Public Works (1898) Department.

G.O., No. 132625

DATED 25 May 98

[Despatch Abstract.]

Rate List, Class L² Rolling Stock for 1898: Circular from the Director of Railway Construction forwarding a —, Comptroller Officers of the W.D.

98/25788

[P. W. 25. 1,000—2-3-98]

Indexed. 21/6

BACK PAPERS.

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

FURTHER PAPERS.

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

Public Works (1898) Department.

CURRENT No. 3635

12/

From The Director of Railway Construction

Order N-1326 W 25 May '98 -

Communicate to offices of the Min.

Corr. No. 3

A.R. 4.5.98.

Dated 3rd March 1898

Received 25 April 1898

Registered

Enclosures One

Spare copies ~~4~~ 60

Recd 21/5/47

SUBJECT.

Forwarding a printed Statement showing the actual English prices, per ton on board in England for Class E Stores, "Rolling Stock" for 1896.

Ch. S. for I. ✓
Supt. ✓
Ch. Asst. ✓
Engineer, 20/5/47

P.S. 76 A 61

P. W. 29.
1,000—7-12-97.

BACK PAPERS.

No.	Date.

FURTHER PAPERS.

No.	Date.

Enclosure to Director of Railway Construction Circular No. 3 of 1898.

RATE LIST.

CLASS E.

ROLLING STOCK

FOR 1896.

G. C. Press, Simla.—No. 1466 P. W. D.—24-3-98.—887.

Pwd.
3635/88

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Enclosure to Director of Railway Construction Circular No. 3 of 1898.

Statement showing the latest average rates per ton for entire sea-freight on locomotive and rolling stock materials sent out from England to the several ports in India for State Railways of both gauges during 1896.

Description of materials.	Karachi.	Bombay.	Coconada or Vizagapatam.	Calcutta.	Rangoon.	Remarks.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
Engines, locomotive, complete	100 0 0	...	...	...	...	Each, or 55*s.* per ton.
Engines, locomotive, spare parts of—	...	...	...	...	...	
Coaching stock, underframe and body iron work for— ...	...	...	0 40 0	...	...	
Goods stock, underframe and body iron work for— ...	0 24 0	...	0 43 3	0 30 3	...	
Wheels and axles, axle-boxes, springs, couplings, etc. ...	0 20 4	0 27 6	0 31 3	0 32 0	...	
Other carriage and wagon fittings	0 18 9	0 25 0	0 24 3	0 20 0	0 21 9	
Cranes, accident	0 21 3	...	0 32 6	0 35 0	...	

Note.—Where rates are not quoted, it should be understood that articles of that description were not imported during the year.

CLASS E.

ROLLING STOCK.

(*a*).—LOCOMOTIVES.

(1).—Engines and spare parts.

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*a*)—LOCOMOTIVES; (1)—ENGINES AND SPARE PARTS.

5′ 6″ Gauge.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
57/186 — 10-4-96	Engines, locomotive, complete.	Vulcan Foundry Company, goods engines, with copper fire boxes and stays and brass tubes having six wheels all coupled, inside cylinders and inside frames, and separate tenders on six wheels as per general dimensions noted below: fitted with automatic brake complete.	*2,719	0	0	Each	Eastern Bengal ...	*Engine ... £2,197 Tender ... 522 = £2,719
		Engines.						
		Diameter of cylinder inside 1 foot 6 inches. Stroke of piston 2 feet 2 inches. Centre of cylinder to centre of driving axle 10 feet 7⅛ inches. Length of boiler barrel between tube plates 11 feet 4⅝ inches. Diameter of boiler barrel outside 4 feet 5 inches. Length of fire box casing outside 6 feet 6 inches. Width of fire box casing at bottom outside 4 feet 6 inches. Width of fire box casing at centre outside 4 feet 6 inches. Height of centre of boiler from rail 7 feet 10 inches. Number of tubes 222. Diameter of tubes outside 1¾ inches. Heating surface of tubes 1,157·61 square feet. Heating surface of fire box 124·49 square feet. Fire grate area 23 square feet. Working pressure of boiler per square inch 160lbs. Length of engine frames 27 feet 7⅝ inches. Thickness of engine frames 1 1/16 inch. Distance between engine frames 4 feet 9 inches. Diameter of coupled wheels on tread 5 feet 1½ inches. Distance between centres of leading to driving wheels 7 feet 9 inches. Centres of wheels, driving to trailing, 7 feet 9 inches. Total wheel base of engine 15 feet 6 inches. Height of buffers from rail, 3 feet 6 inches.						For set of duplicates to this engine see page 9, contract 57/186.

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*a*)—LOCOMOTIVES; (1)—ENGINES AND SPARE PARTS—*contd.*

5′ 6″ GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
57/186 — 10-4-96 ...		*Tenders.* *Number of wheels 6. Wheel base 12 feet 6 inches. Diameter of wheels on tread 3 feet 7½ inches. Distance between centres of journals 7 feet 3 inches. Thickness of frames ⅝ inch. Length of frames 19 feet 4⅜ inches. Distance between frames 6 feet 7½ inches. Capacity of tank, 2,500 gallons. Capacity for fuel, 235 cubic feet.*						
		Tank, Neilson & Co. Having eight wheels with a pain of radial wheels at each end, outside cylinders and inside frames, as per general dimension noted below: (fitted with the automatic vacuum brake complete).	3,745	0	0	Each	Mushkaf-Bolan.	
57/404 — 23-4-96 ...	Engines, locomotive, complete—*contd.*	*Engines.* *Diameter of cylinder inside 20 inches. Stroke of piston 2 feet 2 inches. Centre of cylinder to centre of driving axle 14 feet 11 inches. Length of boiler barrel between tube plates 13 feet 6 inches. Smallest diameter of boiler barrel inside 5 feet 3 inches. Length of fire box casing outside 7 feet 8 inches. Width of fire box casing at bottom outside 4 feet 10 inches. Height of centre of boiler from rail 8 feet. Diameter of tubes outside 2 inches. Heating surface of tubes 1,945 square feet. Heating surface of fire box 158 square feet. Fire grate area 28 square feet. Working pressure of boiler per square inch 180 lbs. Length of engine frames 38 feet. Thickness of engine frames 1 1/16 inches. Distance between engine frames 4 feet 11 inches. Diameter of coupled wheels on tread 4 feet 3 inches. Diameter of radial wheels on tread 3 feet 7 inches. Distance between front radial wheels and leading of coupled 8 feet. Distance between front of coupled and second of coupled 5 feet 3 inches. Distance between second of coupled and driving of coupled 5 feet 3 inches. Distance between driving of coupled and trailing of coupled 6 feet. Distance between trailing of coupled and radial wheels 7 feet. Total wheel base of engine 31 feet 6 inches. Height of buffers from rail 3 feet 6 inches. Capacity of tanks, 2,200 gallons and of bunkers 180 cubic feet.*						
		Goods, (Neilson and Company) having six wheels (all coupled) inside cylinders and inside frames, and separate tenders on six wheels as per general dimensions noted below: fitted with automatic vacuum brake complete.	*2,285	0	0	Each	Oudh and Rohilkhand ...	*Engine ... £1,855 Tender ... £ 430 = £2,285
57/438 — 24-4-96 ...	Engines, locomotive, complete—*contd.*	*Engines.* *Diameter of cylinder inside 1 foot 4 inches. Stroke of piston 2 feet. Centre of cylinder to centre of driving axle 9 feet 5 inches. Length of boiler barrel between tube plates 10 feet 5⅜ inches. Largest diameter of boiler barrel outside 4 feet 2 inches. Length of fire box casing outside 5 feet 2 inches. Width of fire box casing at bottom outside 4 feet 1½ inches. Height of centre of boiler from rail 6 feet 7 inches. Diameter of tubes outside 1¾ inches. Heating surface of tubes outside 906 square feet. Heating surface of fire box 94 square feet. Fire grate area 15·75 square feet. Working pressure of boiler per square inch 160 lbs. Length of engine frames 23 feet 2½ inches. Thickness of engine frames 1 inch. Distance between engine frames 4 feet 10 inches. Diameter of wheels on tread 4 feet 6¾ inches. Distance between centres of leading and driving wheels 7 feet 6 inches. Distance between centre of driving and trailing wheels 7 feet 10 inches. Total wheel base of engine 15 feet 4 inches. Height of buffers from rail 3 feet 6 inches.* *Tenders.* *Number of wheels 6. Wheel base 11 feet. Diameter of wheels on tread 3 feet 6½ inches. Thickness of main frames ¾ inch. Distance between centres of journals 6 feet 10 inches. Distance between main frames 6 feet 4 inches. Capacity of tank 1,800 gallons. Capacity for fuel 200 cubic feet.*						

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*a*)—LOCOMOTIVES; (1)—ENGINES AND SPARE PARTS—*contd.*

5′ 6″ Gauge.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
58/267 — 13-5-96 ...	Engines, locomotive, complete—*contd.*	Vulcan Foundry Company. Goods, with copper fire boxes and stays and brass tubes, having six wheels all coupled, inside cylinders and inside frames, and separate tenders on six wheels as per general dimensions noted below: fitted with automatic vacuum brake complete.	*2,580	0	0	Each	North-Western for working Delhi-Bhatinda-Samasatta Railway.	* Engine ... £ 2,086 Tender ... 494 = 2,580
		Engines. *Diameter of cylinder inside 1 foot 7 inches. Stroke of piston 2 feet 2 inches. Centre of cylinder to centre of driving axle 9 feet 11¾ inches. Length of boiler barrel between tube plates 12 feet 7 inches. Largest diameter of boiler barrel outside 4 feet 7 inches. Length of fire box casing outside 6 feet 3 inches. Width of fire box casing at bottom outside 4 feet 9¾ inches. Width of fire box casing at centre outside 4 feet 8 inches. Height of centre of boiler from rail 7 feet 6 inches. Number of tubes 194. Diameter of tubes outside 2 inches. Heating surface of tubes 1,280 square feet. Heating surface of fire box 105 square feet. Fire grate area 22·7 square feet. Working pressure of boiler per square inch 160 lbs. Length of engine frames 26 feet 9 inches. Thickness of engine frames 1⅛ inches. Distance between engine frames 4 feet 10½ inches. Diameter of coupled wheels on tread 4 feet 7 inches. Distance between centres of leading and driving wheels 7 feet 6 inches. Distance between centres of driving and trailing wheels, 7 feet. Total wheel base of engine 14 feet 6 inches. Height of buffers from rail, 3 feet 6 inches.*						
		Tenders. *Number of wheels 6. Wheel base 12 feet. Diameter of wheels on tread 3 feet 7 inches, Thickness of frames ⅞ inch. Length of frames 8 feet 9 inches. Distance between frames 6 feet 3¼ inches. Capacity of tank, 2,000 gallons.*						
59/335 — 25-6-96 ...	Engines, locomotive, complete—*contd.*	Passenger P. Calss (R. Stephenson & Co.,) having six wheels (four coupled) inside cylinders and inside frames, and separate tenders on six wheels as per general dimensions noted below: fitted with automatic vacuum brake complete.	2,645	0	0	Each	North-Western.	
		Engines. *Diameter of cylinder inside 1 feet 6 inches. Stroke of piston 2 feet. Centre of cylinder to centre of driving axle 9 feet 4⅜ inches. Length of boiler barrel between tube plates 10 feet 5⅛ inches. Largest diameter of boiler barrel outside 4 feet 4 inches. Length of fire box casing outside 5 feet 8 inches. Width of fire box casing at bottom outside 4 feet 8 inches. Width of fire box casing at centre outside 4 feet 5 inches. Height of centre of boiler from rail 7 feet. Number of tubes 227. Diameter of tubes outside 1¾ inches. Heating surface of tubes 1,097 square feet. Heating surface of fire box 107 square feet. Fire grate area 20·5 square feet. Working pressure of boiler per square inch 160 lbs. Length of engine frames 24 feet 10 inches. Thickness of engine frames 1½ inches. Distance between engine frames 4 feet 10 inches. Diameter of coupled wheels on tread 6 feet. Diameter of leading wheels on tread 4 feet 2 inches. Distance between centres of leading and driving wheels 7 feet. Distance between centres of driving and trailing wheels 8 feet 6 inches. Total wheel base of engine 15 feet 6 inches. Height of buffers from rail 3 feet 6 inches.*						
		Tenders. *Number of wheels 6. Wheel base 12 feet. Diameter of wheels on tread 3 feet 7 inches. Thickness of frames ⅞ inch. Length of frames 18 feet 9 inches. Distance between frames 6 feet 3¼ inches. Capacity of tank 2,000 gallons.*						

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*a*)—LOCOMOTIVES; (1)—ENGINES AND SPARE PARTS—*contd.*

