

(1) பக்கங்களின் எண்ணிக்கை _____

(2) புதுக்கித் திருப்பிய நாள் _____

(3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம் 10/2

தமிழ்நாடு ஆவணக் காப்பகம்

(124)

தமிழ்நாடு அரசு

PWD துறை

அரசாணை எண்.
மு. கோப்புத் தாள் எண்.

— 2608

அச்சகம்
பலவகை

நாள் : 30-9-1891

198 .

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

16546

LIST OF SURPLUS MATERIALS AND TOOLS AND PLANT IN THE IRRIGATION DEPARTMENT OF THE NORTH-WESTERN PROVINCES
AND OUDH, AVAILABLE FOR TRANSFER.

Name.	Quantity or num- ber avail- able.	Description or locality.	Condition.	Present value.		Remarks.
				Rate.	Amount.	
1	2	3	4	5	6	7
NORTHERN DIVISION, GANGES CANAL. (Roorkee, on Oudh and Rohilkhand Railway.)						
First Sub-Division.				Rs. a. p.	Rs. a. p.	
Iron pulleys	3	At Meerut	Good	Not known	...	This is 3" Gwynne's pump, the pump itself is in good order, but the standard and fittings are much broken. Can possibly be put in order.
Iron brick moulds	6	Ditto	Do.	1 0 0	6 0 0	
Jham, country	2	Ditto	Do.	18 0 0	36 0 0	
Saws, large, pit	4	Ditto	Do.	Not known	...	
Second Sub-Division.						
Centrifugal pump	1	At Roorkee	Good	Not known	...	Marked G. C. for use with iron moulds. There is no probability of these being used here. These are ash shovels for brick kiln and of no use here.
Sand pump	1	Ditto	Fair order	...	Rs. 80 for the set.	
Hand do.	1	Ditto	Useless	Not known	...	
Concrete skip, iron	1	Ditto	Good	Ditto	...	
Charras, mandal	11	Ditto	Do.	Ditto	...	Of no practical use. These and other kilns furniture were made for special kilns and will not likely be used again. These have never been used, nor will likely ever be.
Draggers for splitting masonry,	8	Ditto	Do.	Ditto	...	
Dies (iron) for brick moulds	25	Ditto	Do.	Ditto	...	
Brick moulds, iron	185	Ditto	Do.	1 0 0	135 0 0	
Pokers	8	Ditto	Do.	Not known	...	
Rakes	14	Ditto	Do.	1 0 0	14 0 0	
Scythes	4	Ditto	Do.	12 0 0	48 0 0	

2608/1

List of surplus materials and tools and plant in the Irrigation Department of the North-Western Provinces and Oudh, available for transfer—(continued.)

(2)

(3)

Summary of the North-Western Provinces and Oudh, available for transfer—(continued.)

Name.	Quantity or number available.	Description or locality.	Condition.	Present value.		Remarks.
				Rate.	Amount.	
1	2	3	4	5	6	7
NORTHERN DIVISION, GANGES CANAL. (Roorkee, on Oudh and Rohilkhand Railway.)						
Trucks for Dehli stone	4	At Roorkee ...	Good ...	...	Rs. a. p.	These are specialities, quite useless for another purpose, and are of no use now for the Solani aqueduct.
Wrench for Solani aqueduct ...	3	Ditto ...	Do. ...	...	...	
Furnace hook ...	20	Ditto ...	Do. ...	...	...	
THIRD SUB-DIVISION.						
Millstone for grinding lime ...	38	{ 18 at Bastam 8 " Latherdewa 12 " Chauthawal	{ Do. ... Do. ... Do. ...	...	...	
Pans, iron ...	2	At Bara ...	Do. ...	...	...	
ANUPSHAH DIVISION, GANGES CANAL. (Meerut, on North-Western Railway)						
Monkeys for pile engine, iron ...	2	Jaoli ...	In fair order	10 0 0	20 0 0	
Pump, hand ...	2	Do. ...	Incomplete and in bad order; nine pieces of piping, one broken, in fair order	28 0 0	56 0 0	
Stone, grinding ...	1	Do. ...	Ditto	5 0 0	5 0 0	
Sarkhi crusher ...	1	Shani Inspection-house 18,	} Good	100 0 0	100 0 0	
Mortar mills, stones	21	Kinawa ditto 3		10 0 0	*210 0 0	
				<div> <div>Measurement of mortar mills.</div> <div> <div>Circumference.</div> <div>At Shani Inspection-house.</div> </div> </div>		<div> <div>Diameter.</div> <div>3' 0"</div> <div>3' 3"</div> <div>3' 0"</div> <div>3' 5"</div> <div>3' 7"</div> <div>3' 3"</div> <div>3' 0"</div> <div>3' 4"</div> <div>3' 4"</div> </div>

