Public Works (1890) Department.

RAILWAY BRANCH.

G.O., No. 696 Ry.

DATED 20th May

[Despatch Abstract.]

Rate list Class E. Rolling stock for 1884.—

Circular from the Govt of India forwarding, Communicated to the Consulting Engineer for Railways.

[P. W. Ry. 760—25-9-99.]

Indexed.

BACK PAPERS.

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

FURTHER PAPERS.

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

Rr. Proc. 743 R dy 10.9.88
B No. 696 R dy 20th May/90

P.W.C. No. 4268.

FROM

THE DIRECTOR GENERAL
OF RAILWAYS,

TO

C.O.S.C.

Communicated to the Consulting Engineer for Railways for information and guidance in continuation of Proc: No. 743 R. dated 10th September 1888.

Circular No. 20.

Dated Simla, the 27th March 1890.

Received 6-5-90.

Enclosure (C.O.S.C.)

10-5-90
W for R

B
No. 696 R dy 20th May/90.

RATE LIST FOR CLASS E, STATE RAILWAY STORES.

"Rolling Stock" for 1887.

To
The Controller for Rys
Exr. Cutt Rly: Accts:
9/0

G. C. Press, Simla.—No. 1393 P. W. D.—10-4-90—1,106

1/5 Abn 10/5 R 13.5.90

[*General Distribution.*]

Circular No. 20.

FROM

THE DIRECTOR GENERAL OF RAILWAYS,

To

THE DIRECTOR, NORTH WESTERN RAILWAY.
THE MANAGER, OUDH AND ROHILKHAND RAILWAY.
THE SUPERITENDENT, WAY AND WORKS, CHAMAN EXTENSION.
THE ENGINEER-IN-CHIEF, MOGULSARAI-HOWRAH RAILWAY.
THE PORT STOREKEEPER, STATE RAILWAY SURVEY DEPARTMENT, CALCUTTA.

Rate List for Class E, State Railway Stores—"Rolling Stock" for 1887.

Simla, the 27th March 1890.

SIR,

In continuation of my Circular No. 8 of the 31st July 1888, I have the honour to forward herewith for information and guidance a printed statement showing the actual rates, *free on board*, in England for Rolling Stock, (State Railway Stores, "E class") contracted for by the Stores Department of the India Office during 1887.

I have the honour to be,
SIR,
Your most obedient servant,
E. H. STONE,
for Director General of Railways.

Documents accompanying.
Rate List, "Class E," Rolling Stock, for 1887.

The Secretaries to the Governments of Madras, Bombay, Bengal, the North-Western Provinces and Oudh, and the Punjab, Public Works Department.
The Secretaries to the Chief Commissioners of the Central Provinces, Burma, Assam and Coorg, Public Works Department.
The Secretaries to the Residents, Hyderabad and Mysore, Public Works Department.
The Secretaries to the Agents to the Governor General, Rajputana, 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 Inspector General of Military Works.
The Accountant General, Public Works Department.
The Comptroller General.
The Accountant General, Bengal.
The Consulting Engineers for Railways, Madras and Bombay.
The Consulting Engineers to the Government of India for Railways, Calcutta, Lucknow, and Central Division.
The Agent and General Manager, Assam Railways and Trading Company, Limited.

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

F. B. Hebbert

for Director General of Railways.

Simla 7/4/90

To

The Joint Secretary to the Government of Madras,
(Railway Branch) Public Works Department.

Code Letter No.

Rd 5/4/90
Transfer ER.

P. W. Rec'd 4268/90

Enclosure to Director General of Railways' Circular No. 20 of 1890.

RATE LIST.

CLASS E.

ROLLING-STOCK.

1887.

C. C. Press, Simla.—No. 1393 P. W. D.—11-4-90.—1,106.

CONTENTS.

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CLASS E.

ROLLING STOCK.

a.—LOCOMOTIVES.

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a*.—LOCOMOTIVES.

For 5′ 6″ Gauge Railways.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
390	Engines (Locomotive).	Of the Abt system, of about 54 tons service weight, able to haul 135 tons of train load up gradients of 1 in 20 and round curves of 600′ radius, with a velocity of 6¾ miles to the hour	3,175	0	0	Each.	
513		Tank, eight wheels coupled	2,325	0	0	„	
		General Dimensions as follows :—					
		Cylinders, 18″ × 26″					
		Diameter of wheels (all coupled), 4′ 0″					
		Wheel base, 14′ 3″					
		Working steam pressure, 160 lbs. per square inch					
		Heating surface tubes, 1,100 square ft.					
		„ „ fire-box, 107 „ „					
		Grate area 22 „ „					
		Total weight in working order, 58 tons					
		Capacity of tanks, 1,500 gallons					
		Length of tubes, 12′ 7″ between plates, fire-box to be 4′ 9″ wide ...					
		Bearing springs to be under axle boxes					

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a.*—LOCOMOTIVE—*contd.*

For 5′ 6″ Gauge Railways.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
513—*contd.*	Engines (Locomotive)—*contd.*	General dimensions—*contd.* :—					
		Boiler to be fitted with two steam domes					
		Top of fire-box to be inclined and front end of tubes to be lowered					
		Boiler shell and barrel plates and copper fire-box plates to be $\frac{9}{16}$″ thick					
		Leading and trailing axle boxes to have $\frac{3}{4}$″ side play either way					
		Steam, hand and chatelier brakes to be provided					
E1140		Complete, with tender, class H. Dubs & Company	1,810*	0	0	Each.	* Engine ... ... £ 1,456 0 0 Tender ... ... 354 0 0 Total ... 1,810 0 0
		Engines.					
		Diameter of cylinder, 16″					
		Length of stroke, 24″					
		Diameter of coupled wheels, 5′ 0½″					
		Diameter of bogie wheels, 2′ 9″					
		Total wheel base, 19′ 3″					
		Working steam pressure per square inch, 140 lbs.					
		Heating surface, external tubes, 886·5 sq. ft.					