5′ 6″ GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
60/246 & 62/295 — 15-7-96 ... 28-9-96 ...	Engines, locomotive, complete—*contd.*	(Kitson and Company.) Having six wheels (all coupled), inside cylinders and inside frames, and separate tenders on six wheels; as per general dimensions noted below: (fitted with a steam and a hand brake, so arranged as to permit of separate or combined action.) *Engines.* *Diameter of cylinder inside 1 foot 6 inches. Stroke of piston 2 feet 2 inches. Centre of cylinder to centre of driving axle 9 feet 10½ inches. Length of boiler barrel 10 feet 6 inches. Largest diameter of boiler barrel outside 4 feet 6 inches. Length of fire box casing outside 5 feet 6 inches. Width of fire box casing at bottom outside 4 feet 7 inches. Height of centre of boiler from rail 7 feet. Number of tubes 218. Diameter of tubes outside 1¾ inches. Heating surface of tubes outside 1,087 square feet. Heating surface of fire box 104 square feet. Fire grate area 20 square feet. Working pressure of boiler per square inch 160 lbs. Length of engine frames 25 feet 1 inch. Thickness of engine frames 1 1/16 inches. Distance between engine frames 4 feet 11½ inches. Diameter of coupled wheels on tread 4 feet 6¾ inches. Distance between centres of leading and driving wheels 7 feet 3 inches. Distance between centres of driving and trailing wheels 8 feet. Total wheel base of engine 15 feet 3 inches. Height of buffers from rail 3 feet 6¾ inches.*	*2,475	0	0	Each	Bezwada-Madras ...	* Engine ... £1,970, Contt. No. 60/246 Tender ... £ 505 „ No. 62/295 = £2,475
62/290 — 28-9-96 ...		Manning Wardle & Co. Side Tank engine carried on four wheels. All coupled together, outside cylinders and axle journals to be to the inside of the wheels. General dimensions noted below. *Engine.* *Diameter of cylinders 1 foot. Length of stroke 1 foot 10 inches. Diameter of wheels 3 feet 6 inches. Length of wheel-base 6 feet. Capacity of water tank 600 gallons. Heating surface in fire box 41 square feet. Heating surface in the tubes 359 square feet. Grate area 7¼ square feet.*	1,340	0	0	Each	Umaria Colliery ...	The engine weights about 18 tons.
65/267 — 30-12-96 ...	Engines, locomotive, complete—*contd.*	(Sharp Steward & Co.) Having six wheels (4 coupled), inside cylinders and inside frames, and separate tenders on six wheels; as per general dimensions noted below; (fitted with the automatic vacuum brake complete.) *Engines.* *Diameter of cylinder inside 17½ inches. Stroke of piston 2 feet 2 inches. Centre of cylinder to centre of driving axle 9 feet 6 inches. Length of boiler barrel between tube plates 10 feet 5½ inches. Diameter of boiler barrel outside 4 feet 4 inches. Length of fire box casing outside 5 feet 9 inches. Width of fire box casing at bottom outside 4 feet 9½ inches. Number of tubes 239. Diameter of tubes 1¾ inches. Heating surface of tubes 1,161 square feet. Heating surface of fire box 105 square feet. Fire grate area 22 square feet. Working pressure of boiler per square inch 160 lbs. Length of engine frames 25 feet 2 inches. Thickness of engine frames 1 1/16 inches. Distance between engine frames 4 feet 11 inches. Diameter of coupled wheels on tread 6 feet 6 inches. Diameter of leading wheels on tread 4 feet. Distance between centres of leading and driving wheels 7 feet 5 inches. Distance between centres of driving and trailing wheels 8 feet 4 inches. Total wheel base of engine 15 feet 9 inches. Height of buffers from rail 3 feet 6 inches. Height of centre of boiler from rails 7 feet 6 inches.* *Tenders.* *Number of wheels 6. Wheel base 11 feet. Diameter of wheels on tread 3 feet 6¼ inches. Distance of wheels leading to middle 5 feet 6 inches. Distance of wheels middle to trailing 5 feet 6 inches. Distance between centre of journals 6 feet 10 inches. Thickness of frames 1/16 inch. Length of frames 18 feet. Distance between main frames 6 feet 3⅜ inches. Capacity of tank 2,250 gallons. Capacity for fuel 200 cubic feet.*	*2,840	0	0	Each	Rae Bareli-Benares ...	* Engine ... £2,320 Tender ... £ 520 = £2,840

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*a*)—LOCOMOTIVES; (1)—ENGINES AND SPARE PARTS—*contd.*

5′ 6″ GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
57/405 23-4-96 ...	Axles ...	Driving and trailing for H. class engines	10	16	6	Each	Eastern Bengal.	
		Steel, engine, crank, for compound twin engine ...	89	0	0	„	North-Western.	
60/170 10-7-96 ...		„ engine, crank, for P. class engines	117	6	0	„	Ditto.	
		„ Tender, H. B. class engines	8	6	6	„	Ditto.	
57/405 23-4-96 ...		„ „ 9″ × 5″ journal, for L. class engines ...	9	18	0	„		
58/414 19-5-96 ...	Boilers ...	Steel, locomotive, for J. class engines, with smoke box, chimney, domes, tubes, steam pipe and all the parts and fittings complete	740	0	0	Each	North-Western.	
		Steel, locomotive, for heavy L. class engines, with smoke box, chimney, dome, regulator steam pipe, regulator handle and valve, tubes, wash out plugs and doors, and all fittings and mountings complete	755	0	0	„	Ditto.	
		Steel, locomotive, H. class type, for B. class engines, complete with all parts and fittings	780	0	0	„	Eastern Bengal.	
58/414 19-5-96 ...	Bogie ...	Complete, for H. class engine, with beams slide springs, and all fittings, with the exception of wheels, axle, and axle-boxes.	80	0	0	Each	Eastern Bengal.	
58/414 19-5-96 ...	Bogie, centre ...	Cast steel, turned and finished with liners complete ...	5	0	0	Each	Eastern Bengal.	
58/414 19-5-96 ...	Buffers ...	Intermediate, complete with shoes for H., H. B. and L. class engines	0	13	4	Each	North-Western.	
		With plungers and springs complete for H. class engines ...	3	10	0	„	Eastern Bengal.	
58/414 19-5-96 ...	Cocks ...	For pressure gauges, H. and H. B. class, with plug handle and nuts complete	0	6	8	Each	North-Western.	
		For pressure gauges, L. class, with plug handle, nuts, and seating complete	0	13	4	„		
		Steam, injector, with spindle, right and left hand, H. B. class, with all nuts and seatings complete	4	0	0	„		
58/414 19-5-96 ...	Cylinders ...	For D. class engines, 18 inches diameter, 26 inches stroke, with glands, bushes, cylinder cocks, valves, valve spindles, pistons, piston rods, back and front, steam chest covers, and all studs and nuts complete	105	0	0	Pair	Eastern Bengal.	
		For H. class engines, with glands, bushes, cylinder cocks, valves, valve spindles, pistons, piston rods, back and front steam chest covers, with all studs and nuts complete ...	95	0	0	„		
57/186 10-4-96 ...	Engines, locomotive, spare parts of— Duplicates ...	One set as follows :— Two trailing, two driving, and two leading engine wheels, fitted with axles, tyres, crank pins, &c., complete, ready for use. Two leading, two centre and two trailing tender wheels, fitted with axles and tyres complete, ready for use. One set of engine springs, consisting of two leading springs with buckles, two pairs of driving springs and two trailing springs with buckles	590	0	0	Set	Eastern Bengal.	

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*a*)—LOCOMOTIVES; (1)—ENGINES AND SPARE PARTS—*contd.*

5′ 6″ GUAGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
57/438 24-1-96	Engines, locomotive, spare parts of— Duplicates	One set as follows:— Two pistons, with rings, piston rods, cross heads, slide blocks, nuts and cotters. Four top and four bottom slide bars. Two valve spindles. Link motions complete for one engine with reversing shaft, quadrants, links, eccentric pulleys, eccentric rods and straps, cast steel motion plate, &c. Two connecting and four coupling rods with bushes, straps, cotters, &c. Two copper tube plates, flanged and machined on the edges, but without any holes bored. One steel smoke-box, tube plate, flanged and machined as the tube plates. Two spare combination injectors. Four leading, four trailing and four driving engine springs. Four leading, four centre, and four trailing tender springs. Two engine leading, two driving and two trailing wheels complete fitted with tyres, axles, crank pins, set bolts and nuts. Six tender wheels complete, fitted with tyres, axles, set bolts, &c. Two leading, two driving and two trailing engine axle boxes complete with bearings and keeps. Two leading, two centre, and two trailing tender axle boxes with gun-metal bearings. One set of diagram apparatus for Crosby's indicator.	930	0	0	Set	Oudh and Rohilkhand.	

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65/267	30-12-96	Engines, locomotive, spare parts of— Duplicates ...	One set as follows:— Two pistons with rings, piston rods, cross heads, slide blocks, nuts and cotters. Four top and four bottom slide bars. Two valve spindles. Link motion complete for one engine, with reversing shaft, quadrants, lints eccentric pulleys, eccentric rods and straps, cast-steel motion plate, &c. Two connecting and two coupling rods with bushes, straps, cotters, &c. One copper tube plate, flanged and machined on the edges but without any holes bored. One steel smoke-box tube plate, flanged and machined on the edges but without any holes bored. Two spare combination injectors of the same design as those for the engines. Four leading, four trailing and four driving engine springs. Four leading, four centre and four trailing tender springs. Two engine leading, two driving and two trailing wheels complete, fitted with tyres, axles, crank pins, eccentric, set bolts, and all nuts and cotters. (The tube of Vicker's or Taylor's make.) Six tender wheels complete fitted with tyres, axles, set bolts, &c. Two leading, two driving and two trailing engine axle boxes complete with keeps. Two leading, two centre and two trailing tender axle boxes with gun-metal bearings.	1,012	0	0	Set	Rae Bareili-Benares.	

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CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*a*)—LOCOMOTIVES (1)—ENGINES AND SPARE PARTS—*contd.*

5′ 6″ GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
58/414 19-5-96	Eccentric rods	For heavy L. class engines	2	0	0	Each	North-Western.	
58/414 19-5-96	Eccentric straps	Wrought iron, L. class, with cast iron rings and all bolts, studs and lubricator complete	10	0	0	Set of four	North-Western.	
58/414 19-5-96	Gauges, pressure	200 lbs. Bourdon's, patent metal face, not enamelled, dial 7 inches diameter	2	5	0	Each.	North-Western.	
58/194 9-5-96	Glasses, gauge	Plain 12″ × 5/8″ outside diameter	0	3	0	Doz	North-Western.	
		„ 14″ × 5/8″ „	0	3	6			
59/317 25-6-96		„ 16″ × 5/8″ „	0	4	0			
		„ 4″ × 3/4″ for sight feed lubricators	0	2	3			
57/359 22-4-96		„ 10½″ × 5/8″ external diameter	0	2	7½	„	Eastern Bengal.	
		„ 11½″ × 5/8″ „	0	8	10½	„		

58/414 19-5-96	Injectors	Gresham and Craven's, self acting re-starting gun metal with cones, right hand No. 8	8	0	0	Each	North-Western.	
		Gresham and Craven's, self acting re-starting gun-metal with cones, left hand No. 8	8	0	0	„		
		Combination. Gresham and Craven's make for locomotives, left hand side 8 M. M.	13	0	0	„	Eastern Bengal.	
		Gresham's patent for pumping engine, 3 M. M.	5	0	0	„		
		Combination for D. class engines	15	0	0	„		
		Gun-metal, with cones, left hand, size No. 8 M. M. for F. class engines Nos. 146 to 155	10	0	0	„	Oudh and Rohilkhand.	
		Gun-metal, with cones, right hand, size No. 9 M. M. for F. class engines Nos. 146 to 155	10	16	8	„		
60/120 6-7-96		Gun-metal, Holden and Brooke's, size No. 8, right hand, for C. and D. class engines	11	11	0	„		
		Gun-metal, Holden and Brooke's, size No. 8, left hand, for C. and D class engines	11	11	0	„		
58/414 19-5-96	Lubricators	"Sight-feed," for mineral oil, Vacuum Oil Company's, latest improved pattern	5	0	0	Each	North-Western.	
		"Sight-feed," "Parel" new improved pattern for D. class engines	10	0	0	„	Eastern Bengal.	
		"Sight-feed," locomotive, with cylinder oilers, the "Parel"	4	10	0	„		
		"Sight-feed," "Michigan," pint size, for E class engines	8	0	0	„	Oudh and Rohilkhand.	
62/259 23-9-96		Automatic, sight feed, 1 pint size	5	0	0	„	North-Western.	
58/414 19-5-96	Piston, cross heads	With gun metal liners, bolts, and oil box with cover, complete for L. class engines	14	0	0	Each	North-Western.	

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*a*)—LOCOMOTIVES; (1)—ENGINES AND SPARE PARTS—*contd.*

5′ 6″ Gauge.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate - Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
58/63 5-5-96	Plates, copper ...	Fire box, back, flanged, for heavy L class engines ...	14	7	10	Each	North-Western.	
		,, ,, ,, ,, P. ,, ...	15	19	4	,,		
		,, ,, ,, ,, B. ,, ...	15	11	10	,,	Eastern Bengal.	
		,, ,, B. class engines Nos. 7 to 30	9	8	2	,,	Oudh and Rohilkhand.	
		,, Crown 4′ × 4′ × ½″ for B. class engines ...	10	9	3	,,	Eastern Bengal.	
		,, tube flanged, for B. class engines	21	18	5	,,	Do.	
		,, ,, ,, ,, H. ,, ...	12	2	9	,,		
		,, ,, ,, ,, H. B. ,, ...	21	10	9	,,		
		,, ,, ,, ,, L. ,, ...	27	13	4	,,		
		,, ,, ,, for heavy L. class engines ...	28	19	3	,,		
60/135 8-7-96		,, ,, ,, ,, ,, ,, ,, ...	30	0	0	,,	North-Western.	
		,, ,, ,, ,, P. ,, ,, ...	23	5	6	,,		
		,, unflanged, 6′ 6″ × 5′ 6″ × ⅜″ and ½″ ...	33	0	0	,,		
58/63 5-5-96		,, ,, 15′ 4″ × 5′ 6″ × ½″ for side and crown plates	56	18	6	,,		
58/414 19-5-96	Plates, steel ...	Buffer beam, 9′ 6″ × 1′ 9¼″ × 1¼″ machined on edges, for heavy L. class engines	4	10	0	Each		
		Frame, machined on sides and slotted, for H. class engines	16	0	0	,,		
		Fire box, back, flanged and machined on edges, K. S. class	7	0	0	,,	North-Western.	
		,, ,, ,, ,, ,, ,, P. class ...	8	0	0	,,		* Without holes.
		*,, front, flanged and machined on edges, but no holes drilled for K. S. class	6	13	4	,,		
		Fire box, flanged, machined on edges and fire hole door cut, for D. and E. class boilers	7	0	0	,,	Oudh and Rohilkhand.	
		Smoke box, tube, flanged, and machined on edges, for engines, B. class, Nos. 61 to 76	7	10	0	,,		
		Smoke box, tube, flanged, machined on edges, but no holes drilled, for H. B. class engines	9	0	0	,,		
		Smoke box, tube, flanged and machined on edges for K. S. class engines	10	0	0	,,	North-Western.	
		Smoke box, tube, flanged and machined on edges, but no holes drilled for L. class engines	10	0	0	,,		
64/78 5-11-96		Smoke box, tube, for B. class boilers H. class type ...	8	6	8	,,	Eastern Bengal.	
58/414 19-5-96	Quadrants ...	For heavy L. class engines	6	13	4	Each	North Western.	
58/361 16-5-96	Rings ...	India rubber $\frac{9}{16}$″ hole, $\frac{3}{16}$″ thick for gauge glasses ...	0	1	$8\frac{3}{4}$	Per 100	North Western.	
58/370 16-5-96		India rubber to suit gauge glasses of ⅝″ diameter ...	0	4	0	Gross	Eastern Bengal.	