Name.	Quantity or number available.	Description or locality.	Condition.	Present value.		Remarks.
				Rate.	Amount.	
Collars 8"	3,200	Maharajpur inspection-house	Good	0 1 0 each	200 0 0	...
Colabas 4 1/2"	1,700	Sihani ditto	Do.	0 3 0 @	318 12 0	...
Do. numbers	575	Lachmipur ditto	Do.	0 0 9 @	26 15 3	...
Furlong posts	856	Sihani ditto	Do.	0 2 0 @	107 0 0	...
Lifting pump	4	MEERUT DIVISION, GANGES CANAL. (Meerut, on North-Western Railway.)	...	1 4 0	5 0 0	Out of repairs at present.
Sand do.	2	1st Sub-Division	Unserviceable	2 8 0	5 0 0	Ditto ditto.
Bulls' dredgers	1	Ditto	Ditto	10 0 0	10 0 0	Ditto ditto.
Punions	2 1/2	Ditto	Ditto	...	1 0 0	Can be used.
Tools and Plant.						
Country jhans	4	BULANDSHAH DIVISION, GANGES CANAL. (Bulandshahr, via Chola, East Indian Railway.)	Good	2 0 0	8 0 0	Piping 32 feet 2 hands and foot.
8" centrifugal pump	1	Walipura mile 13 1/4	Do.	...	175 0 0	valve.
Roorkee hand pump	3	Ditto	Do.	...	20 0 0	2 Length 9 feet 18"
Pile engine	1	Kot	Not good	...	40 0 0	3 " 4 feet 12"
Gwynne's 6" pump	1	Dehra	Ditto	...	150 0 0	1 " 2 feet 2"
		Do.	Ditto	...		32"

2608/2

List of surplus materials and tools and plant in the Irrigation Department of the North-Western Provinces and Oudh, available for transfer—(continued).

Name.	Quantity or number available.	Description or locality.	Condition.	Present value.		Remarks.
				Rate.	Amount.	
1	2	3	4	5	6	7
Miscellaneous.						
BULANDSHAHR DIVISION, GANGES CANAL.						
<i>Bulandshahr, via Chola, East Indian Railway—(concluded.)</i>						
Sectional pipes ...	15	Karanpur inspection-house, ...	Good ...	...	30 0 0	
Tie-rods (various lengths) ...	3	W alipura mile 13½ ...	Serviceable	2 0 0	6 0 0	
<i>Surplus stores not borne on stock.</i>						
Cast iron numbers for trees ...	20	Ditto	Good	0 4 0	5 0 0	
ALIGARH DIVISION, GANGES CANAL.						
<i>(Aligarh, East Indian Railway and Oudh and Rohilkhand Railway, via Bareilly.)</i>						
Screw jack ...	1	2nd Sub-Division ...	Require repair	Not known	...	
Double pulley ...	4	Ditto	Good ...	...	...	
Vice, large ...	1	Ditto	Do. ...	...	...	

List of surplus materials and tools and plant in the Irrigation Department of the North-Western Provinces and Oudh, available for transfer—(continued).

Name.	Number available.	Description or locality.	Condition.	Value.		Remarks.
				Rate.	Amount.	
NARORA DIVISION, LOWER GANGES CANAL. (Narora near Rajghat, on Oudh and Rohilkhand Railway.)						
Angers ...	14½	Sizes ½" to 2" ...	Good	Rs. a. p.	Rs. a. p.	
Adzes ...	4	English ...	Serviceable	0 8 0 each ...	72 0 0	
Block rope, galvanized ...	4	Single double and treble sheaves ...	Ditto	1 0 0	4 0 0	
Ditto plain ...	5	2 double sheaves 4½ ...	Ditto	14 0 0 per set,	56 0 0	
Cupola for casting ...	1	13' x 3-4' Narora made	Ditto	2 0 0 each ...	10 0 0	
Crane Derrick 5 tons 35 feet sweep	1	Some woodwork short	Ditto	400 0 0	400 0 0	
Dredger's Buils, 1½ cubic feet	23	Narora made	New	500 0 0	500 0 0	
Ditto do., 2½ do.	1	Ditto	Used	60 0 0	1,740 0 0	
Ditto four acres, 16 cubic feet	1	Received from Arrah ...	Good order	65 0 0	65 0 0	
Ditto Molesworth's	4	Cast-iron	Ditto	30 0 0	30 0 0	
Monkeys for pile engine	4	Deli and Agra stone...	Ditto	30 0 0	120 0 0	
Mortar mill stones	8	...	Ditto	5 0 0 each ...	20 0 0	
Pickaxes, double headed	17	...	Serviceable	7 0 0	56 0 0	
Pulleys for shafting	23	Cast-iron 13" x 4" x 4"	Ditto	1 0 0	17 0 0	
Pile heads, squares	1	4 feet drain 3 feet deep	Ditto	10 0 0	20 0 0	
Skips, concrete	20	English ...	New	0 8 0	14 0 0	
Shovels	1,985	Do. 9"-10" x 11" ...	Serviceable	150 0 0	150 0 0	
Trowels	40	For broad gauge	Ditto	0 12 0	120 0 0	
Sand cylinders	1	" metre gauge	Ditto	0 12 0	1,438 12 0	
Traversers	1	From 1 seer to 1 munda	New	1 0 0	40 0 0	
Ditto	4 sets,	" 1 lb to 56 lbs ...	Serviceable	80 0 0	80 0 0	
Weights	2	Average 15 cubic feet each piece	Ditto	50 0 0	50 0 0	
Ditto	48	Small pieces	Ditto	8 0 0 per md.,	64 0 0	
Shots for piles	297 c. ft.	Average about 4 cubic feet each	Ditto	8 0 0	48 0 0	
Stone, Delhi	115	Ditto	New	4 0 0 each ...	192 0 0	
Do. Agra	800	Ditto	Serviceable	1 0 0 per cft.	297 0 0	
Do. Mirzapur	400	Ditto	Ditto	1 4 0	143 12 0	
Do. do.	400	Ditto	Ditto	1 8 0	1,200 0 0	
				0 12 0	300 0 0	
						Too large for country masons; might be sold for half price.

