 3 | Each | Eastern Bengal. | |
| | | No. 4 size, for stones up to 15″ wide, and troughs 22½″ over flanges, with spanner, handle, and two cutters complete. | ... | ... | 7 2 6 | „ | | |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. | | Rate—Free on board. | | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Weight. | Unit. | Amount. | Unit. | | |
| | | | Tons. cwt. qrs. lbs. | | £ s. d. | | | |
| 45/98 10-4-95 | Hammer, steam ... | 5 cwt. mounted on single standard, Double action, 9″ cylinder 21″ stroke, complete with top and bottom swages, fitted with combined self-acting and hand worked valve gear, steel anvil block separate from standard, arranged to rest on piles and concrete foundation. 100 feet 2″ steam pipe and 50 feet 3½″ exhaust pipe, holding down bolts, &c. | ... | ... | 138 0 0 | Each | East Coast. | |
| 46/56 4-5-95 | | Blocks, bottom, steel, for 5 cwt. steam-hammer... | ... | ... | 4 0 0 | ,, | Eastern Bengal. | Average. |
| | | Blocks, top, steel, for 5 cwt. steam-hammer ... | ... | ... | 4 0 0 | ,, | | |
| 45/60 6-4-95 | Hearths, annular ... | Suitable for bossing a wheel 5 feet diameter with 3 tuyeres, cisterns, air-valves and pipes, complete. | 2 5 0 0 | Each | 36 0 0 | Each | East Coast. | |
| | | Suitable for bossing a wheel 6′ 6″ diameter with 3 tuyeres, cisterns, air-valves and pipes, complete. | 3 0 0 0 | ,, | 70 0 0 | ,, | | |
| 45/31 4-4-95 | Lathes ... | Power, self-acting, gap, screw-cutting, height of centres 6″, and length of bed between centres 8 feet, complete. | ... | ... | 52 10 0 | Each | East Coast. | |
| 51/217 21-10-95 | | 12 inch centre, self-acting, screw cutting, and surfacing with a bed 20 feet long. | ... | ... | 118 0 0 | ,, | Oudh and Rohilkhand. | *Similar in every respect to those supplied under contract 1⅓ of 1892.* |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. | | Rate—Free on board. | | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Weight. | Unit. | Amount. | Unit. | | |
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 45/94 9-4-95 | Lathes—*contd.* ... | 6 inch centre, self-acting screw-cutting and surfacing, each with a bed 8 feet long. | ..... | ... | 145 10 0 | Each | Oudh and Rohilkhand. | |
| | | 5 inch centre, self-acting screw-cutting and surfacing, each with a bed 5 feet long. | ..... | ... | 119 0 0 | ,, | | |
| 47/37 6-6-95 | | 6 inch centre, self-acting screw-cutting and surfacing to take 2′ 9″ between the centre. | 1 5 0 0 | ... | 138 0 0 | ,, | East Coast. | |
| | | 8 inch centre, self-acting, screw-cutting and surfacing, to take 5 feet 9 inches between the centres. | 2 15 0 0 | ... | 178 0 0 | ,, | | |
| 52/23 1-11-95 | | Sliding and screw cutting 4″ centre, 4 ft. bed, with 4″ gap driven by treadle only. To be of type known as the "Surdale" as illustrated on drawing No. C 1048 and complete in every respect as designed on page 10 of Messrs. Seleg Sonenthals Catalogue. | ..... | ... | 18 10 0 | ,, | Frontier Railway Reserve. | |
| 52/7 1-11-95 | | 6′ 6″ wheel; suitable for wheels on axles up to 8′ 6″. | ..... | ... | 760 0 0 | ,, | Oudh and Rohilkhand. | |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. | | Rate—Free on board. | | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Weight. | Unit. | Amount. | Unit. | | |
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 44/204 — 20-3-95 | Lathes—*concld.* | "Turret" for brass finishing, &c., to take 5 feet between the centre, fitted with screw chasing swing over apparatus and die fitted to c opying screw, worked off head stock spindle: a revolving turret slide rest to take six tools. Fitted with loose head to slide taper and 3 copying screws. Back chasing apparatus, two jaw chuck one pattern hot and die, one tap for recutting die, overhead driving gear, &c., &c. | ..... | ... | 185 0 0 | Each | East Coast. | |
| 44/206 — 20-3-95 | | Double stud, turning, 6 inch centre, on a cast iron planed bed 8 feet long with carriages and slide rests, two loose head stocks arranged for sliding taper. Self-acting feed motion each end independent of the other, set of change wheels, &c., &c. | ..... | ... | 158 0 0 | „ | | |
| | | *Spare parts of:—* | | | | | | |
| 43/40 — 5-2-95 | | Cans, steel sheet, water, for lathes, &c., capacity one gallon, with brass elbow pipe and brass tap complete. | ..... | ... | 0 3 0 | „ | Eastern Bengal. | |



## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. | | Rate—Free on board. | | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Weight. | Unit. | Amount. | Unit. | | |
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 44/228 — 22-3-95 | Lubricators ... | Needle, No. 1, round, 2 oz. ... ... | ... | ... | 0 0 $2\frac{1}{4}$ | Each | Eastern Bengal. | |
| | | No. 1 ... ... ... | ... | ... | | | | |
| | | „ 2 ... ... ... | ... | ... | 0 0 $2\frac{1}{4}$ | „ | North Western. | |
| | | „ 3 ... ... ... | ... | ... | | | | |
| | | „ 4 ... ... ... | ... | ... | | | | |
| 47/62 — 10-6-95 | | Glass, needle, No. 2, flat ... ... | ... | ... | | | | |
| | | „ „ 4 „ ... ... | ... | ... | 0 0 $2\frac{1}{4}$ | „ | Eastern Bengal. | |
| | | „ „ 3 round ... ... | ... | ... | | | | |
| | | „ „ 5 „ ... ... | ... | ... | | | | |
| | | (Lieuvains patent.) | | | | | | |
| 52/205 — 15-11-95 | Machines ... | Bolt, screwing, suitable for screwing bolts $\frac{1}{2}''$, $\frac{5}{8}''$, $\frac{3}{4}''$, $\frac{7}{8}''$, $1''$, $1\frac{1}{8}''$, $1\frac{1}{4}''$. $1\frac{3}{8}''$, and $1\frac{1}{2}''$, to Whitworths' standard thread. | ... | ... | 25 15 0 | Each | Frontier Railway Reserve. | |
| 47/36 — 6-6-95 | | Boring, cylinder ... ... ... | 5 12 0 0 | ... | 225 0 0 | „ | Oudh and Rohilkhand. | |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons cwt. qrs. lbs. | | £ s. d. | | | |
| 47/37 6-6-95 | | Combined rolling, centring, and chasing, for fire-box stays. | 0 17 0 0 | Each | 154 0 0 | Each | Oudh and Rohilkhand. | |
| 43/63 7-3-95 | | Crank pin, trueing, self-acting, portable, adapted for trueing crank pins in place up to 9″ long and capable of being driven either by hand or power. | ... | ... | 80 0 0 | ,, | Eastern Bengal. | |
| 44/196 19-3-95 | | Crank pin, trueing ... ... ... | 0 5 0 0 | ... | 80 0 0 | ,, | East Coast. | |
| 45/94 9-4-95 | | Drilling ... ... ... ... | ... | ... | 579 10 0 | ,, | East Coast. | |
| 51/233 24-10-95 | **Machines**—*contd* ... | Drilling, bench, double geared, with table vice and 6 drills rising as follows:—½″, ⅝″ ¾″ 1″, 1¼″ and 1½″. | ... | ... | 11 10 0 | ,, | Eastern Bengal. | |
| 44/158 14-3-95 | | Drilling, bench, double geared ... ... | ... | ... | 126 0 0 | ,, | East Coast. | |
| 45/94 9-4-95 | | Drilling, slot, (single), arranged for cutting automatically slots or keybeds from ¼ to 1½″ wide, 12″ long and 8″ deep to admit work on the table 19 inches under the drills. | ... | ... | 350 0 0 | ,, | Oudh and Rohilkhand. | |
| 43/65 7-2-95 | | Genuine, stow, flexible shaft, No. 6 size ... | ... | ... | 26 10 0 | ,, | Eastern Bengal. | |