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*a*)—LOCOMOTIVES; (1)—ENGINES AND SPARE PARTS—*contd.*

5′ 6″ GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
56/312, 23-3-96	Springs ...	Bearing for driving wheels, B. class engines	4	1	10	Each	Eastern Bengal.	
		„ for trailing „ „ „	10	15	4	„		
		„ for intermediate wheels, H. class engines ...	3	14	5	„		
64/80, 5-11-96		„ laminated for D. class engines—						
		„ Tender	2	19	0	„		
		„ Trailing	5	4	0	„		
57/403, 23-4-96		Bearing, L. class engines—						
		Driving, leading and trailing	3	8	6	„	North-Western.	
58/245, 12-5-96		Volute, engine and tender buffer for A. and B. class engines	0	6	7	„	Eastern Bengal.	
		„ „ „ for H. class engines ...	0	3	2½	„		
		„ for tender draw hooks, for A. and B. class engines	0	6	5	„		
64/79, 5-1-196		Spiral, driving for D. class engines	0	11	3	„		

57/505, 29-4-96	Tubes ...	*Boiler, brass—* 12′ 3½″ × 2″ × 11 and 12 S. W. G., Q. class					North-Western.	100 tubes = 2,986½ lbs.
		11′ 9″ × 1⅝″ × 13 S. W. G. at one end and 11 S. W. G. at the other.					Eastern Bengal.	100 tubes = 2,366 lbs.
62/314, 30-9-96		11′ 8″ × 1¾″ × 11 and 12 S. W. G. } L. class ...	0	0	6 3/16	lb.	North-Western.	100 tubes = 2,461 lbs.
		11′ 8″ × 1¾″ × 11 and 12 „ }						100 tubes = 2,461 lbs.
		11′ 7″ × 1⅝″ external diameter reduced to 1½″ for 2½″ at firebox end, 11 and 12 S. W. G., for D. class.					Eastern Bengal.	100 tubes = 2,443½ lbs.
57/605, 29-4-96		10′ 10″ × 2¼″ × 11 and 12 S. W. G., K. S. class..					North-Western.	100 tubes = 2,982 lbs.
		10′ 9″ × 1⅝″ × 11 and 12 „ P. class ...					.....	100 tubes = 2,441 lbs.
		10′ 8½″ × 2″ × 11 B. W. G.	...	...	6 3/16	lb.		100 tubes = 2,720 lbs.
		10′ 8½″ × 1⅛″ expanded for 6″ at thinnest end to 2″ external diameter.					Oudh and Rohilkhand.	100 tubes = 2,431 lbs.
		10′ 3″ × 1⅝″ × 11 and 12 S. W. G., for H. and H. B. class.					North-Western.	100 tubes = 2,163½ lbs.
58/332, 16-5-96		*Boiler, mild steel—* 10′ 6″ long × 1⅝″ outside diameter × 12 B. W. G.	0	3	8	Each about	Eastern Bengal.	
57/353 & 57/356, 21-4-96	Tyres ...	*Engines, steels—* Bogie wheels, H. class	3	17	7	Each	Eastern Bengal.	
		Bogie „ „	3	16	3	„		
57/348, 21-4-96		Driving and leading wheels, K. S. class ...	6	16	6	„	North-Western.	
57/353 & 57/356, 21-4-96		„ leading and trailing wheels, B. class, Nos. 7—90	6	17	3	„	Oudh and Rohilkhand.	
		„ „ „ „ „ „	6	15	0	„		

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*a*)—LOCOMOTIVES; (1)—ENGINES AND SPARE PARTS—*contd.*

5′ 6″ GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
		Engine steel—contd.						
		Driving, leading and trailing wheels, C. class ...	9	2	6	Each	Eastern Bengal.	
		,, ,, ,, ,, ,, ...	8	19	3	,,		
		,, and trailing wheels, D. and E. class, Nos. 12—45	11	14	6	,,	Oudh and Rohilkhand.	
		,, ,, ,, ,, ,,	11	10	8	,,		
		,, and trailing wheels, H. class	8	4	4	,,		
57/353 & 57/356	21-4-96	Tyres—*contd.* ... ,, ,, ...	8	1	6	,,	Eastern Bengal.	
		Leading wheels, A. and B. class	6	8	7	,,		
		,, ,, ,, ...	6	6	4	,,		
		Tender steel—						
		Tender wheels, A. B. and C. class	6	9	9	,,	Eastern Bengal.	
		,, ,, ,, ,, ...	6	7	6	,,		
		,, wheels, B. class, Nos. 7—90	5	13	0	,,	Oudh and Rohilkhand.	
		,, ,, ,, ,, ...	5	11	3	,,		
		,, wheels, H. class	5	8	8	,,	Eastern Bengal.	
		,, ,, ,, ...	5	6	7	,,		
57/348	21-4-96	,, 3′ 2″ inside diameter, K. S. class ...	4	0	6	,,	North-Western.	

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*a*)—LOCOMOTIVES; (1)—ENGINES AND SPARE PARTS—*contd.*

METRE GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
		Engine steel—						
56/453	31-3-96	Driving, Leading, Trailing } F. class	21	0	0	Total	Burma.	
59/83	10-6-96	Steel, tender, for all classes	3	19	9	Each	Do.	
56/453	31-3-96	Axle boxes ... Driving, leading and trailing, complete, for F. class engines	36	0	0	Set	Burma.	
58/414	19-5-96	Boilers ... Steel. for new F. class engines, with domes, internal steam pipe, regulators, regulator handles, valves, tubes, smoke boxes, smoke box doors, chimneys, fire bars with bearers, clothing plates, and with all wash out plugs, doors, and mountings complete	590	0	0	Each	Eastern Bengal.	
		Ditto for old F. class engines ...	505	0	0	,,		
		Steel, for E. class engines, with domes, internal steam pipes, regulators, regulator handles, valves, tubes, smoke boxes, smoke box doors, chimneys, fire bars with bearers, clothing plates, and with all wash out plugs, doors, and mountings, complete	465	0	0	Each	Eastern Bengal.	
62/154	10-9-96	Bolts ... Iron, for panel plates, 1″ × ⅜″ with hexagonal nuts ...	0	17	6	Gross	Burma.	
		Iron, snap headed, with slot and hexagonal nuts 1″ × ⅜″ ...	0	5	9	,,		

METRE GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
58/414 19-5-96	Buffers ...	Buffers, with hooks, springs, bolts and nuts, complete, for O. class engine	10	13	4	Each	Eastern Bengal.	
59/120 12-6-96		Flexible, with hooks and duplex screw couplings for engines and tenders	9	10	0	„	Burma.	
56/453 31-3-96	Cocks ...	Blower, F. class	1	3	4	Each	Burma.	
57/235 14-4-96		Blow off, parallel, slide, Hopkinson's patent, for Boiler barrel, F. class	2	5	0	„		
		Blow off, parallel, slide, Hopkinson's patent, for fire box side, F. class	2	5	0	„		
62/111 8-9-96		Gauge column, complete, with protector shields, for F. and O. class engines, Hopkinson's latest patent, absolute safety	*4	1	6	Set		* *Each set to comprise one top and one bottom cock, with protector shields, complete.*
63/62 7-10-96		Gauge column, right hand } F. class, Hopkinson's absolute, safety.	3	5	6	„	Burma.	*Each set to comprise one top and one bottom cock.*
		„ „ left hand }						
56/453 31-3-96		Injector, steam, F. class, right and left hand... ...	3	6	8	Each		
		Scum, for F. and O. class engines	1	8	4	„		
56/453 31-3-96		Whistle, F. class	1	3	4	„		
56/453 31-3-96	Cranks ...	Steel driving ... ... } „ leading ... ... } „ trailing ... ... }	40	0	0	Total	Burma.	
56 31-3-96	Eccentric rods ...	Fore gear, right hand } F. class engines	1	5	0	Each	Burma.	
		Fore gear, left hand }						
62/209 17-9-96		Fore gear, right hand } F. class engines ...	2	15	0	„		
		Fore gear, left hand }	2	15	0	„		
56/453 31-3-96	Eccentric straps and sheaves.	Complete for one engine, F. class	10	0	0	Set	Burma.	
56/447 31-3-96	Ferrules ...	Steel, for boiler tubes, with a taper of 1 in 20 ...	5	0	0	Per 1,000	Burma	Assorted sizes.
57/56 2-4-96	Glasses, gauge ...	*Plain*— 3″ × ¾″	0	2	3	Doz.	Burma.	
57/359 22-4-96		3½″ × 1″	0	3	9	„	Eastern Bengal.	
57/56 2-4-96		4″ × ¾″	0	2	3	„	Burma.	
		8¾″ × ⅝″	0	2	4½	„		
57/359 22-4-96		8½″ × ⅝″	0	2	1½	„	Eastern Bengal.	
		9½″ × ⅝″	0	2	4½	„		
		18″ × ¾″	0	5	7½	„		
61/421 31-8-96	Glasses, spectacle ...	British, polished, plate, clear 1′ 1⅝″ diameter × 1/16″ thick } „ „ „ 1′ 1½″ „ × 1/16″ „ }	0	1	5¾	Each	Burma.	
62/209 17-9-96	Injectors ...	Complete, Gresham and Craven's re-starting to suit F. class engines— Right hand, 7 M. M.	5	16	8	Each	Burma.	
		Left hand, 5 M. M.	5	16	8	„		
56/449 31-3-96		*Spare parts*— No. 5 M. M. valves and cones, complete, for Gresham and Craven's No. 7 M. M. re-starting injector, required for altering No. 7 M. M. injectors to No. 5 M. M. shells and caps not required.	2	2	0	Set		

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*a*)—LOCOMOTIVES; (1) ENGINES AND SPARE PARTS—*contd.*

METRE GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
		Expansion, with die and lifting pin, complete, O. class—						
62/209 17-9-96	Links ...	Right hand	8	10	0	Each	Burma.	
		Left hand	8	10	0	„		
58/414 19-5-96	Lubricators ...	Sight-feed, one pint, the "Parel"	8	0	0	Each	Eastern Bengal.	
		Taper, split, steel—						
57/169 9-4-96	Pins ...	$2\frac{3}{4}''$ × $\frac{1}{4}''$, bright	0	5	3	Gross	Burma.	
62/154 10-9-96		$2\frac{3}{4}''$ × $\frac{1}{4}''$ „	0	7	0	„		
57/169 9-4-96		4″ × $\frac{7}{16}''$ „	0	13	0	„		
62/154 10-9-96		4″ × $\frac{7}{16}''$ „	0	14	0	„		
		Split, bright—						
57/169 9-4-96	Pins—*contd.* ...	3″ × $\frac{1}{4}''$	0	1	4	Gross	Burma.	
		3″ × $\frac{1}{4}''$	0	1	4	„		
62/154 10-9-96		$2\frac{1}{2}''$ × $\frac{5}{16}''$	0	0	8	„		
		$1\frac{1}{2}'$ × $\frac{3}{16}''$	0	0	$6\frac{1}{2}$	„		
		$1\frac{1}{2}''$ × $\frac{1}{8}''$	0	0	$4\frac{1}{2}$	„		
		$1\frac{1}{4}''$ × $\frac{1}{8}''$	0	0	4	„		
		Smoke-box, front, for new F. class engines, finished, ready to go in place, but without rivet holes	7	10	0	Each	Eastern Bengal.	
		Smoke-box, front, for O. class engines, finished, ready to go in place, without rivet holes	7	10	0	„		
		Steel, smoke-box, front, for engines, Nos. 1 to 4, finished...	1	10	0	„	Kaunia-Dharlla ...	2′ 6″ gauge.
58/414 19-5-96		Steel, smoke-box door, for engines, Nos. 1 to 4, dished and finished to sizes shown	1	13	4	„		
		Iron smoke-box, door, for new F. class engines, dished and finished, to form shown, but no holes drilled ...	1	10	0	„	Eastern Bengal.	
	Plates ...	Iron smoke-box, door, for O. class engines, dished and finished, to form shown, but no holes drilled ...	1	10	0	„		
		Steel, tube, front, for old F. class engines, flanged, machined on edges, but no holes drilled	8	0	0	„	Eastern Bengal.	
		Steel, tube, front, for new F. class engines, flanged, machined on edges, but no holes drilled	8	10	0	„		
		Steel, tube, front, for O. class engines, flanged, machined on edges, but no holes drilled	8	0	0	„		
		Steel tube, front, for engines, Nos. 1 to 4, flanged, machined to sizes shown	4	10	0	„	Kaunia-Dharlla ...	2′ 6″ gauge.
62/209 17-9-96		Steel, boiler, throat, F. class	8	10	0	„	Burma.	
58/414 19-5-96	Quadrant ...	And cog, for Bourdon's patent, pressure gauge ...	0	16	8	Each	Eastern Bengal.	