Too large for country masons; might be sold for half price.

2608

Name and description of articles.	Number available.	Rate.	Per	Remarks.
NARORA DIVISION, LOWER GANGES CANAL.				
Engine, portable, 10 HP., double cylinder, No. 20, by Riston and Proctor, in good order, fitted with injector, with spare connecting rod and four sets of big and little end brasses, boiler tubes and ferrules, blow off cock, pump plunger, and numerous other parts	1	2,050 0 0	each.	
Engine, portable, 10 HP., double cylinder, No. 5, by Clayton and Shuttleworth, thoroughly overhauled and repaired in October 1888, and now in good order, with spare connecting rod, three sets big and little end brasses, steel crankshaft, valve and pump eccentric straps, and numerous other parts	1	2,000 0 0	"	
Engine, portable, 10 HP., double cylinder, No. 54, by Riston and Proctor, fitted with injector and in good order, with spare connecting rod, big and little end brasses, crankshaft and brasses, boiler tubes and ferrules, firebars, pump plunger and numerous other parts	1	2,000 0 0	"	
Engine, portable, 10 HP., double cylinder, No. 51, by Robey and Co., fitted with injector and in good order, with spare firebars, four sets of big and little end brasses, eccentric brasses, blow off cock, pump plunger and other parts	1	2,000 0 0	"	
Engine, portable, 10 HP., double cylinder, No. 53, by Clayton and Shuttleworth, thoroughly overhauled and repaired in August 1888, fitted with injector and now in very good order, with spare big and little end brasses, crankshaft brasses, eccentric straps and other parts	1	2,000 0 0	"	

I.—ENGINES, SEMI-PORTABLE, PORTABLE AND VERTICAL.

Engine, portable, 10 HP., double cylinder, No. 20, by Riston and Proctor, in good order, fitted with injector, with spare connecting rod and four sets of big and little end brasses, boiler tubes and ferrules, blow off cock, pump plunger, and numerous other parts

Engine, portable, 10 HP., double cylinder, No. 5, by Clayton and Shuttleworth, thoroughly overhauled and repaired in October 1888, and now in good order, with spare connecting rod, three sets big and little end brasses, steel crankshaft, valve and pump eccentric straps, and numerous other parts

Engine, portable, 10 HP., double cylinder, No. 54, by Riston and Proctor, fitted with injector and in good order, with spare connecting rod, big and little end brasses, crankshaft and brasses, boiler tubes and ferrules, firebars, pump plunger and numerous other parts

Engine, portable, 10 HP., double cylinder, No. 51, by Robey and Co., fitted with injector and in good order, with spare firebars, four sets of big and little end brasses, eccentric brasses, blow off cock, pump plunger and other parts

Engine, portable, 10 HP., double cylinder, No. 53, by Clayton and Shuttleworth, thoroughly overhauled and repaired in August 1888, fitted with injector and now in very good order, with spare big and little end brasses, crankshaft brasses, eccentric straps and other parts

Engine, portable, 10 HP., single cylinder, No. 15, by Ransome, Sims and Head, in good order, with spare crankshaft connecting rod, big and little end brasses, eccentric straps, and numerous other parts

Steam boiler, vertical, 10 HP., No. 11, with injector, with all fittings complete. Used at Nadra Workshops to work steam hammer. In very good order

Steam boiler, vertical, 10 HP., No. 13, fitted with injector with all fittings complete. In good order

Steam winch to be worked by above. In good order

Steam boiler, vertical, by Rogers and Stockton, with 5 ton steam winch attached, No. 42. In good order

II.—WELL SINKING PLANT, HEAVY.

Hoists, steam, five ton, Nos. 33, 34 and 50, same as last, but with steel boilers, sent out by Secretary of State in 1885. In good working order with numerous spare parts

Hoist, steam, five ton, No. 49, same as last but with patch on fire box that has never interfered with its working. In good working order, with numerous spare parts

Dredgers, Hodges' patent, 40 cubic feet size, toothed pattern, weight about 59 mds. In good order, with spare parts, Chain, Sling out, for dredgers, with 5 ton book attached. In good condition and tested to 10 tons

Spare steel spigole 13½" x 2½"

Spare W. I. side links

Side Cutter, Gordon's new pattern, for cutting under kerb of wells 20 feet diameter

III.—WELL SINKING PLANT, LIGHT.