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a.*—LOCOMOTIVES—*contd.*

For 5′ 6″ Gauge Railways.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks
E1140—*contd*	Engines (Locomotive)—*contd.*	Heating surface fire-box, 83·5 sq. ft.					
		Grate surface, 14¾ sq. ft.					
		Tenders.					
		Number of wheels, six					
		Wheel base, 11′					
		Diameter of wheels, 3′ 7″					
		Capacity of tank, 1,700 gallons					
132.	Engines (Loco.)—Spare parts of—Axles.	Driving	73	10	0	Each.	
		Leading	13	0	0	,,	
		Trailing	11	0	0	,,	
1138	Axle boxes...	Bogie wiper, for Locomotives, H. B. class	3	14	4	Each.	
1142	Bars slide ...	With slide blocks, slide brackets, cross heads, and all bolts, complete	34	10	0	Set.	
	Blocks ...	For expansion links	1	0	0	Each.	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a.*—LOCOMOTIVES—*contd.*

For 5′ 6″ Gauge Railways.

Contracted for in 1887.

Contract Number.	Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
E1142	Engines (Locomotive)—Spare parts of—*contd.*	Cocks.	Cylinder } For Kitson & Company's engines	0	12	6	Each.	
			Tallow }	1	17	6	„	
E1141		Coupling rods	Coupling rods for Sharp Stewart & Company's engines	33	10	0	½ Set.	
E1142		Cylinders ...	Complete with covers, glands, bolts and nuts for Messrs. Kitson & Company's engines	69	0	0	Pair.	
E1138		Glasses, spectacle.	White, circular—					
			13⅛″ × 3/16″ thick...	0	2	9	Each.	
			13½″ × 3/16″ „					
			15″ × 3/16″ „					
			16 3/16″ × 3/16″ „					
185		Indicator speed.	For designing and supplying special gearing for locomotive speed indicator ordered on Contract E-719, dated 7th February 1884	15	0	0		
			For packing of ditto	2	0	0		
			„ additional carriage	0	15	9		

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a.*—LOCOMOTIVES—*contd.*

For 5′ 6″ Gauge Railways.

Contracted for in 1887.

Contract Number.	Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
E1141	Engines (Locomotive)—Spare parts of—*contd.*	Injectors.	No. 10 M. M. Gresham's self-starting, for Messrs. Sharp Stewart and Company's engines	14	0	0	Each.	
E1138			With cones, H. class—					
			Right hand					
			Left „					
			With cones, H. B. class—	7	14	2	„	
			Right hand					
			Left „					
E1142		Links.	Expansion ... } For Messrs. Kitson and Company's engines ...	2	15	0	Each.	
			Blocks for expansion ... }	0	7	6	„	
			Hangers for „ ... }	1	0	0	„	
E1138		Lubricators	Roseve's	1	0	10	Each.	
			Furnace's	0	14	10	„	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a*.—LOCOMOTIVES—*contd.*

FOR 5′ 6″ GAUGE RAILWAYS.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
E1142	Engines (Locomotive)—Spare parts of—*contd.* — Piston	With rings and rods, for Messrs. Kitson and Company's engines	10	0	0	Set.	
132	Plates.	Fire-box, tube, flanged, for Messrs. Kitson and Company's engines	26	0	0	Each.	
133		Copper, fire-box, tube, flanged, for Messrs. Sharp Stewart and Company's engines ...	28	10	0	„	
450		Copper, fire-box, tube, flanged, for Locomotives, class L, light	31	15	0	„	
E1112		Smoke-box, tube, flanged, for Messrs. Kitson and Company's engines	25	0	0	„	
E1138		Fire box copper, tube, for H class Locomotives	22	5	0	„	
E1141	Springs, Bearing.	Driving ...	3	5	0	Each.	
		Leading ...	3	4	0	„	
		Tender ... — For Messrs. Sharp Stewart and Company's engines ...	3	1	4	„	
		Trailing ...	3	5	0	„	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a*.—LOCOMOTIVES—*contd.*

FOR 5′ 6″ GAUGE RAILWAYS.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
E1142	Engines (Locomotive)—Spare parts of—*contd.* — Springs, Bearing—*contd.*	Driving ...	3	7	6	Each.	
		Tender ... — For Messrs. Kitson & Company's engines	3	7	6	„	
		Trailing ...	7	0	0	„	
67	Springs ...	Leading ... — For H class engines by Messrs. Nasmyth Wilson & Company ...	2	7	0	Each.	Average price.
		Trailing ...					
167	Tubes ...	Brass boiler, 1⅜″ outside diameter, 7′ 8″ long, ⅛ B. W. G., approximate weight 14 lbs. each	0	6	6	Each.	
E1149		(*a*) Brass boiler, 8′ × 1⅜″ outside diameter, by ⅛ B. W. G. thick	0	7	10	„	Estimated weight of 100 tubes = 1
		(*b*) „ „ 9′ 7½″ × 2″ „ „ „ „	0	10	2	„	„ „ „ „ = 2,166 „
		(*c*) „ „ 10′ 6″ × 2¼″ „ „ „ „	0	16	7	„	„ „ „ „ = 2,741 „

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a*.—LOCOMOTIVES—*contd.*

For 5′ 6″ Gauge Railways.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
E1153	Engines (Locomotive.)—Spare parts of—*contd.* Tyres ...	Steel driving	3	14	4	Each.	
		„ leading					
132		Wheels, driving ... For Messrs. Kitson's engines	15	5	0	Pair.	
		„ leading ... For Messrs. Kitson's engines	15	5	0	„	
		„ trailing ... For Messrs. Kitson's engines	11	0	0	„	
E1142	Valves ...	Slide with bridles, for Messrs. Kitson & Company's engines	4	15	0	Each.	
132	Wheels and axles.	Complete with tyres for tender, for Messrs. Kitson & Company's engines ...	87	0	0	Set.	
1141	„ ...	Cranked, driving, for Messrs. Sharp Stewart & Company's engines	139	0	0	Pair.	
E1142	Wheels ...	Driving, and steel axle cranked, for Messrs. Kitson & Company's engines ...	70	0	0	Set.	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a*.—LOCOMOTIVES—*contd.*

For Metre Gauge Railways.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
80	Engines (Locomotive).	Complete, with tender and all lamps, Class F	1,070*	0	0	Each.	* Engine ... ... £885 Tender ... ... 185 Total ... £1,070
		General Dimensions of Engines :—					
		Diameter of cylinder, 14″					
		Length of stroke, 20″					
		Diameter of wheels, 3′ 6½″					
		Wheel base, 11′					
		Working steam pressure, per square inch, 140 lbs.					
		Heating surface, external tubes, 590 sq. ft.					
		„ „ fire-box, 59 sq. ft.					
		Grate surface, 12 sq. ft.					
		Tenders.					
		Number of wheels, six					
		Wheel base, 7′ 10½″					
		Diameter of wheels, 2′ 1⅜″					
		Capacity of tank, 1,000 gallons					
		For duplicates for above, *vide* Appendix...					