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*a*)—LOCOMOTIVES; (1)—ENGINES AND SPARE PARTS—*contd.*

METRE GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
58/370 16-5-96	Rings ...	India rubber $\frac{3}{4}$" for gauge glasses	11	4	8	Gross	Eastern Bengal.	
59/2 1-6-96		" " $\frac{5}{8}$" " " "	0	4	0	"	Burma.	
58/371 16-5-96		" " thick " or round section $\frac{1}{16}$" Diameter of hole $\frac{3}{16}$"	1	5	0	Per 1000	Eastern Bengal.	
59/120 12-6-96	Rods ...	Valve, connecting with guides, bolts and nuts, complete—						
		" " " " E. class, right hand ...	4	4	2	Each	Burma.	
		" " " " left hand	4	4	2	"		
		" " " " F. class, right hand ...	7	2	6	"		
		" " " " left hand	7	2	6	"		
		Eccentric, E. class, complete, with fork end, pins and butt end bolts	12	5	0	Set of 4		
56/453 31-3-96		Connecting with brasses, complete, right hand, for F. class engine	8	0	0	Each	Burma.	
		Connecting with brasses, complete, left hand, for F. class engines, Rickie's crosshead pin	8	0	0	"		
62/154 10-9-96	Screws ...	Iron, snapheaded with slot $\frac{3}{4}$" × $\frac{3}{8}$", for engine, lagging plates	0	4	0	Gross	Burma.	
		Steel set, for spring, hanger, hexagon head	2	2	6	"		
59/120 12-6-96	Shafts ...	Reversing with carriers, complete, E. class	11	0	0	Each	Burma.	
62/209 17-9-96		" " " " "	10	0	0	"		
57/169 9-4-96	Studs ...	Clack box, for A. E. F. and O. class engines ...	0	10	0	Per 100	Burma.	
62/154 10-9-96		Clack box, 2" × $\frac{5}{8}$" for A. E. F. and O. class engines ...	0	15	6	Gross		
		Cylinder and horn stay, for E. F. and O. class engines ...	1	0	0	Per 100		
75/169 10-9-96		" " " $3\frac{1}{2}$" × $\frac{7}{8}$", for E. F. and O. class engines	1	17	6	Gross		
62/154 10-9-96		Steam chest 3" × $\frac{3}{4}$", for A. E. F. and O. class engines ...	1	5	0	"		
57/169 9-4-96		Steam chest, for A. E. F. and O. class engines ...	0	15	0	Per 100		
57/505 29-4-96	Tubes ...	*Brass boiler—* 9′ 9$\frac{1}{2}$" long × 1$\frac{5}{8}$" external diameter × 12 and 14 S. W. G., for new F. class engines.	0	0	$6\frac{3}{16}$	lb.	Eastern Bengal.	100 tubes = 1,626 lbs.
		8′ 4" long, 1$\frac{5}{8}$" external diameter × 12 and 14 S. W. G. for E. class engines.						100 tubes = 1,387 lbs.
		8′ 2" × 1$\frac{3}{8}$" outside diameter × $\frac{1}{16}$" thick, for engines 1 to 4	0	0	$6\frac{3}{16}$	lb.	Kaunia-Dharla.	100 tubes = 800 lbs. 2′ 6" gauge.
		Steel boiler—						
62/232 21-9-96		8′ 6" × 1$\frac{1}{2}$" outside diameter × 12 S. W. G., thick for A. class engines	0	0	$3\frac{5}{8}$	lb.	Burma.	
		7′ 7" × 2$\frac{3}{4}$" outside diameter 12 S. W. G. thick for portable boilers.	0	0	$5\frac{7}{8}$	"		
		7′ 7" × 2$\frac{1}{4}$" " " " " " "	0	0	$5\frac{3}{8}$	"		
58/414 19-5-96		For Bourdons pressure gauge	0	11	1	Each	Eastern Bengal.	

METRE GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
54/21 3-1-96 ...	Tyres ...	Steel bogie	1	11	8	Each	Jorhat.	
		Steel leading and driving	1	16	9	„		
		„ „ „ „ for new F. class engines ...	3	17	4	„	Eastern Bengal and Burma.	
57/354 21-4-96 ...		„ „ „ „ „ „ E. class engines ...	3	11	10	„	Eastern Bengal.	
		Steel leading and driving wheels, for O. class engines, thickness on tread 2 1/8" and internal diameter 3' 11 5/8" ...	5	4	3	Each	Eastern Bengal.	
		Steel tender wheels, for E. class engines	2	8	1	„		
59/179 16-6-96 ...		„ „ „ E. and F. class engines	1	16	9	„	Burma.	
57/354 21-4-96 ...		„ „ „ for O. „ „	2	9	11	„	Eastern Bengal.	
		„ „ „ „ O. „ „ and bogie ...	2	1	0	„	Burma.	
59/179 16-6-96 ...		Gluts steel, for tyers	0	1	6	„		
62/209 17-9-96 ...	Valves ...	Steam brake, complete, with unions, for F. and O. class boilers	2	11	8	Each	Burma.	
59/120 12-6-96 ...		Ditto ditto ditto	3	8	4	„		
56/491 31-3-96 ...		Sanding, steam, Grisham and Holt's patent, for steam sanding gear cocks.	3	10	0	„		
58/414 19-5-96 ...	Wheels and axles ...	With tyres, for tenders of E. class engines ...	54	0	0	Set or 3 pairs	Eastern Bengal.	

CLASS E.

ROLLING STOCK.

(*a*).—LOCOMOTIVES.

(2).—Vacuum Automatic Brake gear and rigging.

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*a*)—LOCOMOTIVES; (2)—VACUUM AUTOMATIC BRAKE GEAR AND RIGGING.

5′ 6″ GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
		Complete sets—						
64/295 — 14-11-96		For locomotive engines and tenders, complete in every respect with all fittings and brake rigging as supplied under contract $\frac{4^{0}}{5^{1}5}$ together with one spare hose and coupling pipe and 10 feet of 2″ main train piping, *vide* appendix A ...	129	6	2	Set	Oudh and Rohilkhand.	
		Spare parts of :—						
		Balls for drip trap or ball valve brass	0	1	0	Each	North-Western.	
54/135 — 17-1-96	Vacuum automatic brake gear and rigging.	Ball valves, double branched, without diaphragm (brass) A	2	2	0	„		
		Ball valves, double branched, without diaphragm (brass) B	2	2	0	„		
		Combination ejectors brass complete	19	0	0	„		
54/134 — 17-1-96		Coupling washers (rubber), 2″	0	2	6	Doz.		
		„ „ „ 1″	0	0	10	„		
64/416 — 30-11-96		„ „ „ 2″	0	2	7	„		

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*a*)—LOCOMOTIVES; (2)—VACUUM AUTOMATIC BRAKE GEAR AND RIGGING—*contd.*

METRE GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
		Spare parts of—contd.						
54/135 17-1-96		Cylinder for engines and tenders without chamber, complete, with ball valve (*a*) piston and rod, &c. (cast iron brass fittings)	13	10	0	Each		
		Drip trap, complete, (cast iron) with brass valve and seat ...	0	11	6	„		
		Hose pipes.						
		½″ × ¾″ × 18″	0	2	2	„		
		1″ × 18″	0	2	10	„		
64/416 30-11-96	Vacuum automatic brake gear and rigging—*contd.*	2″ × 18″	0	3	9	„	North-Western.	
		2″ × 27″	0	5	0	„		
		Joint insertion for ball valve to cylinder, oval ...	1	4	0	100		
54/134 17-1-96		„ rings for engine, for ball valve, covers	0	0	9	Doz.		
64/416 30-11-93		„ rings, rubber, 21″	0	3	9	„		
54/134 17-1-96		Packing rings, for piston rod, rubber	1	9	0	Per 100		

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*a*)—LOCOMOTIVE; (2)—VACUUM AUTOMATIC BRAKE GEAR AND RIGGING.—*concld.*

5′ 6″ GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
64/416 30-11-96	Vacuum automatic brake gear and rigging—*concld.*	Packing rings, for piston rod, rubber	1	3	6	Per 10	North-Western.	
54/168 18-1-96		Pipes copper exhaust, through boiler barrel, 2½″ bent ...	0	0	7½	lb.		
54/135 17-1-96		Piston rod, (w. i. cased, brass)	1	1	0	Each		
54/416 30-11-96		Rolling rings rubber 2″	1	3	6	Doz.		
		Seating, for clappet valves, rubber	0	1	2	„		
		Universal coupling (c. i.) 2″	0	4	0	Each		
54/135 17-1-96		Valves, steam, brass	3	3	0	„		
		Washers, grover, spring	0	0	8	„		

CLASS E.

ROLLING STOCK.

(*b*).—COACHING AND GOODS STOCK.

(1).—Complete Ironwork for Vehicles.

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*b*)—COACHING AND GOODS STOCK; (1)—COMPLETE IRONWORK FOR VEHICLES.

5′ 6″ GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
		Coaching stock—						
54/30 8-1-96	Brake Vans ...	Underframe, underframe and body steel and ironwork, roofing, lavatory, metallic fittings, and panel pins for one brake van complete, 19 feet 3 inches long	126	7	0	Set	Bezwada-Madras.	
55/198 13-2-96		Underframe, underframe and body steel and ironwork, automatic, vacuum brake gear, and rigging roofing, lavatory and metallic fittings, for brake vans, 24 feet 2 inches long	175	9	0	„	Oudh and Rohilkhand.	
57/236 14-4-96		Underframe,* underframe and body steel and ironwork, roofing, and metallic fittings, for one brake van, complete, 19 feet 3 inches long	118	0	0	„	Eastern Bengal.	* Fox's pressed steel.
63/178 19-10-96		Underframe, underframe and body steel and ironwork, roofing, metallic and lavatory fittings, with lamp fittings, for lighting, with oil, gas, complete (on Pintsch's patent, system) for brake vans, 19 feet 3 inches long ...	177	0	0	„	Eastern Bengal.	
63/179 19-10-96		Underframe, underframe and body steel and ironwork, automatic, vacuum brake gear, and rigging, gauges, valves and piping, also hand gear for brake, and roofing, lavatory and metallic fittings for one brake van, 24 feet long	192	10	0	„	Oudh and Rohilkhand.	

The prices quoted in contracts for complete 5 feet 6 inch and metre gauge vehicles, (except where specially mentioned) do not include wheels and axles, bearing, buffer and draw springs axle boxes India rubber, window, cushions, attock, blocks and lamps. All these form the subject of separate contracts. Woodwork where necessary is supplied locally.

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*b*)—COACHING AND GOODS STOCK (1)—COMPLETE IRONWORK FOR VEHICLES—*contd.*

5′ 6″ Gauge.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
		Coaching stock—concld.						
54/30 — 8-1-96	Carriages, composite	Underframe, underframe and body steel and ironwork, lavatory, metallic fittings and panel pins, for one composite (first and second class) carriage, complete, 24 feet 2 inches long	160	11	0	Set	Bezwada-Madras.	
63/179 — 19-10-96		Underframe, underframe and body steel and ironwork, automatic, vacuum brake gear and rigging, roofing, and metallic fittings, for composite (intermediate and third class) carriages, 29 feet 2 inches long	206	0	0	„	Oudh and Rohilkhand.	
54/30 — 8-1-96	Carriages, first class	Underframe, underframe and body steel and ironwork, roofing, lavatory, metallic fittings and panel pins, for one first class carriage, complete, 24 feet 2 inches long ...	161	8	0	Set	Bezwada-Madras.	
54/30 — 8-1-96	Carriages, second class.	Underframe, underframe and body steel and ironwork, roofing, lavatory, metallic fittings, and panel pins, for one second class carriage, complete, 24 feet 2 inches long	160	17	0	Set	Bezwada-Madras.	
54/30 — 8-1-96	Carriages, third class.	Underframe, underframe and body steel and ironwork, roofing, and metallic fittings, and panel pins for one third class carriage, complete, 27 feet 6 inches long ...	103	3	0	Set	Bezwada-Madras.	
63/179 — 19-10-96		Underframe, underframe and body steel and ironwork automatic, vacuum brake gear and rigging, roofing and metalic fittings for third class carriages, 27 feet 6 inches long	197	10	0	„	Oudh and Rohilkhand.	
55/198 — 13-2-96	Horse boxes ...	Underframe, underframe and body steel and ironwork, automatic, vacuum brake gear and rigging, roofing, lavatory and metallic fittings for horse, boxes, complete, 20 feet long	179	5	0	Set	Oudh and Rohilkhand.	
63/179 — 19-10-96		Underframe, underframe and body steel and ironwork, automatic, vacuum brake gear and rigging, roofing, lavatory and metallic fittings for horse boxes, complete, 20 feet 6 inches long	203	10	0	„	Oudh and Rohilkhand.	
55/91 — 7-2-96	Carriages, saloon...	Underframe, 59 feet 10 inches long, with two bogies, complete, with all details, including wheels and axles, axle boxes buffers, springs, etc., and fitted with the vacuum automatic brake, complete, the brake arranged to act on one bogie truck only...	400	6	6	Set	East Coast.	For the Rajah of Parlakimidi.
54/126 — 15-1-96	Cranes accident or break down.	For relief train, hand power, 10 tons, complete, mounted on steel, underframes, on three pair of wheels ..	425	0	0	Each	Kotri-Rohri.	
54/127 — 15-1-96		Hand power, 10 tons, carried on a steel truck, 17 feet 5 inches long, having six wheels	519	0	0	„	Bezwada-Madras.	
59/318 — 25-6-96		Travelling, hand power, to lift 15 tons, carried on a steel, underframe, 20 feet 11 inches long, having six wheels ...	750	0	0	„	Eastern Bengal.	
60/164 — 9-7-96		Travelling, hand power, to left 15 tons, carried on a steel underframe, 20 feet 11 inches long, having six wheels ...	795	0	0	„	Eastern Bengal.	
		Goods stock—						
55/89 — 6-2-96	Wagons, covered goods.	Underframe,* underframe and body steel and ironwork, and roofing, for covered goods wagons, complete, 18 feet long	80	0	0	Set	Bezwada-Madras.	* Fox's pressed steel, underframe.