Hoist, steam, 3 ton, No. 47, by Appleby, barrel 8' = 2½" long by 16" dia., single and double purchase, fitted with injector. In good order

Spare new spur wheels for ditto, 33" x 4" x 3" (4 mds.)

2608
4

Name and description of articles.		Number available.	Rate.	Per	Remarks.
III.—WELL SINKING PLANT, LIGHT—(concluded).					
Hoists, steam, 1½ tons, Nos. 24 and 25, by Wilson of Liverpool, barrel 18" x 9" single purchase, fitted with injector. In fair order		2	1,000 0 0	each.	
Hoists, steam, 2 ton pile driving Nos. 40 and 41, by MacLellan, with boiler separate from hoist, single purchase, reversing gear, steam injector. In fair order		2	2,000 0 0	"	
Crane, steam locomotive, by Alley and MacLellan, fitted to work a Bruce and Bathos 30 cubic feet dredger. Received through Secretary of State in 1887. Has been very little used, with spare brasses		1	5,000 0 0	"	
Crane, steam, similar to the last but stationary		1	5,000 0 0	"	Photograph available; Ditto ditto.
Dredgers, Bruce and Bathos' patent, 30 cubic feet size, to be worked by above cranes. In good order. Practically new		3	1,000 0 0	"	
Dredgers, Bell's patent, 25 cubic feet size with teeth, weight about 24 mds. In very good order		1	1,000 0 0	"	
Side Cutter, Gattmill's, with revolving bucket		2	50 0 0	"	
Ditto ditto bucket fixed		1	30 0 0	"	
Dredgers, Bull's patent, sand for hand sinking. In good order—		2	120 0 0	"	
6 cubic feet size		2	100 0 0	"	
5 Ditto		7	60 0 0	"	
3 Ditto		110	50 0 0	"	
2½ Ditto				"	
Chains, Sling out :—					

With 3 ton hooks attached 1" 8	15 0 0	"	...	5 to Rohilkhand Canals.
Ditto 2 16	10 0 0	"	...	
Spare ton hooks 11	4 0 0	"	...	
Pulleys for use with 25 cubic feet dredgers, as either overhead or bottom pulleys, 20" sheave, for 2½" wire rope. In good order.	7	40 0 0	"	Photograph available, type 5c.
Spare sheaves for ditto to take chain. Never used.	4	10 0 0	"	Type 7c. in photo.
Blocks, gin, 4 ton for use with 10 cubic feet dredgers, 20" sheaves. In good condition.	13	40 0 0	"	Type 9c. in photo.
Pulleys, bottom, 4 ton for use with 25 cubic feet dredgers 10" sheave. In good order.	15	20 0 0	"	
Pulleys. Overhead, as used in rail gentries on the Balawali Bridge (Oudh and Rohilkhand Railway), with ring and eye bolt to attach to top of gantry, 18" sheave, used with 25 cubic feet dredger. In fair condition.	10	25 0 0	"	
For wire rope	10	30 0 0	"	
Ditto 6" chain	4	30 0 0	"	
Pulley blocks, small, of sizes, see page 17.				
IV.—LIME GRINDING AND MORTAR MIXING PLANT.				
Wire netting, steel, for Lucas's patent pulverizers. 2½ feet wide, 6 mesh to 1 inch.	398 feet	2 0 0	foot.	
Spare shafts for ditto with knives and rollers attached. Used but good.	2	500 0 0	each.	
Hoppers to feed ditto from overhead staging.	2	50 0 0	"	Cost Rs. 1,225 each.
Ditto Size C. In good order, each with 2 spare rollers and 5 renewable pieces.	2	500 0 0	"	
Wire netting steel for ditto.	329	1 12 0	foot.	
2 feet wide, 6 mesh to 1 inch.	744			
Mills, mortar, for steam power, 9 feet pan, rollers 4' 6" x 18", with cup bearings, Nos. 55 and 56. In very good working order.	2	1,000 0 0	each.	

Name and description of articles.	Number available.	Rate.	Per	Remarks.
IV.—LIME GRINDING AND MORTAR MIXING PLANT.—(concluded.)				
Spare parts for above—				
C. I. Bushes for roller shafts	7	Rs. a. p. 6 0 0	each	
Roller shafts	2	30 0 0	"	
Brass pedestals bushes—				
5 for 3½" countershaft	15 pairs.	5 0 0	"	
5 " 5" ditto				
5 " 3" mill shaft				
W. I. Keys, for spur wheel	3	0 8 0	"	
C. I. Collars, flanged	7 pairs	10 0 0	pair.	
Bevil pinion 11½" x 3"	1	13 0 0	each.	
C. I. Scraper	1		"	
Mills mortar 8 feet pan, rollers 44" x 16½", No. 58. In good working order	1	700 0 0	"	
Spare parts for above—				
Bevil pinions	3	10 0 0	"	
Spur pinions	2	20 0 0	"	
C. I. Collars	4 pairs.	3 0 0	pair.	
Ditto	4 "	3 0 0	"	
Ditto	6 "	2 0 0	"	
Roller shafts, W. I. 47" x 3½"	4 number.	6 0 0	each.	
Ditto				
C. I. Collars for vertical central shaft	2	15 0 0	"	
Pan bottom wearing plates	2	15 0 0	"	
7 feet pan, rollers 3' 3" x 15" cup bearings. In good working order. Nos. 63, 69 and 70	6		"	
Ditto	3	800 0 0	"	