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a*.—LOCOMOTIVES—*contd.*

For Metre Gauge Railways.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
427	Engines (Locomotive)—*contd.*	For adding wrought-iron stays to leading end and counterbalance weights at the trailing end of each of the engines included in Contract No. 80 (above) ...	10	0	0	Per engine.	
481		F Class, complete with tender	1,060*	0	0	Each.	* Engine ... ... £880 Tender 180
		General dimensions as follows:—					
		Engine.					
		Diameter of cylinder, 14"					
		Length of stroke, 20"					
		Diameter of wheels, 3′ 6½"					
		Wheel base, 11′					
		Working steam pressure per square inch, 140 lbs.					
		Heating surface, external tubes, 590 sq. ft.					
		Ditto ditto fire-box, 59 sq. ft.					
		Grate surface, 12 sq. ft.					
		Tender.					
		Number of wheels, six					
		Wheel base, 7′ 10½"					

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a*.—LOCOMOTIVES—*contd.*

For Metre Gauge Railways.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
481	Engines (Locomotive)—*contd.*	Diameter of wheels, 2′ 1⅛"					
		Capacity of tank, 1,200 gallons					
E1163		Tank, 2′ 6" gauge outside cylinder type, carried on four coupled wheels, and Major English's patent two wheeled trailing bogie. Specially designed for running on roughly laid lines and sharp curves. The coupled wheels have also a special arrangement of compensating spring gear	745	0	0	Each.	3 sets Tracings £15.
		General Dimensions.					
		Cylinders, diameter 8¼", stroke 12"					
		Coupled wheels, diameter 22"					
		Coupled wheel base, 4′ 0"					
		Total wheel base, 8′ 10"					
		Heating surface in fire-box ... ... 20 sq. ft.					
		„ „ in tubes ... ... 180 „					
		Grate area, 4·4 square feet					
		Tank capacity, 200 gallons					
		Coal bunker capacity, 15 cubic feet					
		Weight in working order, 10¼ tons					

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a.*—LOCOMOTIVES—*contd.*

For Metre Gauge Railways.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
E1163	(Engines Locomotive)—*contd.*	Duplicates for above (*vide* Appendix B)	65	0	0	Lot.	
E1157	Engines (Locomotive)—Spare parts of— Axles ...	Wrought-iron, driving } Rough turned	3	3	5	Each.	
		„ „ leading }	2	8	9	„	
		„ „ trailing }	3	0	8	„	
E1163	Bars fire ...	For Locomotives 2′ 6″ gauge by Fowler and Company	1	5	0	Set.	
388	Bars Slide	For F class engines, built by the Vulcan Foundry Company	2	1	8	Each.	
387		For A class engines, built by Hawthorn and Company	6	0	0	„	
398		For O class engines, built by Neilson and Company	2	0	6	„	
333	Boiler barrel	Ready rivetted, excluding dome, junction with smoke and fire-box (not to be drilled; this will be done locally); necessary rivets to be supplied for ends of barrel. For F class engines, makers Dubs and Company	35	0	0	Each.	
387	Brake gear	Hand, complete, for A class engines by Hawthorn and Company	32	12	6	Set.	
398		Hand, complete, for tender O class engine by Neilson and Company	21	5	0	„	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a.*—LOCOMOTIVES—*contd.*

For Metre Gauge Railways.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
388	Engines (Locomotive)—Spare parts of—*contd.* Brake gear.	Steam, for F class engines by the Vulcan Foundry Company as under:— Brake cylinder with piston head and packing ring, gland, neck ring, escape valve	4	5	0	Each.	
		Cross beam, connection to brake piston rod, with socket piece and nut ...	1	12	6	„	
		Springs for brake, 1′ 0½″ long	0	1	8	„	
398		Steam, for O class engines by Neilson & Company, as under:— 1 Brake cylinder with piston head and packing ring, gland, neck ring, escape valve; 1 Cross beam ... ...; 1 „ centre rod with four nuts and one joint pin ... ...; 1 „ connection to brake piston rod with socket piece and nut ... ...; 2 springs for brake 1′ 0½″ long ... ...; 4 Brake hangers ... ...; 1 Set of brake pins	23	12	6	Lot.	
388	Brackets ...	Buffer Tender (E class) } Vulcan Foundry Company	0	11	8	Each.	
		„ „ (F „) }	0	13	2	„	
288	Brasses ...	Little end } For engine by Manning, Wardle and Company	0	7	7½	Each.	
		Connecting rod }	0	14	3	„	
		Big end }	1	0	4½	„	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a*.—LOCOMOTIVES—*contd.*

FOR METRE GAUGE RAILWAYS.

Contracted for in 1887.

Contract Number.	Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
387	Engines (Locomotive)—Spare parts of—*contd.*	Coupling rods.	Complete for A class engines by Hawthorn and Company	8	12	9	Each.	
504		Cranks ...	Driving, crucible cast steel forging, complete with washers and pins, to be machined all over, ready to drive on to axle, to fix engines class A by Dubs and Company ...	4	10	0	Each.	
E1162		Crank arms	Steel, for driving wheels } For Dubs and Company's engines, to be rough machined all over and bored.	8	0	0	Each.	
			,, trailing ,, }	8	0	0	,,	
398		Eccentric rods.	2 fore gear } For O class engines by Neilson and Company ...	5	15	6	Lot.	
			2 back gear }					

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a*.—LOCOMOTIVES—*contd.*

FOR METRE GAUGE RAILWAYS.

Contracted for in 1887.