CLASS E.

ROLLING STOCK.

(*b*).—COACHING AND GOODS STOCK.

(2).—Ironwork.

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*b*)—COACHING AND GOODS STOCK; (2)—IRONWORK.

5′ 6″ Gauge.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
65/156 — 19-12-96	Axles ...	Steel, 9″ × 4″, journals	3	19	6	Each	Oudh and Rohilkhand.	
55/103 — 7-2-96	Axle boxes ...	With bearings and leather shields, cast steel, complete, for journals 9″ × 4½″	1	9	8	Each	East Coast.	
		Without bearings and leather shields for journals, 9″ × 4½″	0	15	1	„	Wazirabad-Lyallpur.	
		Carriage and wagon, complete, with bearings, but without leather shields, for journals, 9″ × 4½″	1	5	9	„	Kotri-Rohri.	
55/104 — 7-2-96		Cast iron, without bearings and leather shields, for journals, 9″ × 4½″	0	8	9	„	Wazirabad-Lyallpur.	
55/105 — 7-2-96		Cast iron, with bearing and leather shields, complete, for journals, 9″ × 4½″	1	1	5	„	East Coast.	
		Cast iron, with bearings, but without leather shields, for journals, 9″ × 4½″	0	18	1	„	Kotri-Rohri.	
55/268 — 19-2-96		Cast steel, with bearings, complete—						
		9″ × 4″	1	6	2	„	Bezwada-Madras.	
		9″ × 4½″	1	9	4	„		

5′ 6″ GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
		Cast iron, with bearings, complete—						
55/269 19-2-96		9″ × 4″	0	19	5	Each	Bezwada-Madras	
		9″ × 4½″	1	1	3	„		
57/399 23-4-96		Cast iron, with bearings, complete, for journals, 9″ × 4½″, for brake vans, and low sided wagons	1	10	0	„		
58/57 2-5-96	Axle, boxes—*concld.*	Cast steel, with bearings, complete, for journals, 9″ × 4½″	1	8	0	„	Eastern Bengal.	
58/78 5-5-96		Cast steel, complete, except bearings	0	17	7	„		
63/163 19-10-96		Cast steel, complete, with bearings, but without leather shields, for journals, 9″ × 4½″	1	0	0	„	North-Western.	
64/14 2-11-96		Cast steel, with bearings, complete, for journals, 9″ × 4½″, for covered goods wagons, and brake vans	1	9	4	„	Eastern Bengal.	
		Complete sets—						
55/198 13-2-96		Body, steel, and ironwork, automatic vacuum brake gear and rigging, gauges, valves and piping, also hand gear for brake, roofing, lavatory and metallic fittings, for brake vans, 24 feet 2 inches long	114	14	10	Set		
63/179 19-10-96		Body, steel, and ironwork, draw and buffing gear, automatic vacuum brake gear and rigging gauges, valves and piping, also hand gear for brake roofing, lavatory and metallic fittings for brake vans, 24 feet long	156	0	0	„		
55/198 13-2-96		Body, steel, and ironwork, automatic, vacuum brake gear and rigging, roofing, lavatory and metallic fittings, for first class carriage, 25 feet 2 inches long	163	8	0	„		
		Body steel, and ironwork, automatic, vacuum brake gear and rigging, roofing, and metallic fittings, for composite, intermediate and third class carriages, 29 feet 2 inches long	113	17	0	„		
3/179 19-10-96		Body steel, and ironwork, draw and buffing gear, automatic, vacuum brake gear and rigging, roofing, and metallic fittings, for composite, intermediate and third class carriages, 29 feet 2 inches long	160	0	0	„	Oudh and Rohilkhand.	
55/198 13-2-96	Body, ironwork ...	Body steel, and ironwork, automatic, vacuum brake gear and rigging roofing, and metallic fittings, for third class carriages, 27 feet 6 inches long	120	0	9	„		
63/179 19-10-96		Body steel, and ironwork, draw and buffing gear and rigging, automatic, vacuum brake gear, roofing, and metallic fittings, for third class carriages, 27 feet 6 inches long ...	154	10	0	„		
55/198 13-2-96		Body steel, and ironwork, automatic, vacuum brake gear and rigging, roofing, lavatory, and metallic fittings, for horse boxes, 20 feet long	116	3	7	„		
63/179 19-10-96		Body steel, and ironwork, automatic vacuum, brake gear and rigging, roofing lavatory, and metallic fittings, for horse boxes, 20 feet 6 inches long	167	10	0	„		
		Spare parts of—						
58/366 15-5-96		Hinges, wrought iron, sunshade, 8″ × 1″ (open) ...	0	0	4½	Each	North Western.	
		Iron, corrugated, galvanized, for roof 8′ 6″ radius, 11′ 6″ long × 2′ 6″ wide, from centre to centre of outer corrugation and 3″ pitch, 18 S. W. G., thick to cover, 10′—6″ free from spangle	0	10	4	„		

5′ 6″ GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
		Spare parts of—contd.						
60/138 8-7-96		Iron, corrugated, galvanised for roof, curved to 8′ 6″ radius, 11′ 6″ long, before being curved by 2′ 9″ wide out to out when corrugated to 3″ pitch and ¾″ depth of corrugation; weight 30 oz. per square foot after galvanizing	16	0	0	Ton	North-Western.	
		Sheets for panels, plain—						
		9′ × 3′ 6″ × 2½ lbs. per square foot	14	12	6	,,	North-Western.	
	Body, ironwork—*contd.*	9′ × 3′ 6″ × 4 ,, ,, ...	13	12	6	,,		
		8′ 6″ × 2′ 5″ × 14 S. W. G.						
58/102 5-5-96		4′ 3″ × 2′ 1″ × ,, ...						
		4′ 2″ × 2′ 5″ × ,, ...						
		3′ 0½″ × 2′ 7″ × ,, ...	13	15	0	,,	Oudh and Rohilkhand.	
		3′ 0½″ × 1′ 7″ × ,, ...						
		3′ 0″ × 2′ 1″ × ,, ...						
		2′ 11″ × 2′ 5″ × ,, ...						
		2′ 7″ × 2′ 1″ × 14 S. W. G.						
		2′ 5″ × 2′ 5″ × ,, ...						
		2′ 5″ × 2′ 3½″ × ,, ...	13	15	0	Ton	Oudh and Rohilkhand.	
		2′ 5″ × 2′ 1½″ × ,, ...						
		2′ 1″ × 1′ 7½″ × ,, ...						
58/102 5-5-96	Body, ironwork—*concld.*	Panels, planished—						
		8′ 0″ × 2′ 2″ × 16 S. W. G.						
		4′ 7″ × 2′ 7½″ × ,, ...						
		4′ 3″ × 2′ 7½″ × ,, ...						
		2′ 7½″ × 2′ 4½″ × ,, ...	14	2	6	,,	Eastern Bengal.	
		2′ 7½″ × 1′ 10″ × ,, ...						
		2′ 7½″ × 1′ 8½″ × ,, ...						
		2′ 7½″ × 1′ 3″ × ,, ...						
54/96 14-1-96		Bearing, laminated 11 plates by 3½″ wide for wagons ...	1	18	2	Each	East Coast Kotri-Rohri and Wazirabad-Lyallpur.	
54/277 29-1-96		,, ,, for wagons	3	0	0	,,	Bezwada-Madras.	
		,, ,, for carriages	1	18	9	,,		
56/312 23-3-96		,, ,, for brake vans	2	6	4	,,	Oudh and Rohilkhand	
		,, ,, Horse boxes	2	2	1	,,		
		,, ,, 11 plates 3½″ × ½″ for wagons ...	1	11	3	,,	Eastern Bengal.	
	Springs ...	,, ,, 10 plates, 3½″ × ½″ ,, ...	1	11	5	,,		
		,, ,, for carriages	2	6	6	,,		
63/174 19-10-96		,, ,, 11 plates 3½″ × ½″ for wagons ...	2	5	0	,,	Eastern Bengal.	
		,, ,, for brake vans	3	5	11	,,		
		,, ,, 11 plates by 3½″ wide	2	4	3	,,	North Western.	
64/411 30-11-96		,, ,, for 3rd class carriages and brake vans ...	3	3	8	,,	Oudh and Rohilkhand.	
		,, ,, for Horse boxes	3	3	6	,,		
		,, ,, for composite carriages	3	5	9	,,		

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*b*)—COACHING AND GOODS STOCK; (2)—IRONWORK—*contd.*

5′ 6″ GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
57/403 23-4-96	Springs—*contd.* ...	Berring, laminated 9 plates 4″ × ½″ for carriages ...	2	15	0	Each	North-Western.	
		„ „ 11 plates 3½″ × ½″ for wagons ...	2	1	9	„		
54/31 8-1-96		Buffer, spiral, re-coil	0	3	0	„	East Coast.	
54/297 30-1-96		„ „ „	0	2	10	„	Bezwada-Madras.	
56/385 27-3-96		„ „ „	0	2	10	„	Oudh and Rohilkhand.	
63/194 20-10-96		„ „ „	0	1	0	„	Eastern Bengal.	
64/333 19-11-95		„ „ „	0	3	0	„	Oudh and Rohilkhand.	
54/31 8-1-96		„ Volute	0	5	0	„	East Coast.	
		„ „	0	6	9	„	Wazirabad and Kotri-Rohri.	
54/297 30-1-96		„ „	0	5	0	„	Bezwada-Madras.	
56/385 27-3-96		„ „	0	8	4½	„		
58/572 30-5-96		„ „ 7½″ × 1⅛″ hole for carriage and wagon ...	0	3	9	„	Oudh and Rohilkhand.	
60/119 6-7-96		„ „ 7½″ × 1⅛ × 1⅛ hole	0	3	7¼	„		

63/194 20-10-96	Springs—*contd.*	Buffer volute	0	8	1	Each	Eastern Bengal.				
		„ „	0	5	0	„					
		„ „	0	6	7	„	North-Western.				
		„ „	0	5	0	„					
64/333 19-11-96		„ „	0	10	0	„	Oudh and Rohilkhand.				
54/31 8-1-96		Draw bar volute	0	4	0	„	East Coast.				
		„ „	0	5	9	„	Wazirabad Lyallpur and Kotri-Rohri.				
54/297 30-1-96		„ „	0	3	11	„	Bezwada-Madras.				
56/385 27-3-96		„ spiral	0	6	4	„	Oudh and Rohilkhand.				
64/333 19-11-96		„ „	0	7	0	„	Oudh and Rohilkhand.				
		Draw hooks „	0	6	1	„	Eastern Bengal.				
63/194 20-10-96		„ volute	0	5	7	„	North-Western.				
54/96 14-1-96		Door check laminated for wagons	0	6	10	„	Wazirabad-Lyallpur and Kotri-Rohri.				
54/277 29-1-96		Door check „	0	8	0	„	Bezwada-Madras.				
63/174 19-10-96		„ „	0	7	0	„	North-Western.				
54/297 30-1-96		Side chain	0	3	4	„	Kotri-Rohri and Wazirabad Lyallpur.				
63/194 20-10-96		Safety chains	0	2	0	„					
63/194 20 10-96		Draw bar plates, malliable cast iron for draw bar volute springs	0	6	9	„	Eastern Bengal.				
		Washers, buffer, malliable cast-iron	0	2	3	„					
57/355 21-4-96	Tyres ...	Steel for wagon wheels, Mansell's pattern	4	7	4	Each	Oudh and Rohilkhand.				

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*b*)—COACHING AND GOODS STOCK; (2)—IRONWORK—*contd.*

5′ 6″ GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
61/122 — 12-8-96	Underframe, ironwork—	*Sets complete*— Underframe, and underframe and body steel and ironwork, for one covered goods wagon, 19 feet 6 inches long	93	0	0	Set	Delhi-Bhatinda-Samasatta.	
		Underframe, and underframe and body steel and ironwork, for one high-sided wagon, 19 feet 3 inches long...	84	0	0	,,	Delhi-Bhatinda-Samasatta.	
		Spare parts of— Buffing and draw gear spare parts of— Buffers w.i. with springs and all parts complete ...	2	12	6	Each	North-Western.	
58/265 — 13-5-96		,, ,, ,, ,, ...	2	16	3	,,	Oudh and Rohilkhand.	
		Chains, safety or side, with eye bolt and hook complete	0	14	2	,,		
		Cradles	1	0	10	,,	North-Western.	
		Draw bars	1	19	6	,,		
		Draw bar, with hook, standard pattern, with washer nut and cotter, complete	1	17	2	,,	Eastern Bengal.	
55/44 — 3-2-96	Wheels and axles ...	With Journals 9″ × 4″	17	1	0	Pair	Bezwada-Madras.	
56/454 — 31-3-96		9″ × 4½″	17	2	6	,,		
63/250 — 21-10-96		9″ × 4½″	19	2	6	,,	Oudh and Rohilkhand and Eastern Bengal Railway.	
64/241 — 12-11-96		9″ × 4½″	19	5	0	,,	Eastern Bengal and North-Western.	
		9″ × 4″	19	5	0	,,	Oudh and Rohilkhand.	
59/208 — 18-6-96	Wheels ...	Carriage disc, Tozer's, with tyers but without axles ...	7	16	6	,,	Eastern Bengal.	