Spare parts for ditto—				
Crown bevil wheel 60" x 7½"	1	60 0 0	"	
Ditto ditto 55" x 3½"	2	40 0 0	"	
Pen, bottom wearing plates	4	20 0 0	"	
Bevil pinion 11½" x 2½"	1	5 0 0	"	
Ditto 8½" x 2½"	1	5 0 0	"	
C. I. Collars 7½" x 4½"	2	2 0 0	"	
Ditto 3½" x 4½"	2	1 0 0	"	
Roller shafts	2	20 0 0	"	
Pan shafts	2	15 0 0	"	
Brasses for mortar mill plummer blocks 2"	2	5 0 0	pair	
White metal brasses for ditto 2½"		3 0 0	"	
Ditto for countershaft 2½"		3 0 0	"	
6 feet pan, rollers 3' x 12" ball bearings. In good order. Nos. 64 and 85	2	600 0 0	each.	
Spare parts for ditto—				
Crown bevil wheel 26" x 3½"	1	20 0 0	"	
Ball bearings	2 sets.	75 0 0	"	
Spare steel balls for ditto	18	1 0 0	"	
Bevil pinion 12" x 2½"	1	6 0 0	"	
6 feet pan, rollers 2' 6" x 10" top gearing, No. 65. In fair condition	1	300 0 0	"	
Countershafting with pulleys, plummer blocks, top and bottom brasses, bolts, nuts, and studs, complete.				
To work 9 feet mills coupled	1	175 0 0	"	
Ditto 7 feet	1	150 0 0	"	
Ditto 6 feet	1	125 0 0	each	
Reigns to work above mills see page 6				
Belting ditto				
Pulleys, spare ditto				
Plummer blocks ditto				
Mixer, concrete, Appleby's, for steam power. In good order	1	250 0 0	"	
V.—WORKSHOP MACHINERY AND TOOLS.				
Anvils. Steel faced. Used but good	3	7 8 0	maund.	
Ordinary Ditto	8	5 0 0	"	

2608
6

Name and description of articles.	Number available.	Rate.	Per	Remarks.
V.—WORKSHOP MACHINERY AND TOOLS—(contd.).				
NARORA DIVISION, LOWER GANGES CANAL—(continued).				
Augers 1½"	31	Rs. a. p.		
" 1½"	21	2 0 0	each.	
" 1½"	40	1 12 0	"	
" 1½"	22	1 8 0	"	
" 1½"	8	1 4 0	"	
" 1½"	12	1 2 0	"	
" 1½"	49	1 0 0	"	
" 1½"	5	0 12 0	"	
" 1½"	21	0 10 0	"	
" 1½"	58	0 8 0	"	
" 1½"	5	25 0 0	"	
" 1½"	2	3 0 0	"	
" 1½"	2	20 0 0	"	
" 1½"	23	40 0 0	"	
" 1½"	1	1 0 0	"	
" 1½"	5	1 0 0	"	
" 1½"	4	1 0 0	"	
" 1½"	5	1 0 0	"	
" 1½"	2	1 8 0	"	
" 1½"	15	25 0 0	"	
" 1½"	40	1 0 0	"	
" 1½"	30	1 8 0	"	
Bel lows, blacksmith, 30" across shoulders				
Birmingham wire gauge				
Boiler testing pump. See pages 15 and 16				
Brackets for driving shafting				
Calipers of sizes				
Case hardening box 3'8" x 1'6" x 1'3". In good order				
Chisels, carpenters—				
Compasses, wing 9"				
Counters; Engine revolution...				
Files, tapping, 2nd cut				
" round lastard 18"				
				30 per cent. below Bombay prices.