## CLASS OF STORES C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 44/158 14-3-95 | | Grinding, emery, special for motion bars of Locomotives. | ... | ... | 260 0 0 | Each | East Coast. | |
| 48/368 22-7-95 | | Grinder, for hardened lathe centres with one spare emery disc. | ... | ... | 4 10 0 | ,, | Burma. | |
| | | Grinding, emery of sorts— | | | | | | |
| | | *Spare discs for*:— | | | | | | |
| 47/262 22-6-95 | | 22″ diar. × 3″ thick with 10″ diar. centre hole (4) | ... | ... | 22 0 0 | Total | Eastern Bengal. | *Total price for 16 discs.* |
| | | 8″ diar. × 1½″ thick with 1½″ diar. centre hole (12) | ... | ... | | | | |
| | **Machines**—*contd.* ... | 12″ × ¼″ with ¼″ hole ... | ... | ... | 0 3 0 | ,, | Oudh and Rohilkhand. | |
| | | 12″ × ⅜″ ,, ... | ... | ... | 0 4 6 | ,, | | |
| | | 12″ × ½″ ,, ... round edge ... | ... | ... | 0 6 0 | ,, | | |
| | | 12″ × ⅝″ ,, ... | ... | ... | 0 7 6 | ,, | | |
| 48/508 31-7-95 | | 12″ × ¾″ ,, ... | ... | ... | 0 9 0 | ,, | | |
| | | 4½″ × 1½″ with ⅝″ hole; hard ... | ... | ... | 0 2 6 | ,, | | |
| | | 9″ × 2½″ ,, 2¾″ ,, ,, ... square edge. | ... | ... | 0 16 0 | ,, | | |
| | | 2¼″ × ½″ ,, ⅝″ ,, medium hard | ... | ... | 0 1 0 | ,, | | |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| | | Grinding, emery, of sorts—*contd.* | | | | | | |
| | | *Spare discs for* :—contd. | | | | | | |
| | | $2\frac{1}{2}'' \times 1\frac{1}{2}''$ with $\frac{5}{8}''$ hole medium ... (square edge.) | ... | ... | 0 1 0 | Each | Oudh and Rohilkhand. | |
| | | $4\frac{1}{2}'' \times 1\frac{1}{2}''$ „ $\frac{5}{8}''$ „ hard ... (square edge.) | ... | ... | 0 2 6 | „ | | |
| | | $4'' \times 1\frac{1}{2}''$ „ $\frac{5}{8}''$ „ „ ... (square edge.) | ... | ... | 0 2 0 | „ | | |
| 48/508 | 31-7-95 | **Machines**—*contd.* ... $1\frac{1}{2}'' \times 1\frac{1}{2}''$ „ $\frac{5}{8}''$ „ ... (Medium hard square edge.) | ... | ... | 0 0 9 | „ | | |
| | | $1\frac{3}{4}'' \times 1\frac{1}{2}''$ „ ... (Medium hard square edge.) | ... | ... | 0 0 9 | „ | | |
| | | $2'' \times 1\frac{1}{2}''$ „ ... (Medium hard square edge.) | ... | ... | 0 0 9 | „ | | |
| | | $2\frac{3}{4}'' \times 1\frac{1}{2}''$ „ ... (Medium hard square edge.) | ... | ... | 0 1 0 | „ | | |
| | | $3'' \times 1\frac{1}{2}''$ „ ... (Medium hard square edge.) | ... | ... | 0 1 0 | „ | | |
| | | $3\frac{1}{2}'' \times 1\frac{1}{2}''$ „ ... (Medium hard square edge.) | ... | ... | 0 1 6 | „ | | |
| 47/246 | 22-6-95 | Discs emery 12″ diameter × $\frac{3}{8}''$ thick with hole in centre $\frac{3}{4}''$ diameter No. 24 Crown Brand for emery grinding machine. | ... | ... | 0 5 2 | „ | Burma. | |



## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

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|---|---|---|---|---|---|---|---|---|
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 44/210 | 21-3-95 | Magnetic, for separating iron or steel filings from brass and copper, largest size containing 60 magnets and capable of cleaning 10 cwts. of metal borings per day of 8 hours. | ... | ... | 20 5 0 | Each | East Coast. | |
| 47/37 | 6-6-95 | Milling, universal ... ... ... | ... | ... | 313 10 0 | „ | Oudh and Rohilkhand. | |
| 46/194 | 13-5-95 | **Machines**—*contd.* ... Portable hydraulic rivetter, with adjustable suspending gear, for boiler shop. Capable of closing rivets up to $1\frac{1}{4}''$ diameter with a working pressure of 1,600 lbs. per square inch and with a gap 12″ wide and 27″ long from the centre of the discs. The machine is complete in every respect. | ... | ... | * 128 0 0 | „ | Eastern Bengal. | **Includes £3 extra cost of 30 ft. length of flexible copper pipe with coupling.* |
| 44/158 | 14-3-95 | Punching, shearing, and angle cutting, capable of punching 1″ holes through 1″ steel plate and shearing, 1″ steel plate 19″ deep from edge, cutting angle bars 6′ × 6″ × $\frac{3}{4}''$ thick to any required length. | ... | ... | 240 0 0 | „ | East Coast. | |
| 51/262 | 26-10-95 | Punching, shearing and up-setting worked by hand, to cut $\frac{3}{4}''$ square iron, 3″ × $\frac{1}{2}''$ flat iron, and to punch iron $\frac{3}{8}''$ thick, $\frac{3}{4}''$ holes in $\frac{5}{16}''$ iron, and upset iron up to 1″ thick dies complete with stand, ripping shear attachment dies, spare punches, &c. | 0 4 0 0 | Each | 12 17 6 | „ | Frontier Railway Reserve. | |

## CLASS OF STORES C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Tons. cwt. qr. lbs | | £ s. d. | | | |
| 48/461 25-7-95 | Machines—*contd.* ... | Portable rail sawing, with 3 saws for each, "Bryants." | ... | ... | 37 0 0 | Each | North Western. | |
| 46/42 3-5-95 | | Sand blast apparatus, for cleaning, casting, and for frosting glass, Mathewson's patent. Size B type, No. 4 A. | ... | ... | 26 1 6 | ,, | Burma. | |
| 44/196 19-3-95 | | Shaping, 12″ stroke, 8 feet bed, self-acting in all movements. | 5 10 0 0 | Each | 291 10 6 | ,, | East Coast. | |
| 47/36 6-6-95 | | Shaping, 12″ stroke ... ... ... | 3 10 0 0 | ... | 173 0 0 | ,, | East Coast. | |
| 47/33 6-6-95 | | Ditto 16″ ,, ... ... ... | ... | ... | 209 0 0 | ,, | Oudh and Rohilkhand. | |
| 51/231 24-10-95 | | Slotting, 8 inch stroke, complete with countershaft, belting, &c. | ... | ... | 140 0 0 | ,, | Jorhat. | |
| 46/205 14-5-95 | | Universal turning, to take in work 32″ diameter and 18″ height, complete. | 2 8 0 0 | Each | 160 0 0 | ,, | Burma. | |
| 43/48 7-2-95 | | *Spare parts of*— Cams, cast iron, for Horsefall's patent bolt and nut making machine. | ... | ... | 2 5 0 | ,, | Eastern Bengal. | |



## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. Weight. | Unit. | Rate—Free on board. Amount. | Unit. | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | *Spare parts of*—concld. | Tons, cwt. qr. lbs. | | £ s. d. | | | |
| 52/12 1-11-95 | Machines—*concld* ... | Cams, chilled, C. I. for Horsefall's patent bolt and nut machine figure No. 1 to 4. | ... | ... | 3 5 6 | Set | North Western. | Average. |
| 48/401 23-7-95 | | Circular, saw, 15½″ diameter, for rail cutting machines. | ... | ... | 1 10 0 | Each | North Western. | |
| 45/94 9-4-95 | Presses ... ... | Hydraulic wheel, and pumps, &c., complete ... | ... | ... | 621 0 0 | Each | East Coast. | |
| 46/360 24-5-95 | Pumps ... | Boiler testing, suitable for testing boilers by hydraulic pressure up to 200 lbs. | ... | ... | 12 3 0 | Each | North Western. | |
| 49/139 10-8-95 | Pulsometer ... | No. 5, with fittings complete ... ... | 0 7 0 0 | Each | 93 15 5 | Each | Kotri-Rohri. | |
| | | No. 6, with fittings complete ... ... | 0 8 0 0 | ,, | 117 10 0 | ,, | | |
| 10-8-95 | | *Spare parts*— For Pulsometer, No. 5 ... ... | ..... | ... | 4 14 0 | Set | | |
| | | ,, ,, No. 6 ... ... | ..... | ... | 5 7 0 | ,, | | |

## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*contd.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. | | Rate—Free on board. | | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Weight. | Unit. | Amount. | Unit. | | |
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 49/376 30-8-95 | Pulsometer—*contd.* | Boiler for— | | | | | | |
| | | 12 H. P. vertical boiler capable of working at 120 lbs. pressure, to be provided with all fittings, steam gauges, &c., &c. | 4 10 0 0 | Each | 116 0 0 | Each | Kotri-Rohri. | |
| 48/23 1-7-95 | Saws ... ... | Circular, for cutting cold metal, diameter 3′ 0″, thickness at teeth No. 5 S. W. G., number of teeth 226. | ... | ... | 4 15 0 | Each | Eastern Bengal. | |
| | | Circular, for cutting wood, 12″ diameter, No. 14 S. W. G., $1\frac{1}{4}$″ hole, London tooth, $\frac{7}{8}$″ pitch. | ... | ... | 0 4 0 | ,, | Oudh and Rohilkhand. | |
| | | Circular, for cutting wood, 36″ diameter, No. 10 S. W. G., 2″ hole, London tooth, $1\frac{3}{4}$″ pitch. | ... | ... | 1 7 0 | ,, | | |
| | | Circular, for general joiner, 18″ diameter × $\frac{7}{64}$″ thick, pitch of teeth from point to point about 1.″ | ... | ... | 0 9 0 | ,, | Eastern Bengal. | |
| | | Circular, for general joiner, $10\frac{1}{2}$″ diameter × $\frac{1}{16}$″ thick, pitch of teeth about $\frac{5}{16}$″ for grooving, to suit hoop iron tongues. | ... | ... | 0 4 0 | ,, | | |