Contract Number.	Articles.		Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
387	Engines (Locomotive)—Spare parts of—*contd.*	Eccentric sheaves and rods.	2 sheaves 2 rods, fore gear } For A class engines by Hawthorn and Company ... 2 ,, back ,, }	34	0	0	Lot.	
398		Eccentric sheaves.	For O class engines, built by Neilson & Company	1	10	3	Each.	
388			For E class engines, built by the Vulcan Foundry Company	1	11	8	,,	
288			For engines, built by Manning, Wardle & Company, of Leeds	1	6	8	,,	
288		Eccentric straps.	For engine No. 686, built by Manning, Wardle & Company, of Leeds	2	6	8	Pair.	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a.*—LOCOMOTIVES—*contd.*

For Metre Gauge Railways.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
464	Engines (Locomotive)—Spare parts of—*contd.* — Gauge Steam	To show 200 lbs.	1	3	9	Each.	
		Steel tube, to show 200 lbs. ordinary dial Bourdon steam gauge with a $\frac{3}{8}$" screw, 16 threads to the inch and $\frac{3}{4}$" long, the face of the dial to be about 4" ...	1	5	0	"	
398	Hangers Spring.	4 front, 4 hind, 2 centre — For O class engines, built by Neilson and Company	21	10	6	Lot.	
388		8 front, 8 hind, 8 centre — For F class engines by Vulcan Foundry Company	11	15	0	Lot.	
387	Horn cheek clips.	Leading, Driving, Trailing — For A class engines by Hawthorne and Company ...	5	2	6	Set.	
388		2 leading, 2 driving, 2 trailing — For E class engines, built by the Vulcan Foundry Company ...	2	5	0	Lot.	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a.*—LOCOMOTIVES—*contd.*

For Metre Gauge Railways.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
393	Engines (Locomotive)—Spare parts of—*contd.* — Horn cheek clips.	Leading, Driving, Trailing — For O class engines, built by Neilson and Company	3	6	0	Set.	
"	Horn plate clips.	For O class engines, built by Neilson and Company	1	12	0	"	
888		4 front, 4 hind, 4 centre — For E class Engines	2	7	6	Lot.	
		4 front, 4 hind, 4 centre — For F class engines	2	5	0	"	
266	Injector ...	Gifford, outsided $2\frac{3}{16}$" length, 15" from bottom flange to top	6	5	0	Each.	
387	Pipes Steam	Copper, for smoke-box of A class engines by Hawthorne & Company	6	0	0	Each.	
"		" main for inside of boiler, for A class engines by Hawthorne & Company ...	3	0	0	Set.	
388		" main, for inside of boiler, fo E class engines by the Vulcan Foundry Company	2	10	0	"	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a*.—LOCOMOTIVES—*contd.*

For Metre Gauge Railways.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
388	Engines (Locomotive)—Spare parts of—*contd.* — Pipes steam—*contd.*	Copper main for inside of boiler for F class engines	3	10	0	Set.	
„		„ for smoke-box of E class engines by Vulcan Foundry Company	2	7	6	Each.	
„		„ „ „ F „ „ „ „ ...	2	14	2	„	
398		„ main, for inside of boiler of O class engines by Neilson & Company ...	4	4	0	Set.	
„		„ „ smoke-box „ „ „ „ ...	2	15	2	Each.	
„	Pipes, Telescopic.	1 Attachment to engine ...					
„		1 „ „ tender ...					
„		Sliding pipe ... ... } For O class engines, built by Neilson & Company ...	9	11	6	Set.	
„		2 Union units ...					
388		1 socket attachment to engine					
„		1 „ „ „ tender					
„		Sliding pipe ... ... } For F class engines, built by the Vulcan Foundry Company	4	16	3	Set.	
„		2 Union units ...					
288	Piston rings	6" piston rings for cylinders of engines, built by Manning, Wardle & Company, of Leeds	1	0	10	Pair.	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a*.—LOCOMOTIVES—*contd.*

For Metre Gauge Railways.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
393	Engines (Locomotive)—Spare parts of—*contd.* — Piston rod ...	Piston rod glands for engines, built by Manning, Wardle & Company, of Leeds ...	1	10	0	Pair.	
	Plates ...	Boiler barrel, for A class engines, by Dubs & Company	17	10	0	Set.	
		„ E „ „ „	22	0	0	„	
		„ F „ „ „	24	0	0	„	
		To be bent but not drilled (but planed on edges) with cover plates inside and out. complete with all necessary rivets.					
187	Plates, copper.	Tube, flanged, but not bored, for F class engines, 14" cylinders, makers Dubs & Company	15	0	0	Set.	
126		1 back flanged, fire-box ...					
		1 crown fire-box ...					
		1 sides „ ... } For A class engines by R. and W. Hawthorne Leslie & Company	34	0	0	Lot.	Separate rates not quoted.
122		1 tube flanged fire-box ...					
		1 for patching fire-boxes ⅜"					
		1 fire-box, back flanged ...					
		1 crown ... } For F class engines by Dubs & Company	66	0	0	„	Ditto.
		1 „ tube flanged ...					

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a*.—LOCOMOTIVES—*contd*.

For Metre Gauge Railways.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
106	Engines (Locomotive)—Spare parts of—*contd.* Plates, copper.	Fire-box, back, flanged— To drawing E. 258 ... ... „ E. 432	8	12	6	Each.	
		Fire-box, crown— To drawing E. 258 „ E. 432 } For E class engines, built by the Vulcan Foundry Company	21	16	0	„	
		Fire-box, tube flanged— To drawing E. 258 ... ... „ E. 432	12	10	0	„	
460	Plates, iron	Tube, for smoke-box end of locomotive engines, class D, built by the Vulcan Foundry Company. Holes for tubes, wash out plugs, longitudinal stays and steam pipe only to be bored in England	4	18	0	Each.	
387	Quadrant ...	Links and blocks one of each for A class engines, built by Hawthorne and Company ...	7	10	0	Lot.	Separate rates not quoted.
387	Regulator handle.	Stop casting complete with gland for A class engines by Hawthorne and Company ...	6	2	0	Each.	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a*.—LOCOMOTIVES—*contd*.