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*b*)—COACHING AND GOODS STOCK; (2)—IRONWORK—*contd.*

METRE AND OTHER GAUGES.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
59/101 — 11-6-96	Axles ...	Carriage and wagon with journals 7″ × 3¼″	2	8	9	Each	Burma.	
64/87 — 3-11-96		Steel, 3′ 4″ × 2″, for journals, for goods vehicle ...	0	16	0	Cwt.	Cherra-Companyganj.	
56/452 — 31-3-96	Axle guards ...	For bogie coaching trucks	0	10	0	Each	Burma.	
57/55 — 2-4-96	Axle boxes ...	Cast steel, accommodating all sizes of journals, with bearings and oil retaining washers for journals, 6 5/16″ × 2¾″ ...	1	0	10	Each	Burma.	
57/399 — 23-4-96		With brasses, complete, standard pattern journals, 7″ × 3¼″	0	19	0	,,	Eastern Bengal.	
59/14 — 2-6-96		With brasses and oil pads, complete	0	12	6	,,	Jorhat.	2 feet gauge
64/14 — 2-11-96		Cast steel, with bearings, complete, for journals 7″ × 3¼″ ...	1	2	0	,,	Eastern Bengal.	
58/74 — 5-5-96		Brasses, bored and faced, 6¾″ long for—	0	4	6	,,	Eastern Bengal.	

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*b*)—COACHING AND GOODS STOCK; (2)—IRONWORK—*contd.*

METRE AND OTHER GAUGES.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
		Sets, complete—						
59/14 2-6-96		Bottoms complete, sides with doors and angle irons, complete, ends with angle irons, complete, roofs complete, plain galvanized sheet for bogie wagons ...	28	10	0	Set	Jorhat.	2 feet gauge.
		Spare parts of :—						
		Iron sheets, for carriage panels—						
58/102 5-5-96	Body Ironwork ...	8′ 10″ × 2′ 7″	14	2	6	Ton		
		9′ 0″ × 2′ 6″						
57/408 23-4-96		Latrine fittings, for third class carriages	23	12	6	Set	Eastern Bengal.	
65/266 30-12-96		Ditto ditto ditto	16	15	0	„		
56/312 23-3-96	Springs ...	Bearing, carriage, complete, 9 plated, standard patterns ...	1	10	10	Each	Eastern Bengal.	
56/312 23-3-96	Springs—*concld.*...	Bearing, wagon, 7 plates, complete	0	11	10	Each	Eastern Bengal.	
63/174 19-10-96		„ „ „ „	0	18	0	„		
65/252 30-12-96		„ „ 9 „ „ standard pattern ...	1	12	3	„		
56/385 27-3-96		Buffer and draw volute	0	5	10	„		
63/194 20-10-96		„ „ „	0	5	9	„		
65/251 30-12-96		„ „ „	0	5	4½	„		
63/175 19-10-96	Tyres ...	Steel for carriage and wagon wheels	1	16	3	Each	Eastern Bengal.	
59/179 16-6-96		„ „ „ „	1	6	6	„	Jorhat.	2 feet gauge.
		Steel for 2′ 4″ diameter carriage and wagon wheels ...	2	0	6	„	Burma.	
57/354 21-4-96		Steel, block for wheels, 2′ 4″ diameter	2	8	5	„	„	
		Buffing and draw gear combined—						
		Spare parts of—						
59/14 2-6-96.	Underframe, Ironwork.	Buffers with sockets, complete	0	15	6	Each	Jorhat.	2 feet gauge.
58/265 13-5-96		Bolts for coupling hooks, with nuts, split pins and washers, complete, for Jones' patent buffers ...	0	1	6	„	Eastern Bengal.	
		Hooks, coupling, for Jones, patent buffers ...	0	14	0	„		

METRE AND OTHER GAUGES.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
59/82 10-6-96	Underframe, Ironwork—*concld.*	Sockets draw spring of hard steel to stand wear well ...	0	3	9	Each	Burma.	
		Wearing plates, for channel bar, head stock, hard steel, to stand wear well	0	1	2	„		
		Wearing plates, hard steel for plain head stock ...	0	1	0	„		
	Wheels and Axles.	For carriages and wagons—						
56/455 31-3-96		2′ 4″ diameter wheel and 7″ × 3¼″ journal ...	10	2	0	Pair	Eastern Bengal.	
65/226 28-12-96		2′ 4″ diameter wheel and 7″ × 3¼″ journal ...	10	1	10	„		
63/250 24-10-96		With journals 7″ × 3¼″	10	6	0	„	Ditto.	
59/14 2-6-96		For bogie wagons	3	10	0	Pair	Jorhat.	2 feet gauge.
59/396 29-6-96		With corrugated disc	12	0	0	„	Burma.	
64/37 3-11-96		9″ on tread, inside bearings, for pit tubs	0	7	3	„	Dandot Colliery. ...	18″ gauge.
57/497 29-4-96	Wheels ...	Without axles	1	1	0	Each	Kaunia-Dharlla ...	2′ 6″ gauge.

CLASS E.

ROLLING STOCK.

(*b*).—COACHING AND GOODS STOCK.

(3).—Vacuum Automatic Brake gear and rigging.

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*b*)—COACHING AND GOODS STOCK; (3)—VACUUM AUTOMATIC BRAKE GEAR AND RIGGING.

5′ 6″ Gauge.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
		Sets complete for 4 wheeled vehicles—						
54/176 20-1-96	Vacuum automatic brake gear and rigging.	For 1st, 2nd and composite (1st and 2nd class) carriages 24 feet steel underframe, and intermediate and third class carriages, 27 feet steel, under frame ...	32	4	5	Set	Oudh and Rohilkhand...	For detail and cost of brake gear, see Appendix C.
		For luggage vans 20 feet steel, underframe ...	32	6	1	„		
		For brake vans, 20 feet steel, underframe ...	39	0	2	„		
		Spare parts of—						The cost of rigging has not been given in this contract.
54/135 17-1-96		Ball valves, single branched, with diaphragm (brass) ...	2	2	0	Each		
54/135 17-1-96		Cylinders, for carriages and wagons, with chamber, complete, with ball valve, piston and rode, etc, (c. i. with w. i. chamber and brass fittings)	12	5	0	„	North-Western.	
54/134 17-1-96		Diaphragms for ball valve, flat, rubber	0	15	0	Per 100		
64/416 30-11-96		„ „ „ „	0	14	6	„		
54/134 17-1-96		„ „ „ cupped	0	16	0	„		

5′ 6″ GAUGE.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
		Spare parts of—						
64/416 30-11-96	Vacuum automatic brake gear and rigging—*concld.*	Diaphragms for ball valve, cupped	0	13	6	Per 100	North-Western.	
		Diaphragm, guards van, valve, rubber	1	11	0	,,		
54/135 17-1-96		Gauges, vacuum, single, brass	1	10	0	,,		
		Hose pipes, ¾″ × 24″	0	3	0	Each		
64/416 30-11-96		,, ,, ¾″ × 36″ for bogie stock	0	4	6	,,		
		Joint rings, rubber, 18″	0	3	6	Doz.		
		Rolling rings ,, 18″	1	1	0	,,		
		Seatings, for guards van, valve (rubber)	0	16	0	Per 100		
54/134 17-1-96		,, ,, ,, ,, ,, ,, ...	0	15	0	,,		
54/135 17-1-96		Springs, steel, for ball valves	0	0	1	Each		
		Syphons, brass	0	14	0	,,		

CLASS E.

ROLLING STOCK.

(*b*).—**COACHING AND GOODS STOCK.**

(4).—**Metallic and other Fittings.**

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*b*)—COACHING AND GOODS STOCK; (4)—METALLIC AND OTHER FITTINGS.

ALL GAUGES.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
58/306 15-5-96	Basins ...	Washing, porcelain, with pipes, plugs and chains, complete	2	0	0	Each	Eastern Bengal.	
		Washhand, iron, enamelled, complete, plugs and chains, and gun metal	1	11	0	"	North-Western.	
62/96 4-9-96		Wash; electroplated, complete, with cock	11	11	0	"	Burma.	
63/53 5-10-96		Washhand, iron, enamelled, complete	1	6	0	"	North Western.	
63/53 5-10-96	Commodes ...	Wrought iron, enamelled, white, inside, pressed steel tops, complete, with wooden tops and lids	3	17	6	Each	North-Western.	
57/349 21-4-96	Glass ...	British, polished, plate, $\frac{3}{16}$" thick— clear 24" × 20"	0	4	2	Each	North-Western.	
		" 22" × 18"	0	3	$5\frac{1}{4}$	"		
		" 22" × 20"	0	3	$9\frac{3}{4}$	"	Eastern Bengal.	
		" 22" × 14"	0	2	$8\frac{1}{2}$	"	North-Western.	
57/239 14-4-96		" 22" × 13"	0	2	$5\frac{3}{4}$	"	Oudh and Rohilkhand.	
		" $24\frac{1}{2}$" × $6\frac{1}{2}$"	0	1	6	"		
		" $24\frac{1}{2}$" × $18\frac{1}{4}$"	0	4	$1\frac{1}{2}$	"		

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*b*)—COACHING AND GOODS STOCK; (4)—METALLIC AND OTHER FITTINGS—*concld.*

ALL GAUGES.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
		British polished plate $\frac{5}{16}$″ thick—contd.						
		clear 22″ × 15″	0	2	10¼	Each	Eastern Bengal.	
		„ 21⅓″ × 19″	0	3	7½	„		
57/349	21-4-96	„ 21″ × 18″	0	3	3¼	„	North-Western.	
		„ 20″ × 19″	0	3	5½	„		
		„ 20″ × 15½″	0	2	9¼	„	Eastern Bengal.	
	Glass—*concld.* ...	ground 22″ × 19½″	0	3	9⅜	„	Oudh and Rohilkhand.	
57/239	14-4-96	„ 22″ × 13½″	0	2	8	„		
		„ 22″ × 12″	0	2	3½	„	Bezwada-Madras.	
57/349	21-4-96	„ 20″ × 18″	0	3	1½	„	Eastern Bengal.	
		neutral tinted 22″ × 20″	0	9	2	„	Bezwada Madras.	
56/443	31-3-96	„ „ 22″ × 19½″	0	9	2	„	Oudh and Rohilkhand.	
		„ „ 20″ × 17″	0	7	1	„	Bezwada-Madras.	
58/306	15-5-96	Handles ... Brass, carriage doors, with locks and plates, right hand ...	0	3	9	Each	Eastern Bengal.	
		„ „ „ „ „ left hand ...	0	3	9	„		

58/306	15-5-96	Hinges ...	Brass, for carriage doors, 2¾″ × 2″, shut	0	1	1	Each	North-Western.		
			Brass, for side door of 3rd class carriages, 2½″ × 2″ (when shut)	0	0	9½	„	Eastern Bengal.		
		Hooks ...	Hat, malleable, cast iron, small	0	0	6¼	Each	North-Western.		
59/28	3-6-96	Locks ...	Iron, private, with plates	0	0	6	Each	North-Western and Eastern Bengal.		
			Carriage, self-closing, Wethereds' patent, complete, with handles and striking plates	0	5	8	„	Burma.		
		Pans ...	Floor, iron, enamelled, for intermediate and 3rd class carriages	1	17	6	Each			
58/306	15-5-96	Pegs ...	Hat, malleable, cast iron	0	0	4	Each	North-Western.		
		Pots ...	Commode, iron, enamalled, with top, complete, 10″ diameter 2′ 6″, white, inside	4	5	0	Each			
		Tanks ...	Wrought iron, galvanized, for carriage roof	12	10	0	Each	Eastern Bengal.		

CLASS E.

ROLLING STOCK.

(b).—COACHING AND GOODS STOCK.

(5).—India-rubber Fittings.

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*b*)—COACHING AND GOODS STOCK; (5)—INDIA-RUBBER FITTINGS.

ALL GAUGES.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
		India-rubber, spencer and Attock's patent, vulcanized, for carriage bodies—						
57/102 4-2-96	Blocks ...	7″ × 3″ × 1″ with $\frac{5}{16}$″ diameter, hole at centre ...	0	2	7	Each	Oudh and Rohilkhand.	
		7″ × 3″ × 1″ „ „ „ „ „ ...	0	2	3	„	Oudh and Rohilkhand.	
65/253 30-12-96		6″ × 2½ × 1″ with $\frac{3}{16}$″ diameter hole at centre ...	0	2	0	„	Eastern Bengal.	
57/518 29-4-96		5″ × 3″ × 1″	0	2	0	„	North Western.	
		India-rubber, spencer and Attock's patent, vulcanized, for window sashes	0	19	6	Per 100	Burma and Oudh and Rohilkhand.	
57/102 4-2-96	Cushions ...	Ditto ditto ditto ...	2	3	9	„	Eastern Bengal.	
		Ditto ditto ditto ...	1	13	4	„	North-Western.	
57/518 29-4-96		Vulcanized, Pearce's patent	3	15	0	„	North-Western.	

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*b*)—COACHING AND GOODS STOCK; (5)—INDIA-RUBBER FITTINGS—*concld.*

ALL GAUGES.

Contracted for in 1896.

Contract number and date.		Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
65 / 253	30-12-96	Cushions—*concld.*	India-rubber, vulcanized, for window sashes	1	5	0	Per 100	Oudh and Rohilkhand and Burma.	
			" " " "	2	3	0	"		
69 / 139	10-9-96		" " " "	1	5	0	"	Burma.	
59 / 95	11-6-96		" " " "	1	0	0	"	Oudh and Rohilkhand.	
57 / 102	4-2-96	Springs ...	India-rubber, for window sashes, to prevent rattling ...	0	0	2	Each	Eastern Bengal.	

CLASS E.

ROLLING STOCK.

(*b*).—COACHING AND GOODS STOCK.

(6).—Trimmings.

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*b*)—COACHING AND GOODS STOCK; (6)—TRIMMINGS.