## CLASS OF STORES. C.—WORKSHOP MACHINERY AND HEAVY TOOLS—*concld.*

*Contracted for in 1895.*

| Contract number and date. | Articles. | Details. | Approximate gross weight. | | Rate—Free on board. | | For what railway. | Remarks. |
|---|---|---|---|---|---|---|---|---|
| | | | Weight. | Unit. | Amount. | Unit. | | |
| | | | Tons. cwt. qr. lbs. | | £ s. d. | | | |
| 51/163 15-10-95 | | Machine for sharpening rail cutting saws, suitable for sharpening the saws of the machine for cutting 75 lbs. and 100 lbs. steel rails. | ... | ... | 4 7 6 | Each | Frontier Railway Reserve. | |
| | | Extra disc for above ... ... ... | ... | ... | 0 6 0 | ,, | | |
| 47/246 22-6-95 | Saw-sharpener ... | Emery discs for above, crown brand No. 24:— | | | | | | |
| | | 12″ diameter × $\frac{1}{4}$″ thick × $\frac{3}{4}$″ hole ... | ... | ... | 0 3 1 | ,, | North Western. | |
| | | 12″ ,, × $\frac{3}{8}$″ ,, × $\frac{3}{4}$″ ,, ... | ... | ... | 0 4 7 | ,, | | |
| | | 12″ ,, × $\frac{1}{2}$″ ,, × $\frac{3}{4}$″ ,, ... | ... | ... | 0 6 1 | ,, | | |
| 43/20 2-2-96 | | *Spare parts of*— | | | | | | |
| | | Wheels, emery, 12″ × $\frac{1}{4}$″ × 1″ hole in the centre | ... | ... | 0 2 6 | ,, | Eastern Bengal. | |
| | | ,, ,, 12″ × $\frac{3}{8}$″ × 1″ ,, ,, ,, | ... | ... | 0 3 7 | ,, | | |

[*For General Distribution.*]

Circular No. 10.

FROM

THE DIRECTOR GENERAL OF RAILWAYS,

TO

THE MANAGER, NORTH WESTERN RAILWAY.
THE MANAGER, OUDH AND ROHILKHAND RAILWAY.
THE MANAGER, EASTERN BENGAL STATE RAILWAY.
THE MANAGER, EAST COAST STATE RAILWAY.
THE ENGINEER-IN-CHIEF, KOTRI-ROHRI RAILWAY.
THE ENGINEER-IN-CHIEF, MARI-ATTOCK RAILWAY AND GRADIENT IMPROVEMENT WORKS, NORTH WESTERN RAILWAY.
THE ENGINEER-IN-CHIEF, BEZWADA-MADRAS RAILWAY.
THE ENGINEER-IN-CHIEF, MANDALAY KUNLON RAILWAY.
THE ENGINEER-IN-CHIEF, RAE BAREILLY-BENARES EXTENSION RAILWAY.
THE PORT STOREKEEPER, STATE RAILWAY DEPARTMENT, CALCUTTA.

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**Rate List, Class C—Workshop Machinery and Heavy Tools for 1895.**

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SIR,

Simla, the 29th July 1896.

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 C State railway stores, "Workshop Machinery and Heavy Tools," contracted for by the Stores Department of the India Office during 1895.

2. A table giving the average rates of sea-freight for Class C stores imported from England to the several ports in India for State railways of both gauges during 1894 is prefixed to the Rate List, figures for 1895 not being available.

3. In order to arrive at the total cost of Class C stores landed in India, an insurance charge of* one-half per cent. on the *free on board* cost *plus* entire sea-freight, should be added in addition to other incidental charges and exchange, which latter should be calculated at the official rate for the year.

I have the honour to be,

SIR,

Your most obedient Servant,

T. GRACEY, Colonel, R.E.,

Director General of Railways.

*Documents accompanying.*

1. Statement showing the average rates per ton for entire sea-freight on Class C stores imported from England to the several ports during 1894.

2. Rate List, Class C—Workshop Machinery and Heavy Tools for 1895.

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* For State Railway Stores and Irrigation Works only classed as Imperial. Stores for Provincial and Local funds, and for railways constructed by Native States are charged one-per cent. as heretofore.

The Secretaries to the Government 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 at Hyderabad and in 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 Chief Engineer, Kashmir.
The Accountant General, Bengal.
The Consulting Engineers for Railways, Madras and Bombay.
The Consulting Engineers to the Government of India for railways, Calcutta, Lucknow, and Assam.

Copy forwarded to the Local Governments and Administrations and to the Officers noted in the margin for information, with the intimation that all Railway Administrations have been supplied with copies direct.

T. GRACEY, Colonel, R.E.,
Director General of Railways.

No 2670 W., dated 19th September 1896.

TO

THE

Communicated to officers of the P.W. Dept for information
(Sd) D. McC
W

G. C. Press, Simla.—No. 493 P. W. D.—13-8-96.—884.

Ch. Eforf
Safety Engrs
C. A to Govt
Guar & W Accts