For Metre Gauge Railways.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
388	Engines (Locomotive)—Spare parts of—*contd.* Regulator handle.	Stop casting complete with gland for E class engines, built by the Vulcan Foundry Company	2	12	6	Each.	
398		Stop casting complete with gland for O class engines, built by Neilson and Company...	3	8	0	„	
387	Springs ...	Bearing driving } For A class engines by Hawthorne Company	1	11	3	Each.	
„		„ trailing }					
388		„ driving }	1	14	9	„	
„		„ leading } For E class engines, Vulcan Foundry Company	1	14	9	„	
„		„ trailing }	2	0	0	„	
„		„ driving }					
„		„ leading } For F Class engines „ „ „	1	10	0	„	
„		„ trailing }					
398		„ bogie }	1	19	0	„	
„		„ driving }					
„		„ trailing } For O class engines by Neilson & Company	1	19	7½	„	
„		Buffer volute }	0	11	6	„	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a*.—LOCOMOTIVES—*contd.*

For Metre Gauge Railway.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
388	Engines (Locomotive)—Spare Parts of—*contd.* Springs—*concld.*	Buffer volute for E class engines by Vulcan Foundry Company	0	16	3	Each.	
,,		,, ,, F ,, ,, ,, ...	0	16	3	,,	
,,		Draw bar for E ,, ,, ,, ...	2	14	9	,,	
,,		,, ,, F ,, ,, ,, ...	3	0	7½	,,	
398		,, ,, O ,, Neilson & Company	0	16	2	,,	
288		Steel laminated, for engines by Manning Wardle & Company	3	17	10	Pair.	
288	Spring balance.	Salter's, outside, 2½"	1	5	0	Each.	
464		Salter's, to be of the ordinary commercial type, 1¾" diameter and 9" long in spring drawn	0	10	8	Each.	
250	Tubes ...	Boiler (Locomotive), brass, external diameter 1¾" and 6′ 2″ long, 11 B. W. G. for W. B. Dick & Company's C class engines. Estimated weight of 100 tubes = 1400 lbs.	0	0	5½	lb.	
415	Tubes, boiler brass: Ferrules for—	Locomotive boiler tubes to be made from solid drawn steel tubes of best quality; each ferrule must have a taper of 1 in 16 when finished and be 1¾" long	0	0	3	Each.	For Kaunia Dharla Railway (2′ 6″ gauge.)

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *a*.—LOCOMOTIVES—*concld.*

For Metre Gauge Railways.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
391	Engines (Locomotive)—Spare parts of—*concld.* Tyres ...	Crucible, steel, tender and trailing, for E and F class engines, 1′ 8⅝" inside diameter	1	3	0	Each.	
388	Valves ...	Brake, steam, complete with 2 unions, for F class engines, by the Vulcan Foundry Company	5	4	7	,,	
398		Brake, steam, complete with two unions, for O class engines, by Neilson & Company	4	19	8	,,	
398	Valve, buckle	Complete with cross head and cotter, for O class engines, built by the Neilson & Company	2	15	0	Each.	
388	,,	,, ,, ,, ,, for E ,, built by Vulcan Foundry Company	2	16	3	,,	
388	Valve, spindle, intermediate.	Complete, for E class engine, built by the Vulcan Foundry Company	4	0	0	Each.	
288	Valve, spindle, glands ...	For engine, built by Messrs. Manning, Wardle & Company, Leeds	0	16	0	Each.	
288	Wheel centres.	Driving and leading, with crucible steel tyres only, 3 pairs driving and 3 pairs leading. For engines by Manning, Wardle & Company, Leeds	15	18	8	Pair.	

CLASS E.

ROLLING-STOCK.

A.—COACHING AND GOODS STOCK.

(1) Complete Vehicles.

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

FOR 5′ 6″ GAUGE RAILWAYS.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
338	Brakevan ...	Underframe and body iron-work, roofing, lavatory and metallic fittings, trimmings, window glass and panel pins	112	5	0	Set.	
235	Wagons, covered goods.	Underframe and body steel and ironwork for covered goods wagons complete ...	84	4	0	Set.	
E1166	Ditto ...	Special type 20 feet long (complete ironwork for) —	63	5	0	Set.	
468	Cranes ...	Travelling or accident. The cranes are to be carried on a wrought-iron truck, and suited to lift and slue a weight of 10 tons at a maximum radius of 16 feet from centre of the pillar to the centre of the chain and a maximum height at work of 14′ 5″ from platform of truck with a loose link motion for lowering the jib ...	475	0	0	Each.	

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

FOR METRE GAUGE RAILWAYS.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
138	Coaching Stock. Brake vans	Underframe and body iron work, lavatory and metallic fittings, trimmings, window-glass for —	52	15	0	Set.	
198	Brake vans	Underframe, underframe and body iron work, lavatory and metallic fittings, trimmings and window-glass for —	79		0	,,	
,,	Carriages, composite.	Underframe, underframe and body steel and ironwork, lavatory and metallic fittings, trimmings and window-glass for (1st and 2nd class,) — with end doors ...	130	0	0	,,	
,,	Carriages, 1st class.	Underframe, underframe and body steel and ironwork, lavatory and metallic fittings, trimmings and window-glass, with end doors for —	131	0	0	,,	
,,	Carriages, 2nd class.	Underframe, underframe and body steel and ironwork, lavatory and metallic fittings, trimmings and window-glass for a second class — with end doors	130	0	0	,,	
,,	Carriages, 2nd class.	Underframe, underframe and body steel ironwork, trimmings and window-glass for a — without lavatory or metallic fittings	80	0	0	,,	
,,	Carriages, 3rd class.	Underframe, underframe and body ironwork, metallic fittings and trimmings for — with end doors	56	0	0	,,	
310	Carriages, 3rd class.	Underframe, underframe and body iron and steel work, roofing, metallic fittings, trimmings and window glass for —	56	2	0	,,	
198	Horse box ...	Underframe, underframe and body ironwork, metallic fittings and trimmings for a —	96	0	0	Set.	
198	Post Office carriage.	Underframe, underframe and body iron work, lavatory and metallic fittings, trimmings and window-glass for —	137	0	0	Set.	