" ditto 16"	3	1 4 0	"	
" 2nd cut 16"	64	1 8 0	"	
Grindstones, file cutting, 6 feet diameter, 12" on face, mounted for spindle, new	1	100 0 0	"	
Grindstones, file cutting, 6 feet diameter 12" on face, but unmounted	2	75 0 0	"	
Steam Boiler. See page 7	1	300 0 0	each.	
Hydraulic shaft straightening machine for 4" shaft. Good	1	600 0 0	"	
Hydraulic wheel press for removing wheels from axles, 75 ton power 9" ram. Good as new	1	100 0 0	"	
Indicator, stem, Richard's patent	1	1,000 0 0	"	
Lathe, machine wheel, 24" centres. Capable of turning and boring up to 6 feet. Narora made. In good order	1	1,000 0 0	"	
Plate bending machine, by Mair. Takes 6 feet plate. Rollers 10" dia. In good order	1	1,000 0 0	"	
Plummer blocks with bruses, &c., complete 3" diameter	4	20 0 0	"	
Ditto ditto 3½"	7	20 0 0	"	
Ditto ditto 2½"	14	10 0 0	"	
Punch Duplex lever, to punch 1½" hole through a 3" plate. New	1	100 0 0	"	
Do. Screw fly. Wants punches, but otherwise in good condition	1	150 0 0	"	
Pincers of sizes				
Pulley split 60" x 9" x 3"	20	0 4 0	"	
Ditto 60 x 9" x 3½"	1	75 0 0	"	
Ditto 60 x 9" x 2½"	1	70 0 0	"	
Ditto 60 x 7 x 3½"	1	70 0 0	"	
Ditto 60 x 7 x 2½"	3	65 0 0	"	
Ditto 42 x 6½ x 3½"	2	65 0 0	"	
Ditto 42 x 6 x 3	1	30 0 0	"	
Ditto 42 x 8 x 3	1	30 0 0	"	
Ditto 27 x 6 x 3	1	30 0 0	"	
Ditto 24 x 6 x 3	1	20 0 0	"	
Ditto 24 x 5 x 3	1	17 0 0	"	
Ditto 20 x 6 x 3	1	16 0 0	"	
Ditto 20 x 6 x 2½"	3	15 0 0	"	
Ditto 18 x 7 x 2½"	1	15 0 0	"	

2608
7

Name and description of articles.	Number available.	Rate	Per	Remarks.
V.—WORKSHOPS MACHINERY AND TOOLS—(continued).				
Pulley, split 18" x 7" x 3"	2	15 0 0	each	
Ditto 18 x 6 x 3	4	14 0 0	"	
Ditto 18 x 6 x 2½	9	14 0 0	"	
Ditto 12 x 6 x 3	4	11 0 0	"	
Ditto 12 x 6 x 2½	1	11 0 0	"	
Ditto, plain 50 x 10 x 2½	1	75 0 0	"	
Ditto 48 x 6 x 3½	1	80 0 0	"	
Ditto 48 x 6 x 3	1	80 0 0	"	
Ditto 48 x 6 x 2½	2	30 0 0	"	
Ditto 42 x 10 x 3½	1	30 0 0	"	
Ditto 36 x 14 x 2½	1	26 0 0	"	
Ditto 36 x 10 x 3	1	24 0 0	"	
Ditto 36 x 8 x 2½	1	50 0 0	"	
Ditto 35 x 15 x 4	1	30 0 0	"	
Ditto 35 x 10 x 3½	1	25 0 0	"	
Ditto 35 x 9½ x 3	1	25 0 0	"	
Ditto 35 x 8 x 4	1	20 0 0	"	
Ditto 35 x 7½ x 4½	1	25 0 0	"	
Ditto 35 x 6 x 3½	1	20 0 0	"	
Ditto 35 x 6 x 2½	3	25 0 0	"	
Ditto 34 x 10 x 3½	3	20 0 0	"	
Ditto 30 x 10 x 3½	4	25 0 0	"	
Ditto 30 x 9 x 3½	1	19 0 0	"	
Ditto 27 x 11 x 2½	1	24 0 0	"	
Ditto 24 x 9½ x 3	1	20 0 0	"	
Ditto 24" x 9" x 8½	1	20 0 0	"	

NARORA DIVISION, LOWER GANGES CANAL—(continued).

Ditto 24 x 8 x 2½	2	16 0 0	"	
Ditto 24 x 6 x 3½	1	14 0 0	"	
Ditto 23 x 6 x 3	1	13 0 0	"	
Ditto 20 x 10 x 3	1	18 0 0	"	
Ditto 18 x 13 x 3	1	25 0 0	"	
Ditto 18 x 7 x 3½	1	10 0 0	"	
Ditto 18 x 7 x 3	1	10 0 0	"	
Ditto 16 x 6 x 3	1	9 0 0	"	
Ratchet braces with bits 14"	2	6 0 0	"	
Ditto ditto 16"	1	7 0 0	"	
Ditto ditto 18"	1	8 0 0	"	
Riveting block, with 40 bolt and 10 dog spikes shaping tools	1	35 0 0	set.	
Rules, steel, for fitters	12	1 8 0 0	each.	
Ditto 2 feet, wooden. Used but good	3	0 8 0 0	"	
Saws	17	16 0 0	"	
Ditto cross-cut	1	8 0 0 0	"	
Ditto compass	1	1 0 0 0	"	
Ditto tenon	4	1 8 0 0	"	
Ditto pit	4	3 0 0 0	"	
Sawing machine, Band 36", by Ransome. In good order	1	400 0 0	"	
Ditto ditto 42" nearly new	1	800 0 0	"	
Saw bracing machine, by Ransome. In good order	1	75 0 0	"	
Saw sharpening machine, for circular saws, by Ransome. Will take in a 4-foot saw. In good order	2	250 0 0	"	
Saw sharpening and setting machine for hand saw, by Ransome, self acting. Practically new	1	350 0 0	"	
Shafting, main driving 3" diam. 2 x 20"	...	...	...	
Ditto ditto " do.	40 feet.	...	foot, run.	
Ditto ditto " do.	82 "	2 0 0 0	"	
Ditto ditto 2½" diam.	20 "	3 0 0 0	"	
Ditto ditto 3½" "	11 prs.	1 0 0 0	pair.	
Collars for do, with steel set screws	9 "	10 0 0	"	
Flanged couplings with bolts, complete	21 prs.	1 8 0 0	each.	
Pulleys for do. See page 13	2	6 0 0 0	"	
Smith's squares 2½"	95	1 0 0 0	"	
Spanners, Clyborn, 1½ feet	22	0 8 0 0	"	
Spanners, double ended, of sizes	3	18 0 0	"	
Ditto angle	...	...	"	
Swage blocks (1 with stand)	...	...	"	