ALL GAUGES.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
57/38 2-4-96 ...	Buttons ...	Leather enamelled maroon, in one gross packets ...	0	2	3	Gross	Bezwada-Madras and Oudh and Rohilkhand.	
57/362 22-4-96 ...	Carriage seats ...	Railway, patent spring wire 6'-8" long and 24" wide.	1	11	0	Ec h	North-Western.	
57/73 2-4-96 ...	Cloth ...	Baize, green, 36" wide, 7½ oz. per yard, suitable for lamp shades.	0	1	7	Yard	Oudh and Rohilkhand, and Bezwada-Madras.	
47/268 22-6-96 ...		Baize, green, fine, 72" wide, 1 lb. 5 oz. per yard, suitable for lamp shades.	0	4	7	„	„ „	
57/41 2-4-96 ...		Canvas, common No. 1; 24" wide without stripes ...	1	9	8	Bolt	Burma.	
		„ „ „ 36" „	2	6	4	„	„	
58/374 16-5-96 ...		Canvas, duck, 54" wide, 11½ oz. per yard	0	0	7½	Yard	„	

ALL GAUGES.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
		Canvas prepared for outside roofing.						
57/499 29-4-96 ...	Cloth—*contd.* ...	11′ 6″ wide } In length of 25 yards	0	8	0	Yard	Eastern Bengal.	
		10′ 6″ „ }	0	7	6	„		
		9′ 8″ × 28 feet long	3	7	6	Piece	North-Western.	
		10′ 10″ × 28 „	3	15	6	„		
61/301 24-8-96 ...		8′ 0″ × 43′ 3″ „	4	6	6	„	Mandalay-Kunlon.	
		8′ 0″ × 41′ 0″ „	4	2	0	„		
64/303 17-11-96 ...		9′ 0″ × 19′ 6″ „	1	18	6	„	Eastern Bengal.	
64/357 21-11-96 ...		8′ 0″ × 41′ 0″ „	4	1	6	„	Mu Valley (Mogaung Ext.)	
64/413 30-11-96 ...		10′ 6″ × 24′ 0″ „	3	2	9	„	Eastern Bengal.	
57/432 24-4-96 ...		Floor, 9′ 0″ wide in lengths of 28 yards	0	7	0	Yards	Oudh and Rohilkhand, and Bezwada Madras.	
57/487 21-4-96 ...	Cloth—*concld.* ...	Leather, vulcan, maroon, pattern No. 75, about 35″ wide	0	5	6	Yard	Eastern Bengal.	In rolls of 50 yards.
		„ „ green and maroon, pattern No. 87 36″ „	0	5	6	„	North-Western.	
57/53 2-4-96 ...		Linen, black, 30′ wide	0	0	4½	„	Bezwada-Madras and Oudh and Rohilkhand.	
57/460 27-4-96 ...		Rib, French drab for carriage cushions	0	2	2½	„	North-Western.	
57/32 2-4-96 ...	Cord	Log line, seaming in 1 lb. balls and 6 lbs. papers ...	0	0	6½	lb.	Bezwada-Madras.	
59/38 4-6-96 ...	Lace	Seaming	0	0	3½	Yard	Burma.	
57/400 23-4-96 ...	Lifts	Leather 4½″ long for bath room windows, neatly covered with maroon coloured morocco leather, sewn all round ...	0	1	2	Each	Bezwada-Madras, and Oudh and Rohilkhand	
61/293 24-8-96 ...	Linoleum ...	In pieces 6′ 6″ wide and 14′ 6″ long	1	7	0	Piece	Burma.	
57/72 2-4-96 ...	Netting ...	Silk, cord, maroon, 12″ wide, 1″ mesh, ...	0	1	6	Yard	Bezwada Madras and Rohilkhand.	
57/151 11-4-96 ...		Silk, maroon colour, 10″ wide, 1 mesh, in lengths of 50 yards.	0	1	2	„	North-Western and Eastern Bengal.	
		Silk, maroon, for carriage, 14″ wide, 1″ mesh ...	0	1	8	„	Eastern Bengal.	
		Neatly covered with maroon coloured morocco leather sewn all round.						
57/400 23-4-96 ...	Straps, leather ...	2′ 8″ long, with 2 eyelets each, for windows ...	0	4	0	Each	Bezwada-Madras and Oudh and Rohilkhand.	
		2′ 0″ long, for bath room windows	0	2	6	„		
		0′10″ long, for top windows	0	1	3	„		
58/333 16-5-96 ...		Leather middlings best finished uncoloured ⅛″ for—	0	2	1	lb.	Burma.	

CLASS OF STORES E.—ROLLING STOCK, SUB-HEAD (*b*)—COACHING AND GOODS STOCK; (6)—TRIMMINGS—*concld.*

ALL GAUGES.

Contracted for in 1896.

Contract number and date.	Articles.	Details.	Rate—Free on board. Amount. £	s.	d.	Unit.	For what railway.	Remarks.
$\frac{56}{445}$ 31-3-96	Skins ...	Buffaloe, enamelled, maroon to average 52 sq. feet each hand buffed.	0	1	1¾	Sq. feet	Bezwada, Madras and Oudh and Rohilkhand.	
$\frac{54}{166}$ 18-1-96	Thread ...	Linen, white, sewing machine—						
		No. 35	0	3	5½	Doz. reels	Eastern Bengal.	
		„ 40	0	3	11½	„		
		Flax, sewing fine, in 2 oz. balls and 3 lb. papers ...	0	1	4	lb.	Burma.	
$\frac{57}{12}$ 2-4-96								
$\frac{57}{457}$ 27-4-96		Linen, hand sewing, black, No. 35	0	1	9	Bundle	North-Western.	
$\frac{57}{31}$ 2-4-96	Twine ...	English, white, in ¼ lb. balls and 3 lb papers ...	0	1	1	lb.	Bezwada Madras, Burma and Oudh and Rohilkhand.	
$\frac{57}{75}$ 2-4-96		„ „ „ ...	0	1	2	„		

Appendix A.

OUDH AND ROHILKHAND RAILWAY.

Detail list of Vacuum automatic Brake Parts as supplied on Contract No. $\frac{64}{295}$, dated 14th November 1896.

Quantity.	Description.	£	s.	d.
1	40 m/m Brass Combination Ejector with relief valve release valve and lubricating cock attached	19	0	0
1	Brass Slating for ditto ditto	1	0	0
1	1¼″ Screw Stop, valve	3	3	0
1	Brass Seating for ditto	1	1	0
1	Duplex vacuum gauge	2	10	0
1	Drip trap & Valve	0	11	6
1	Brass Syphon Casting	0	14	0
1	21″ Cylinder with ball valve attached	13	10	0
1	2″ Coupling “ Dummy ”	0	4	0
1	Transit screw for Cylinder	0	1	6
½ pair	2″ × 27″ Hose & “ C ” couplings for Engine	0	10	0
1 „	2″ × 18″ „ „ „ „ between Engine and Tender	0	17	0
1 „	1″ × 18″ Hose & Ball coupling for between Engine and Tender	1	8	6
2	½″ × 18″ Hose pipes for Engine Cylinders 3/4″ one end £/3 each	0	6	6
1	Copper exhaust pipe through boiler barrel	2	10	0
1	„ Steam pipe to Ejector	0	10	6
1	„ drip „ from „	0	5	6
2	„ pipes to Duplex vacuum gauge 5/ each	0	10	0
1	2″ C. I. Bend	0	4	0
3	2″ Hose pipe clips ... 1/ each	0	3	0
1	1″ „ „ „	0	0	9
2	¾″ „ „ „ ... 9*d.* each	0	1	6
2	½ „ „ „ ... 9*d.* each	0	1	6
8	2″ Elbows ... 1/6 „	0	12	0
2	2″ Tees .... 1/6 „	0	3	0
12	Feet (about 1¼″ pipe made up into complete set)	0	12	0
	Carried over ...	50	10	9

Appendix A—*concld.*

Detail list of Vacuum automatic Brake Parts as supplied on Contract No. $\frac{64}{295}$, dated 14th November 1896.

Quantity.	Description.	£	s.	d.
	Brought forward ...	50	10	9
2	1¼″ Elbows ... ... 1/3 each	0	2	6
4	2″ Sockets ... ... 5 „	0	0	10
4	2″ Back nuts ... ... 5 „	0	0	10
1	Tee with branch union to vacuum gauge	0	10	0
40 feet	(About) 2″ pipe made up into complete set	2	10	0
3	¾″ Elbows for Engines ... ... 1/ each	0	3	0
15 feet	(About) ¾″ pipes made up into complete set	0	15	0
1 foot	(About) 1″ pipe made in set	0	1	0
1	¾″ × ¾″ × 1″ Tee	0	1	6
1	2″ Up turned bend in Smokebox	0	10	0
1	21″ cylinder with ball valve attached	13	10	0
1	Transit screw for ditto	0	1	6
1	Brass Syphon casting	0	14	0
1	2″ Coupling Dummy	0	4	0
½ pair	2″ × 27″ Hose & "C" Coupling for Tender	0	10	0
2	½″ × 18″ Hose pipes for Tender cylinders ¾″ one and 3/3 each ...	0	6	6
1	2″ C. I. Bend	0	4	0
1	2″ Hose pipe clip	0	1	0
20	Feet (about) 2″ pipe made up into complete set	1	5	0
1	Vacuum chamber 4′ 0″ × 20″ dia.	5	0	0
15	Feet (about) ¾″ pipe made up into complete set	0	15	0
3	¾″ „ Elbows ... ... 1/ each	0	3	0
1	Tee piece ¾″ × ¾″ × 1″	0	1	6
1	1″ pipe bend	0	1	6
1	1″ Hose pipe clip	0	0	9
2	¾″ „ „ „ „ ... ... 9*d.* each	0	1	6
2	½″ „ „ „ „ ... ... 9 „	0	1	6
	Add cost of brake rigging see Appendix B. ... £ ...	78	6	2
		51	0	0
		£129	6	2

Appendix B.

Schedule of Brake rigging for Vacuum automatic Brake as supplied on India Office Contract No. $\frac{64}{295}$, dated 14th November 1896.

Description of detail for 1 Engine Tender.	Quantity required.	Rate per each delivered free on board in the Port of London, Leverpool or Birkenhead.	Total.
		£ s. d.	£ s. d.
ENGINE.			
Brake Lever ... ... A 4621 A	4	0 3 4	0 13 4
Pull rod and pins ... ... B „	4	0 4 0	0 16 0
Push link, pins and ferrule ... ... C „	1	0 13 0	0 13 0
Brake shaft with pins ... ... D „	1	0 60 0	3 0 0
Brake shaft and cylinder, carrying plate with C.-1, bushes, angles and ⅞″ bolts ... E „	2	0 28 0	2 16 0
Anchorplate with 1″ bolts ... ... F „	2	0 7 6	0 15 0
Pull rod with pins ... ... G „	2	0 6 0	0 12 0
Brake Beam ... ... H „	2	0 48 0	4 16 0
Brake hanger thickening ... ... piece ... I „	4	0 3 0	0 12 0
Pull rod with nut and pins ... ... J „	2	0 20 0	2 0 0
2″ pipe carriers ... ... K „	1	0 0 6	0 0 6
2″ „ „ ... ... L „	4	0 0 6	0 2 0
2″ „ „ ... ... M „	1	0 0 9	0 0 9
⅞″ „ „ ... ... N „	2	0 0 9	0 1 6
2″ „ „ ... ... O „	2	0 0 9	0 1 6
1″ „ „ ... ... P „	1	0 0 9	0 0 9
TENDER.			
Brake shaft and pin ... ... A¹ 3301 A	1	0 60 0	3 0 0
„ „ bracket ... ... B¹ „	2	0 30 0	3 0 0
Hand Brake shaft ... ... C¹ „	1	0 21 0	1 1 0
„ „ bracket ... ... D¹ „	1	0 18 0	0 18 0
„ „ „ ... ... E¹ „	1	0 24 0	1 4 0
Cylinder bracket ... ... F¹ „	2 (R¹ and L¹)	0 22 0	2 4 0
Block hangers ... ... G¹ „	6 (R³ and L³)	0 21 0	6 6 0
Carried over ...			34 13 4

Appendix B.

Schedule of Brake rigging for Vacuum automatic Brake Contract No. $\frac{64}{295}$, dated 14th November 1896.

Description of detail for 1 Engine and Tender.		Quantity required.	Rate per each delivered free on board in the Port of London, Liverpool or Birkenhead.	Total.
	Brought forward ...			34 13 4
	TENDER—*contd.*			
Brack brackets	H[1] 3301, A	{(Long[4] and short[2]) 6	0 9 0	2 14 0
" "	... H[2] "	2	0 8 0	0 16 0
Brake Beam and Coupler ...	... I[1] "	2	0 45 0	4 10 0
" " without coupler ...	... I[1] "	1	0 40 0	2 0 0
Vac Chamber strap	... J[1] "	2	0 4 6	0 9 0
Brake Block and pin ...	... K[1] "	6 (R[3] and L[3])	0 9 0	2 14 0
Hand Brake Rod	... L[1] "	1	0 10 0	0 10 0
Adjusting pull rod	... M[1] "	1	0 21 0	1 1 0
Pull rod forked	...N[1] "	1	0 12 0	0 12 0
" " "	... O[1] "	1	0 12 0	0 12 0
1" Pipe carrier	... P[1] "	1	0 0 9	0 0 9
2" " "	... Q[1] "	3	0 1 0	0 3 0
2" " "	... R[1] "	1	0 0 9	0 0 9
Dummy Carrier	... S[1] "	1	0 3 0	0 3 0
$\frac{3}{4}$" pipe carrier	... T[1] "	2	0 0 7	0 1 2
	TOTAL ...			51 0 0

Appendix C.

OUDH AND ROHILKHAND RAILWAY.