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

FOR METRE GAUGE RAILWAYS.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
214	Wagons, Ballast.	Underframe, underframe and body steel and ironwork for —	33	16	0	Set.	
138	Wagon Stock. Covered goods.	Underframe and body steel and ironwork for covered goods wagons 14 feet long, complete	36	8	0	Set.	
503	Covered goods.	Underframe, underframe and body steel and ironwork for — 14 feet long ...	51	18	2	,,	
397	Ditto. Bogie.	Underframe and bogie trucks, underframe and bogie truck and body ironwork for — 25 ft. long	99	2	6	,,	
395	Ditto. Bogie.	Underframe and bogie trucks, underframe bogie trucks and body ironwork for — 25 feet long, complete	93	13	6	,,	
396	Ditto. Bogie.	Underframe and bogie trucks, underframe bogie truck and body ironwork for one covered goods bogie wagon, 25 feet long, complete	95	17	3	,,	
214	Cattle Truck ...	Underframe, underframe and body steel and ironwork for one highsided wagon, with roof, to be used as —	38	0	0	Set.	
214	Timber Truck ...	Underframe, underframe and body steel and ironwork for —...	35	10	0	Set.	
17	Cranes Accident	To lift five tons	330	0	0	Each.	
,,	Cranes Accident	To lift 10 tons	455	0	0	,,	

CLASS E.

ROLLING STOCK.

4.—COACHING AND GOODS STOCK.

(2) Ironwork.

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

FOR 5′ 6″ GAUGE RAILWAYS.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
E1174	Axle boxes ...	Complete with gun metal bearings, leather washers and wrought-iron shields and set screws	0	14	3	Each.	
E1147		With brasses B type					
		„ C „					
		„ D „ „ „ „ „ „ „	0	14	9	„	
		„ E „					
		„ F „					
303		Complete with gun metal bearings, leather washers and wrought-iron shields and set screws	0	15	0	„	
23		Complete with gun metal bearings, leather washers and wrought-iron shields and set screws. I. S. R. Standard	0	14	3	„	
E1137	Axle Guards ...	With bridles and bolts	0	11	9	„	
E1150	Bogie centres ...	Cast steel, sets of two castings each	3	7	0	Set.	
E1137	Brake gear ...	Complete to drawing E380	12	10	0	„	
E1173	Chains ...	Safety with eyebolts and washers	0	12	6	Each.	

CLASS OF STORES. E.—TOOLS AND STORES, SUB-HEAD *b*.—COACHING AND GOODS STOCK—(*2*) IRON WORK—*contd.*

FOR 5′ 6″ GAUGE RAILWAYS.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
1157	Cotters, split	No. 1	0	2	2½	Dozen.	
„		„ 2	0	2	5½	„	
„		„ 3	0	1	5½	„	
„		„ 4	0	1	1½	„	
„		„ 5	0	0	8	„	
		„ 6	0	0	3½	„	
1173	Draw bar hooks	With washers, &c., complete	1	6	6	Each.	
1137	Guides, spindle	For buffer, D type	0	10	0	Each.	
E1150	Links	Swing, with bottom plates, bars, &c.	2	5	0	Each.	
1137	Iron sheets	Corrugated, galvanized, curved 10′·6″ × 2′·6″ × 3″ pitch × ¾″ deep, 1¾ lbs per square foot	13	2	6	Ton.	
		„ „ roofing 8′·6″, radius, 11′·6″, long × 3″ pitch × ¾″ deep No. 18 B. W. G.	14	2	6	„	

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

FOR 5′ 6″ GAUGE RAILWAYS.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
306		Bearing, complete, for wagons	1	8	2	Each.	
35		„ „ wagon with ten plates, with scroll iron pins, &c., complete, standard pattern	0	17	10	„	
66		Bearing, with clips for wagon stock, 10 plates, with scroll iron pins, &c., complete	0	17	10	„	
314		„ with clips for wagon stock	0	8	7	„	
E1145		„ complete for wagons	0	18	6	„	
E1172		„ for wagons	0	18	0	„	
312	Springs	Buffer, recoil, Timmis'	0	4	9	„	
„		„ Timmis'	0	19	3	„	
E1145		Elliptical, complete	1	17	6	Group.	
E1136		Timmis' Patent, unequal section—					
„		B	0	8	3	Each.	
„		B2	0	9	0	„	
„		C	0	13	0	„	

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

FOR 5′ 6″ GAUGE RAILWAYS.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
E1136		Timmis patent unequal section—					
		C2	0	14	0	Each.	
		F	0	4	6	„	
		G	0	15	0	„	
		G2	0	16	6	„	
		H	0	12	6	„	
		H2	0	14	0	„	
	Springs ...	I	0	15	0	„	
		J	0	15	0	„	
E1145		Triple coil, nest	0	10	0	Nest.	
„		Volute 9½″ × 6¼″ × 2⅛″ hole	0	4	9	Each.	
306		Volute	0	6	0	„	
E1172		Volute, buffer	0	4	6	„	
		„ draw	0	5	0	„	

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

FOR 5′ 6″ GAUGE RAILWAY.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
491	Tyres ...	Steel, 3′ 2″ inside rolled diameter	1	11	2	Each.	
E 1175		For carriages and wagons	12	2	6	Pair.	
E 1143		Ditto	12	0	6	„	
307	Wheels and axles	Ditto	12	2	6	„	
125		For mining wagons, cast steel	0	9	9	„	
E 1146		„ „ „	0	12	6	„	
E 1156		For Platelayer's light inspection trollies, to be ground on tread	6	12	8	Set.	

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

FOR METRE GAUGE RAILWAYS.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
E 1167	Axles ...	Steel, for carriages and wagons	1	2	6	Each.	
340	Axle boxes ...	Complete, with gun metal bearings, washers and wrought-iron shields and set screws	0	8	0	Each.	
341		" " " " " " " ...	0	10	0	"	
507		" " " " " " " ...	0	10	6	"	
340		" " " " journals, $6\frac{5}{16}$" × $2\frac{3}{4}$" ...	0	8	0	"	
341		" " " " " 7" × 3" ...	0	10	0	"	
103	Buffers ...	Coupling (Jones' flexible) complete, with screw coupling, 1 volute spring, 2 spring sockets.	3	15	6	"	
		Flexible, and screw couplings for wagons, complete, with steel springs	8	13	5	"	
446		Hook, with one volute spring and 2 spring sockets, for Jones' flexible couplings ...	2	4	3	"	
103	Hooks ...	Coupling, standard pattern, for Jones' flexible couplings	0	7	11	"	
E1165	Iron corrugated	Galvanized, for roof 6′ × 2′ 2″ × 24″ B. W. G. }	11	10	0	Ton.	
		" 7′ × 2′ 2″ × 24″ " }					