210 P. P. 3 to Soap Co.

Spare hand saws available.
Ditto.

Spare Emery discs available.

Name and description of articles.	Number available.	Rate.	Per	Remarks.
V.—WORKSHOPS MACHINERY AND TOOLS—(concluded).				
Straight edges, steel 1 foot	1	Rs. 1 8 0	each.	
" 2 feet	1	8 0 0	"	
" 3 "	1	5 0 0	"	
" 4 "	1	8 0 0	"	
" 6 "	1	10 0 0	"	
" 7 "	1	13 0 0	"	
Squares, fitters, 18 inches.	1	3 0 0	"	
" 12 "	1	1 12 0	"	
" 10 "	1	1 8 0	"	
" 6 "	1	5 0 0	"	
" 12 "	1	20 0 0	"	
Trammel, fitters	1	35 0 0	"	
Tube expanders, boiler 14"	1	20 0 0	"	
" 21"	22	0 2 6	lb.	
Tube cutting wrench 2 1/2" to 3"	1	25 0 0	each.	
Vices, bench. In good order				
" C. I. table for				
VII.—PUMPING MACHINERY				
Pump, centrifugal, 12" No. 5, with 38 feet of piping and 1 bend, casing has been repaired, pump in very serviceable order	1	900 0 0	each	
Do. invincible, 10" No. 4, without air pump, with 28 feet of piping and 3 bends. In very good order	1	900 0 0	"	

Do. do., No. 12, with 28 feet of piping and 3 bends. In very good order	1	600 0 0	"	
Do. do., 9" No. 18, with 9 feet of piping and 1 bend. No foot valve	1	500 0 0	"	
Do. do., 8" No. 17, with 39 feet piping and 4 bends. In fair order	1	600 0 0	"	
Do. do., 7" No. 22, with 40 feet piping and 2 bends, casing well repaired with W. I. patches on both sides. In good working order	1	300 0 0	"	
Do. do., 6" No. 11, with 50 feet of piping and 2 bends. In very good order	1	400 0 0	"	
Do. do., 5" No. 14, with 50 feet piping and 2 bends. No foot valve. In very good order	1	350 0 0	"	
Do. boiler testing. Tests up to 300 lbs. In good order...	1	150 0 0	"	
VIII.—DIVING APPARATUS.				
Air pumps complete and in good order	2	400 0 0	each.	
Do. " but without pressure gauge	2	300 0 0	"	
Divas lead weights	13	12 0 0	maund.	
Helmets and beanstaples. In good order	8	50 0 0	each.	
Rubber, Air hose with couplings	439 feet	0 5 0	foot.	
IX.—HAULING AND LIFTING TACKLE (HAND).				
Chains of sizes, chiefly 3" and 4"	Mds. 332	5 0 0	maund.	
Crane Derrick 2 tons, W. I. 40 feet, and W. I. back stays, single and double purchase gearing. In good order...	1	500 0 0	each.	
Jacks, Screw bottle pattern, 6 ton, nearly new	15	15 0 0	"	
Do. ditto 8 ton, ditto	11	25 0 0	"	
Do. ditto Meley's patent 8 ton, ditto	6	50 0 0	"	
Do. transcar traversing. Good	2	20 0 0	"	
Do. hydraulic. Wants repairs	1	20 0 0	"	
Jim Crow 2' 8" wide 3" screw	1	70 0 0	"	
Ditto 2' 5" " 2 1/2"	1	50 0 0	"	
Low's bolts	8	1 0 0	"	
Divas 3 feet long for lifting concrete blocks	2	5 0 0	"	
Fulley blocks. All in good condition—				
For large size single blocks see under well sinking.				
Single chain 4 1/2" shank to take 1 1/2" chain.	4	3 0 0	each	
Ditto 7" " " "	1	4 0 0	"	

2608
1/9

XI.—MISCELLANEOUS STORES.