Detail list of Vacuum Automatic Brake Parts as supplied on Contract No. 54—176, dated 20th January 1896.

For first, second and composite 1st and 2nd class carriages, 24 feet underframe; intermediate and 3rd class carriage; 27 feet underframes, and luggage van, 20 feet underframe—

	£	s.	d.
1 18-inch combined "C" cylinder with vacuum chamber and ball valve attached, complete	12	3	3
1 transit screw for ditto	0	1	6
2 2-inch coupling dummies, 4*s.* each	0	8	0
1 syphon casting for tee piece	0	15	6
1 pair 2" × 27" hose and "C" couplings	1	0	0
1 $\frac{3}{4}$" × 24" cylinder hose pipe	0	4	0
2 2-inch cast iron bends, 4*s.* each	0	8	0
2 2-inch hose clips, 1*s.* each	0	2	0
2 $\frac{3}{4}$-inch " " 9*d.* "	0	1	6
1 2-inch tee piece	0	2	0
Main train pipe made up into complete set	1	18	6
	17	4	3
Add for rigging (not shown in contract)	15	0	2
	32	4	5

One 4-wheeled brake van exactly same as for luggage van with the following addition:—

1 guards van valve and 18 length copper pipe ...	3	19	10
1 6-inch single vacuum gauge	1	10	0
1 2-inch equal tee	0	2	0
1 8 feet length 2-inch pipe	0	8	0
	5	19	10

Appendix D.

Statement of engines and rolling stock, Jorhat State Railway (2′ 0″ gauge).

Engines.—Class 1.

Number of engines of this class.	Original cost in running order.	Source of supply.	Date of supply.	Description.
3	R30,214.	Messrs. Fowler & Co., Leeds.	1884.	

Principal dimensions.

Cylinders	6½″ dia. × 10″ stroke.	
Diameter of coupled wheels ...	...	1′ 9″
Centre to centre of ,, ...	...	3′ 0″
Diameter of rear radial ,, ...	...	1′ 1″
Total wheel base	...	8′ 0″
Length of engine over all ...	...	13′ 9″
Centre of boilers above rails ...	...	3′ 9″
Boiler.—Length between tube-plates	...	5′ 1½″
Diameter ...	...	2′ 3″
Number of tubes ...	...	40
Outside diameter of tubes	...	1¾″
Heating surface.—Tubes ...		...100·86 sq. ft.
Firebox ...		... 18·51 ,,
Total heating surface ...		...119·37 sq. ft.
Grate area		... 4·95 sq. ft.

Outside cylinder, four wheels coupled tank engines, with a pair of radial wheels under foot-plate. Boiler and cylinders are placed too high making these engines somewhat top heavy. Fitted with Joy's valve gear, which is placed outside the frames, the steam-chest being above the cylinders. Boiler of $\frac{7}{16}$″ iron plate with dome and usual brass mountings; safety valves adjusted to 140 lbs. per square inch. Boiler fed by two injectors. Coal bunker on foot-plate and water-tank on each side of firebox. Fitted with hand-brakes.

Haulage power.—Sixty-five tons at 10 to 12 miles per hour on the level.

Engines.—Class 2.

Number of engines of this class.	Original cost in running order.	Source of supply.	Date of supply.	Description
1	R6,381.	Darjeeling-Himalayan Railway.	July 1886.	

Principal dimensions.

Cylinders	6″ dia. × 8″ stroke.	
Diameter of coupled wheels ...	...	1′ 7″
Centre to centre of ,, ...	...	3′ 3″
Diameter of rear radial ,, ...	...	1′ 1″
Total wheel base	...	7′ 7½″
Length of engine over all ...	...	14′ 9″
Centre of boiler above rails ...	...	2′ 10″
Boiler.—Length	...	6′ 0½″
Diameter... ...	...	1′ 9″
Number of tubes ...	...	20
Outside diameterr of tubes	...	1⅞″
Heating surface.—Tubes ...		... 55·36 sq. ft.
Firebox ...		... 14·24 ,,
Total heating surface ...		... 69·60 sq. ft.
Gate area		... 3·67 sq. ft.

Outside cylinder, four wheels coupled tank engine with a pair of radial wheels under foot plate. Not a powerful engine, and very awkward to get at for repairs. Steam, chest inside the frames valves being controlled by eccentric and link motion; the valve rods work through guides in a cross plate which also carries the feed pump. Boiler of ⅜″ iron plate, with usual brass mountings but no dome; safety valves adjusted to 125 lbs. per square inch. Boiler is fed by an injector and a pump, the latter worked by an eccentric on the driving axle. Coal bunker on foot-plate, saddle-tank on boiler, and another tank on each side of smoke box.

Haulage power.—Forty tons at 8 miles an hour on the level.

Appendix D.—*contd.*

Statement of engines and rolling stock, Jorhat State Railway (2′ 0″ gauge)—contd.

Engines.—Class 3.

Number of engines of this class.	Original cost in running order.	Source of supply.	Date of supply.	Description.
1	R12,463.	The Vulcan Foundry & Co., Newton-le-Willows.	1887.	

Principal dimensions.

Cylinders	7″ dia. × 12″ stroke.	
Diameter of coupled wheels ...	...	2′ 0″
Centre to centre of ,, ...	...	3′ 0″
Diameter of rear radial ,, ...	...	1′ 8½″
Total wheel base	...	7′ 9″
Length of engine over all ...	...	16′ 4″
Centre of boiler above rails ...	...	3′ 3″
Boiler.—Length between tube plates	...	6′ 0⅛″
Diameter... ...	...	2′ 5½″
Number of tubes ...	...	65
Outside Diameter of tubes	...	1¾″
Heating surface.—Tubes ...		... 179·0 sq. ft.
Fire box ...		... 21·0 ,,
Total heating surface ...		... 200·0 sq. ft.
Grate area		... 4·55 sq. ft.

Outside cylinder, four wheels coupled tank engine, with a pair of radial wheels under foot-plate. This is the most useful engine on the line.

Steam-chest above the cylinders, the valves being controlled—through the medium of rocking shafts working through the frames—by eccentric and link motions inside the frames. Boiler of good capacity, with dome and usual brass mountings; safety valves adjusted to 140 lbs. per square inch. Boiler fed by two injectors. Coal bunker on foot-plate, and water-tank on each side of firebox. Fitted with hand-brake.

Haulage power.—Eighty tons at 12 miles per hour on the level.

Appendix D—*contd.*

Goods and Coaching Stock.

Class of vehicles.	Number of vehicles of this class.	Cost per vehicle in running order.	Source of supply.	Date of supply.	Description.
Four-wheeled goods truck.	30	R250 each as near as could be ascertained.	Messrs. John Fowler & Co., Leeds.	1885, probable.	These are of different descriptions, the majority being low-sided or flat wooden trucks with iron underframes; size of body 7′ 0″ × 5′ 0″; wheel base 2′ 6.″ They are now out of use except for hand-shunting goods into sidings and similar work.
Covered goods bogie wagons.	18	R1,530 each	Messrs. John Fowler & Co., Leeds.	Ten in 1893, and 8 converted from open wagons subsequently.	Size 15′ 0″ × 4′ 6,″ with curved corrugated iron roof, 4′ 6″ from floor of wagon at centre. Body of $\frac{1}{4}$″ and $\frac{3}{16}$″ steel plates, might be lighter with advantage. Under frame of 5″ × 2½″ × $\frac{7}{16}$″ channel iron, but insufficiently stayed, and liable to buckle when banged about in shunting. Centres of bogies 9′ 1″ apart; bogie frames plain and neat, and sufficiently strong. Drawgear attached to bogie centre pins. Cast steel wheels, 12″ diameter, with steel axles; rims of wheels too thin; wear out too rapidly— Tare weight of wagon . 62 maunds. Carrying capacity . 100 „ Will carry 32 large tea-chest each.
Open goods bogie wagons.	32	R850 each as near as could be ascertained.	Messrs. John Fowler & Co., Calcutta.	Probably 1885	Similar to covered wagons in every respect, except that they have no roof; sides are 2′ × 6″ high— Tare weight of wagon . 50 maunds. Carrying capacity . 100 „ Will carry 32 large tea-chests each.
Rail-carrying bogie trucks.	4	R865 each	Built for the Jorhat State Railway in the Eastern Bengal State Railway Workshops, Kanchrapara.	July 1896.	Size 15′ 0″ × 4′ 6″ with wooden platform and bolster; under frame same as those of other bogie vehicles, but stayed vertically below centre of frame, to take concentrated load on bolsters— Tare of wagon . . 46 maunds. Carrying capacity . 100 „ A pair of these trucks take thirty-three—30 feet rails, 50lb to the yard.

Appendix D—*contd.*

Goods and Coaching Stock—contd.

Class of vehicles.	Number of vehicles of this class.	Original cost in running order.	Source of supply.	Date of supply.	Description.
Flat bogie trucks.	12	R800 each as near as could be ascertained.	Two from old stock obtained from Messrs. John Fowler & Co.	Probably in 1885.	These have the same underframes as the covered and open bogie wagons, with a flat top of ¼″ iron plate.
			Ten wagons obtained from England from Oldbury Railway Carriage and Wagon company.	Between April 1896 and August 1896	Size 15′ 0″ × 4′ 6.″ They are used for carrying boilers, large cases of machinery and construction material. By fitting temporary bolsters they can be used for carrying long rails— Tare weight of wagon . 41 maunds. Carrying capacity . 100 „ One truck will take 75 metre-gauge sâl sleepers. One pair will take 33—30 feet rails, 50 lbs. per yard.
Iron coal trucks.	2	R350 each	From Messrs. John Fowler & Co.	1884	These are small four-wheeled open trucks, 5′ 6″ × 3′ 10″ × 2′ 0″ high, with strong under frames. They are used as tenders for engines, and are fitted with tool boxes, but have no water-tanks. Tare weight of wagon . 30 maunds. Weight in running order, with tools and 12 maunds coal . . . . 44 „
Lower class carriages.	2	R500 each as near as could be ascertained.	Messrs. John Fowler & Co.	1884	Old and uncomfortable vehicles, built entirely of iron except the seats, which are wooden. Now only used on a small branch line which is open for traffic in the cold season only.

Appendix D.—*concld.*

Goods and Coaching Stock—concld.

Class of vehicles.	Number of vehicles of this class.	Original cost in running order.	Source of supply.	Date of supply.	Description.
Lower class carriages.	6	R1,500 each as near as could be ascertained.	One or two were made on the Jorhat State Railway from dismantled carriages and the rest were obtained from Eastern Bengal State Railway.	Probably 1889	Four-wheeled wooden carriages, 20′ 8″ long × 6′ 6″ broad (out side measurements), with 8 seats, accommodating four passengers each. Single wooden roof, 6′ 4½″ from floor at centre. No doors or windows, only canvas purdahs. Wooden under frame, 20′ 6″ long, with 11′ 0″ wheel base. The carriage is hung on long springs, the hangers having rubber washers, and the wheels have a certain amount of radial motion, accommodating themselves readily to curves; the carriages are thus very smooth running. Two of the six carriages have a zenana compartment in the centre with double-folding doors, and seats for six passengers. This leaves two-end compartments, one of which is intermediate class, and has cushioned seats.
Upper class carriages.	2	R2,000 each as near as could be ascertained.	Eastern Bengal State Railway.	1889	Under frame same as for lower class carriages; bodies are very like metre-gauge first class carriages, but roof is single. Outside length 20′ 8″, outside breadth 6′ 6″. Each compartment, 6′ 10″ × 6′ 0″, with upholstered seats for eight passengers, also bath-room and end-balcony. These are comfortable and smooth-running vehicles.

[*General Distribution.*]

Circular No. 3.

FROM

THE DIRECTOR OF RAILWAY CONSTRUCTION,

TO

THE MANAGER, NORTH-WESTERN RAILWAY.
THE MANAGER, OUDH AND ROHILKHAND RAILWAY.
THE MANAGER, EASTERN BENGAL STATE RAILWAY.
THE MANAGER, EAST COAST RAILWAY.
THE ENGINEER-IN-CHIEF, INDUS BRIDGEWORKS AND BRITISH, SECTION SHADIPALI-BALOTRA RAILWAY.
THE ENGINEER-IN-CHIEF, MARI-ATTOCK RAILWAY.
THE ENGINEER-IN-CHIEF, BEZWADA-MADRAS RAILWAY.
THE ENGINEER-IN-CHIEF, RAE BARELI-BENARES RAILWAY.
THE ENGINEER-IN-CHIEF, GODAVARI BRIDGE WORKS.
THE ENGINEER-IN-CHIEF, HARDWAR-DEHRA RAILWAY.
THE PORT STOREKEEPER, STATE RAILWAY DEPARTMENT, CALCUTTA.

Rate List, Class E.—Rolling-stock for 1896.

Calcutta, the 3rd March 1898.

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 E Stores, "Rolling Stock," contracted for by the Stores Department of the India Office during 1896.

2. A table giving the average rate per ton, of sea freight, for Class E Stores imported from England to the several ports in India for State railways during 1896 is prefixed to the Rate List.

3. In order to arrive at the total cost of the Rolling Stock 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,

G. Lubbock, Lt. R.E.
for ~~C. W. HODSON~~,
Director of Railway Construction.

Documents accompanying.

1. Statement showing the average rate per ton of entire sea-freight on Class E Stores imported from England to the several ports during 1896.

2. Rate List, Class E—Rolling Stock for 1896.

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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 Governments of Madras, Bombay, Bengal, the North-Western Provinces and Oudh, the Punjab and Burma, Public Works Department.
The Secretaries to the Chief Commissioners of the Central Provinces 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, Bombay and Burma.
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.

G Labtock Lt. R.E.
for Director of Railway Construction.

To

The Secretary to the Govt of Madras
Public Works Dept.

with 60 spare copies (Sent per Packet Post)
(in T Prokits)