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

FOR METRE GAUGE RAILWAYS.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.		Unit.	Remarks.
305	Springs carriage and wagon.	Bearing, carriage, tension	0	17	8	Each.	
"		" " "	0	18	9	"	
"		" " "	0	17	0	"	
508		" " laminated, 7 plates	1	0	3	"	
508		" carriage, laminated 6 plates	1	0	3	"	
305		" for Brake vans	0	18	9	"	
314		" for wagons with clips	0	8	$8\frac{1}{2}$	"	
E 1139		" " " laminated	0	9	$4\frac{1}{2}$	"	
508		" " " "	0	6	$6\frac{1}{2}$	"	
305		" " " "	0	6	8	"	
"		Buffer volute "	0	6	3	"	
404		" " "	0	8	2	"	
508		" " "	0	5	3	"	
446		" " steel	0	7	0	"	
E 1151		Buffer, Spiral, steel, 'Timmis', $16\frac{1}{4}$" × $7\frac{1}{2}$" × $1\frac{1}{8}$"	0	9	0	"	

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

FOR METRE GAUGE RAILWAYS.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
155	Tyres ...	Carriage, steel 9½″ wide	1	7	7	Each.	Without flange, in the rough.
E1164		Wagon „	0	14	10	„	
172	Underframe iron, complete sets.	For third class carriage, 18 feet long, with screw buffer at one end, and buffer with hook riveted in at the other.	36	7	10	Set.	
„		For covered goods wagon, 18 feet long, with buffers, pin, chain and vice handle attachment at one end, and buffer with hook riveted in at the other.	32	11	8	„	
404		For covered goods wagons, 18 feet long, complete with horn guards, and brake gear ...	32	13	0	„	
E1161	Wheels with axles	Wheels, for carriages and wagons with keys	1	17	6	Each.	Without axles.
319		Wheels and axles, for carriages and wagons 2′ 0⅜″ diameter	4	15	0	Pair.	
514		„ „ 2′ 0⅜″ „	5	16	0	„	
„		„ „ „ „	5	16	0	„	Flangeless tyres.
320		„ „ „ Journals $6\frac{5}{16}″ \times 2\frac{3}{4}″$	4	13	6	„	
337		„ fitted complete wrought-iron bodies and bosses with steel tyres ...	5	0	0	„	For Bogie wagons, 25 feet long.

CLASS E.

ROLLING-STOCK.

b.—COACHING AND GOODS STOCK.

(3) Metallic and other Fittings.

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *b*.—COACHING AND GOODS STOCK—(*3*) METALLIC AND OTHER FITTINGS.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
1137	Gauze Glasses, looking...	Iron, wove, plain, 3′ wide × ⅛″ mesh	0	0	2	Sq. ft.	
E1159		18″ × 18″ × ¼″ in teak wood frames.	0	17	3	Each.	
308	Glass window plate.	Neutral tint 18¼″×18¼″×$\frac{3}{16}$″	0	6	10½	Each.	For carriage stock.
,,		,, 18″ × 14¼″ × $\frac{3}{16}$″	0	5	5	,,	
309		White 24″ × 19″ × ¼″	0	6	0⅝	,,	
E1158		,, 21″ × 21″ × $\frac{3}{16}$″	0	4	3¼	,,	
,,		,, 21″ × 18¼″ × $\frac{3}{16}$″	0	3	10¼	,,	
,,		,, 21″ × 4″ × $\frac{3}{16}$″	0	0	9¾	,,	
309		,, 19″ × 19″ × $\frac{3}{16}$″	0	3	9¼	,,	
,,		,, 18¼″ × 18¼″ × $\frac{3}{16}$″	0	3	9¼	,,	
1158		,, 18¼″ × 18¼″ × $\frac{3}{16}$″	0	3	6	,,	
309		,, 18¼″ × 17¾″ × $\frac{3}{16}$″	0	3	6⅛	,,	
1158		,, 16″ × 15″ × $\frac{3}{16}$″	0	2	4	,,	

CLASS E.

ROLLING-STOCK.

b.—COACHING AND GOODS STOCK.

(4) India Rubber Fittings.

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *b*.—COACHING AND GOODS STOCK—(*3*) METALLIC AND OTHER FITTINGS—*contd.*

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
1137	Handles	Brass, with lock caps and plates, complete	0	4	0	Each.	
		Carriage door, malleable cast iron	0	1	4	„	
		Type, door, with staples	0	3	4½	„	
	Hinges	Wrought-iron sunshade	0	0	3½	Each.	
		Carriage door	0	2	11	„	
	Hooks ...	or hat pegs, malleable cast iron	0	0	3½	Each.	
	Lifts	Brass top for venetians	0	0	5	Each.	
		Finger	0	1	9	Dozen.	
	Locks ...	Iron, private, with plates for carriage doors	0	0	4	Each.	
		With handles and plates for lavatory doors, gun metal	0	4	3	„	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *b*.—COACHING AND GOODS STOCK—(*3*) METALLIC AND OTHER FITTINGS—*concld.*

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
1173	Plates ...	Brass fence for windows	0	1	1	Dozen.	
		„ angle „	0	1	1	„	
		„ keyhole „	0	2	4½	„	
		„ lap „	0	0	4	Foot.	
	Studs ...	For glass frame straps	0	1	9	Dozen.	

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *b*.—COACHING AND GOODS STOCK—(*4*) INDIA RUBBER FITTING.