Bolt nut, hexagonal	1"	...	2	10	0	20	0	0	"
Ditto.	3"	...	1	34	0	22	0	0	"
Bolt nuts, hexagonal, for Engines, polished bright						20	0	0	gross.
Ditto ditto	3"	...				16	0	0	"
Ditto ditto	4"	...				13	0	0	"
Ditto ditto	5"	...				11	0	0	"
Bolt nuts, square, of sizes, from centerings : used			40	21	0	5	0	0	maund.
Bolts of sorts 6" x 3/4"	...	...				8	0	0	"
Ditto from centerings.			29 1/2	0	0	5	0	0	maund.
Butt Hinges iron	5"	...				0	4	0	each.
Ditto "	4 1/2"	...				0	4	0	"
Ditto "	4"	...				0	4	0	"
Ditto brass	5"	...				0	8	0	"
Ditto iron	6"	...				...			"
Copper sheet	1/2"	...				45	0	0	maund.
Coneh screws	2 1/2" x 3/8"	...	0	6	12	11	0	0	"
Ditto	3 1/2" x 1/2"	...	0	14	0	11	0	0	"
Ditto	4" x 3/8"	...	0	13	0	11	0	0	"
Ditto	4" x 1/2"	...	41	18	0	11	0	0	"
Door bolts	12"	...				3	0	0	dozen.
Ditto	8"	...				2	4	0	"
Ditto	6"	...				1	8	0	"
Ditto	5"	...				1	0	0	"
Ditto	3"	...				0	12	0	"
Fire clay		...				1	0	0	maund.
Do. bricks		...				16	0	0	%.
Do. tiles 18" x 18" x 3"		...				2	15	0	each.
Galvanized roofing rivets 5/8" x 1/2"		...				1	0	0	%.
Ditto		...				0	10	0	seer.
Ditto gutters	1" x 1/2"	...				2	4	0	each.
Ditto washers	...	...				16	0	0	maund.
Ditto screws	...	...				0	10	0	%.

NARORA DIVISION, LOWER GANGES.
CANAL—(continued).

Mds. sr. ch.	Rs. a. p.	maund.
1285.	9 0 0	maund.
7-2-11	9 0 0	"
4160	9 0 0	"
13-12-0	9 0 0	"
8835	9 0 0	"
6-28-0	9 0 0	"
1120	9 0 0	"
1-28-0	11 0 0	"
1238	11 0 0	"
6-40-0	15 0 0	"
863	15 0 0	"
6-27-8	0 9 0	gross.
184 Gross.	0 9 0	"
1	1 2 0	"
1	1 2 0	"
1	1 2 0	"
1	1 2 0	"
0 24 0	40 0 0	maund.
0 18 0	40 0 0	"
0 15 8	10 0 0	"
...	26 0 0	"
...	26 0 0	"
...	5 0 0	"
2 0 0	10 0 0	"
1 18 0	10 0 0	"
2 9 0	10 0 0	"
0 6 6	10 0 0	"
...	10 0 0	"
...	10 0 0	"
0 28 0	10 0 0	"

0	26	0	10	0	0	22
0	22	0	25	0	0	22
2	13	0	23	0	0	22
2	12	0	23	0	0	22
1	24	8	28	0	0	22
0	27	0	28	0	0	22
4	30	0	38	0	0	22
6	17	0	5	0	0	22
1	19	0	9	0	0	22
5	92		6	0	0	22
1	029		6	0	0	22
9	50		6	0	0	22
8	90		6	0	0	22
1	340		6	0	0	22
...			6	0	0	22
2	93		6	0	0	22
9	16		6	0	0	22
1	220		6	0	0	22
2	30		6	0	0	22
1	090		6	0	0	22
2	100		6	0	0	22
0	18	10	0	10	0	maund.
0	21	4	0	10	0	seer.
0	12	0	25	0	0	maund.
0	38	0	25	0	0	22
0	10	4	25	0	0	22
0	12	3	25	0	0	22
0	1	4	25	0	0	22

No. 2203 I. OF 1891.

GOVT., N.-W. P. AND OUDH,
PUBLIC WORKS DEPARTMENT,
IRRIGATION BRANCH.

DATED ALLAHABAD, THE 22 SEPTEMBER 1891.

To

*The Secretary to the Government
Madras Riv. Department*

SIR,

WITH reference to the orders contained in Government of India, Public Works Department Circular No. XI-P. W., dated the 20th December 1887, I am directed to forward herewith a printed list of Surplus Materials and Tools and Plant in the Irrigation Department of these Provinces, available for transfer, and to request that if any of the articles therein mentioned are required, the Executive Engineer concerned may be addressed on the subject.

I have the honor to be,

SIR,

Your most obedient servant,

[Signature]
For Assistant Secretary.

*Enclos
4 spare copies }*

102521

Rd 28-9-91
Enc 1 (+45c)

No 2608 w/ 30 Sept 1891

Communicated
to the Super. Genl
V Circle.

0013
29.9.91

(16)

L.S. V Circle 9.30.91

Enc 1/10. 3/10.