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
304	Attock's Blocks India rubber	6″ × 2½″ × 1″ hole, 1 1/16″ diameter	0	0	10½	Each.	
392		,, ,, ...	0	1	3	,,	
E1144	Cushions India rubber, vulcanized.	3½″ for Window Sashes, Spencer's and Attock's patent	1	0	0	Per °/₀	
304		Window Cushions	0	17	0	,,	
E1152		For Window Sashes, Spencer's and Attock's patent	0	0	2¼	Each.	
26		,, ,, ,, ...	0	0	1¼	,,	
83	Cylinders, India rubber, vulcanized, for 5′ 6″ gauge stock.	For buffer 4⅜″ × 4″ hole, 1 9/16″ iron ring, 6⅜″ diameter	0	3	7	,,	
,,		3¼″ × 1¾″ hole, 1 9/16″ iron ring, 4⅜″ diameter	0	1	1½	,,	
,,		For draw, 5⅜″ × 4¾″ hole, 2 1/16″ iron ring, 1⅛″ diameter	0	6	6	,,	
,,		For buffer springs 4⅜″ diameter × 4″ thick; hole 1 9/16″; outer iron ring 6⅜″ diameter	0	3	7	,,	
26		,, ,, 4⅜″ diameter × 4″ thick; hole 1 9/16″; outer iron ring 6⅜″ diameter	0	3	7	,,	
83		For re-bound springs 3¾″ diameter × 1¾″ thick; hole 1 9/16″; outer iron ring 4⅜″ diameter	0	1	1½	,,	
26		For Draw-springs 5⅜″ diameter × 4¾″ thick; hole 2 1/16″; outer iron ring 8⅛″ diameter	0	6	6	,,	
83		,, ,, ,, ,,	0	6	6	,,	
26		For safety chain 4⅜″ diameter × 4″ thick; hole 1⅛″; outer iron ring 6⅜″ diameter ...	0	3	9	,,	
83		,, ,, ,, ,, ...	0	3	9	,,	
392	Washers India-rubber.	6″diameter × 2″ thick × 2″ hole	0	2	7	Each.	

CLASS E.

ROLLING-STOCK.

5.—COACHING AND GOODS STOCK.

(5) Trimmings.

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

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
G1873 433 G1873 323	Buttons ...	Repp, figured ⅝"	0	1	1	Gross.	
		„ „	0	1	4½	„	
		„ plain ⅝"	0	1	1	„	
		„ „	0	0	1	Dozen.	
1875 44 „ G1873 433 323	Cloth ...	Baize, dark green, 72" wide	0	5	11	Yard.	
		Floor 8 feet wide, in lengths of 25 yards each	0	10	0	„	(Pattern oak, geometrical.)
		„ green 8' 6" wide, in lengths of 8 yards each	0	0	3½	Sq. ft.	
		Repp, figured, 54" wide	0	3	7	Yard.	
		„ figured or "York Ferry," 54" wide	0	3	8½	„	
		„ „ or "York Ferry"	0	2	11	„	
E1171	Hides ...	Buffalo for cushions, maroon color, hand buffed, to average 56 square feet each ...	2	12	5	...	Lion brand.

CLASS OF STORES. E.—ROLLING STOCK, SUB-HEAD *b*.—COACHING AND GOODS STOCK—(5) TRIMMINGS—*contd.*

Contracted for in 1887.

Contract Number.	Articles.	Details.	Rate—Free on Board. Amount. £	s.	d.	Unit.	Remarks.
323	Lace ...	Seaming for trimming	0	0	1½	Yard.	
433		" "	0	0	1¾	"	
G1873		" "	0	0	3¼	"	
"		Pasting	0	0	4	"	
2	Netting ...	Green silk cord, 2 feet wide, in lengths of 25 yards each	0	2	8	"	
E1135	Springs ...	Spiral coppered, for cushions 6¼" × ⅛" thick	0	5	0	Per cent.	
		" copperized " 6" × 5/16" "	0	0	1¼	Each.	

CLASS E.

ROLLING-STOCK.

APPENDICES.

Appendix A.

Price of duplicates for metre gauge engine and tender class F, supplied on Contract No. 80 of 1887.

Description.	Total delivered in the store depôt per cent. £	s.	d.	Remarks.
Engine.				
1 Set of wheels and axles	105	10	0	
2 Sets of tyres	30	5	0	
1 Set of axle boxes	36	10	0	
2 Sets of bearing springs, complete	35	10	0	
1 Set of connecting rods, &c., complete	14	10	0	
1 „ bearings for ditto	4	10	0	
1 „ coupling rods, complete	15	0	0	
1 „ bearings for ditto	3	3	0	
1 „ slide bars, &c.	20	10	0	
1 „ cylinders, &c.	54	10	0	
1 „ piston rods and slide valves	8	0	0	
10 Sets of piston packing rings (cast iron)	5	0	0	
1 Set of valve gear	40	0	0	
1 „ buffers and draw gear for both ends of engine	9	0	0	
2 Injectors and pipes	9	0	0	
4 Sets of spare cones for injectors...	6	0	0	
2 Boiler clack boxes	7	10	0	
2 Sets of cocks and fittings	39	10	0	
1 Whistle	1	18	0	
4 Wash-out plugs, sealings and caps	2	10	0	
1 Regulator stuffing box and gland	2	10	0	
2 Springs for safety valves	0	7	0	
2 Steam pressure gauges	2	10	0	
1 Set of boiler tubes and ferrules	73	0	0	
10 Sets of fire bars and 2 sets of bearers	27	10	0	
5 gross of gauge glasses	8	0	0	
20 Spectacle glasses	2	0	0	
3 Sets of lamps	30	0	0	
1 Set of steam brake gear, complete, with shaft levers, screw, &c.	18	10	0	
Tender.				
1 Set of wheels and axles	33	10	0	
2 Sets of tyres	18	10	0	
1 Set of axle boxes and bearings	12	0	0	
1 „ of feed pipe apparatus, ball and socket pipes and feed valves ...	15	15	0	
1 „ of brake apparatus, complete, with shaft, screw, &c.	20	0	0	
2 Sets of buffers and draw gear, with springs	21	10	0	
2 „ of bearing springs	13	0	0	

Appendix B.

Duplicate wearing parts for the engines supplied on Contract No. 1163 of 1887—£65.

4 Driving wheels with steel tyres.
4 Cast steel bogie wheels (or steel tyres).
2 Sets of bearing springs throughout.
2 Complete sets of brasses for leading, driving and bogie axle boxes.
2 Complete sets of bushes for connecting and coupling rods.
2 Front cylinder covers, with glands and studs.
2 Back cylinder covers.
2 Pistons complete, with rings and springs.
8 Brass piston rings.
4 Gun metal slide valves.
12 Boiler tubes and 24 ferrules.
8 Fusible plugs.
12 Water gauge glasses and 24 I. R. washers for do.
2 Sets of cross head sleepers.
8 Radius dies.
8 Brake blocks.
6 Sets of firebars.