

(1) பக்கங்களின் எண்ணிக்கை _____

(2) புதுக்கித் திருப்பிய நாள் _____

(3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம் _____

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

16 sheets

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 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.)						
FIRST SUB-DIVISION.				Rs. a. p.	Rs. a. p.	
Iron pulleys	3	At Meerut	Good	Not known	...	
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	...	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.
Sand pump	1	Ditto	Fair order	...	Rs. 80 for the set.	
Hand do.	1	Ditto	Useless	...	...	
Concrete skip, iron	1	Ditto	Good	Not known	...	
Charas, mandal	11	Ditto	Do.	Ditto	...	
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	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.
Pokers	8	Ditto	Do.	Not known	...	Of no practical use. These and other kiln furniture were made for special kilns and will not likely be used again.
Rakes	14	Ditto	Do.	1 0 0	14 0 0	These have never been used, nor will likely ever be.
Scythes	4	Ditto	Do.	12 0 0	48 0 0	

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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	Walipura 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.	
Tools and Plant.						
Augers ...	144	Sizes ½" to 2" ...	Good	0 8 0 each ...	72 0 0	Too large for country masons; might be sold for half price.
Adzes ...	...	English ...	Serviceable	1 0 0	4 0 0	
Block rope, galvanized ...	4	Single double and treble sheaves ...	Ditto	14 0 0 per set,	56 0 0	
Ditto plain ...	5	2 double sheaves 4½ ...	Ditto	2 0 0 each ...	10 0 0	
Cupola for casting ...	1	13' x 3'-4" Narora made	Ditto	400 0 0	400 0 0	
Cane Derrick 5 tons 35 feet sweep ...	1	Some woodwork short	Ditto	500 0 0	500 0 0	
Dredger's Buils, 1½ cubic feet ...	23	Narora made	New	60 0 0	1,740 0 0	
Ditto do., 2½ do. ...	1	Ditto	Used	65 0 0	65 0 0	
Ditto four acres, 16 cubic feet ...	1	Received from Arrah ...	Good order	30 0 0	30 0 0	
Ditto Moleworth's ...	4	Cast-iron	Ditto	30 0 0	120 0 0	
Monkeys for pile engine ...	4	Delhi and Agra stone...	Ditto	5 0 0 each ...	20 0 0	
Mortar mill stones ...	8	...	Serviceable	7 0 0	56 0 0	
Pickaxes, double headed ...	17	...	Ditto	10 0 0	170 0 0	
Pulleys for shafting ...	23	Cast-iron 12" x 4" x 4"	Ditto	150 0 0	3,450 0 0	
Pile heads, squares ...	1	4 feet drain 3 feet deep	New	0 12 0	12 0 0	
Sinks, concrete ...	1,985	English 9" 10" x 11"	Serviceable	0 12 0	23,820 0 0	
Shovels ...	40	For broad gauge	Ditto	1 0 0	40 0 0	
Trowels ...	1	" metre gauge	Ditto	80 0 0	80 0 0	
Sand cylinders ...	4 sets,	From 1 seer to 1 maund	Ditto	50 0 0	200 0 0	
Traversers ...	2 "	" 1 lb to 56 lbs	Ditto	8 0 0	16 0 0	
Weights ...	48	Average 15 cubic feet each piece	Serviceable	4 0 0 each ...	192 0 0	
Ditto ...	297 c. ft.	Small pieces	Ditto	1 4 0	415 8 0	
Shots for piles ...	115	Average about 4 cubic feet each	Ditto	1 8 0	2,070 0 0	
Stone, Delhi ...	800	Ditto 1 cubic foot	Ditto	0 12 0	9,600 0 0	
Do. Agra ...	400				300 0 0	
Do. Mirzapur ...						
Do. do. ...						

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

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Name and description of articles.	Number available.	Rate.	Per	Remarks.
NARORA DIVISION, LOWER GANGES CANAL.				
Rs. a. p.				
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 Nadrai 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 8" (4 mds.)

Photograph available.

Ditto ditto.

There are four of these, one being repairable.

Full description on application.

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	"	Photograph available.
Crane, steam, similar to the last but stationary	1	5,000 0 0	"	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, Gatmill's, with revolving bucket	2	50 0 0	"	
Ditto	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 ¾"	8	15 0 0	"	5 to Rohilkhand Canals.
Ditto 2 ditto ¾"	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 ¾" 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	"	
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.	Cost Rs. 1,225 each.

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Name and description of articles.	Number available.	Rate.	Per	Remarks.
IV.—LIME GRINDING AND MORTAR MIXING PLANT.—(continued.)				
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	700 0 0	"	
Mills mortar 8 feet pan, rollers 44" x 16½", No. 58. In good working order	1			
Spare parts for above—				
Bevil pinions	3	10 0 0	"	
Spur pinions 15" x 3" x 2½"	2	20 0 0	"	
C. I. Collars 9½" x 3½"	4 pairs.	3 0 0	pair.	
Ditto 8½" x 3½"	4 "	3 0 0	"	
Ditto 7" x 3½"	6 "	2 0 0	"	
Roller shafts, W. I. 47" x 3½"	4 number.	6 0 0	each.	
Ditto 47" x 3"				
C. I. Collars for vertical central shaft	2	15 0 0	"	
Pan bottom wearing plates	2	15 0 0	"	
7 feet pan, rollers 3' x 3" x 15" cup bearings. In good working order. Nos. 83, 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	"	
Pan, 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"	2	3 0 0	"	
Ditto for countershaft 2½"	2	3 0 0	"	
6 feet pan, rollers 3' x 12" ball bearings. In good order. Nos. 64 and 85	4 pairs.			
Spare parts for ditto—	8			
Crown bevil wheel 26" x 3½"	2	600 0 0	each.	
Ball bearings	1	20 0 0	"	
Spare steel balls for ditto	2 sets.	75 0 0	"	
Bevil pinion 12" x 2½"	18	1 0 0	"	
6 feet pan, rollers 2' x 6" x 10" top gearing, No. 65. In fair condition	1	6 0 0	"	
Countershafting with pulleys, plummer blocks, top and bottom brasses, bolts, nuts, and studs, complete.	1	300 0 0	"	
To work 9 feet mills coupled				
Ditto 7 feet	1	175 0 0	"	
Ditto 6 feet	1	150 0 0	"	
Reigns to work above mills see page 6	1	125 0 0	each	
Belling 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	"	

One broken.

Calcutta price Rs. 150 each set.

These are not fitted up.
Ditto.
Not fitted up.

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. 2 0 0	each.	
" 1½"	21	1 12 0	"	
" 1½"	40	1 8 0	"	
" 1½"	22	1 4 0	"	
" 1½"	8	1 2 0	"	
" 1½"	12	1 0 0	"	
" 1½"	49	0 12 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	"	
Belows, 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, steam, 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 Muir. Takes 6 feet plate. Rollers 10" dia. In good order	1	1,000 0 0	"	
Plummer blocks with brusses, &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 66" 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	"	

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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 60 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 36 x 14 x 2½	1	30 0 0	"	
Ditto 36 x 10 x 3	1	26 0 0	"	
Ditto 35 x 8 x 2½	1	24 0 0	"	
Ditto 35 x 18 x 4	1	50 0 0	"	
Ditto 35 x 10 x 3½	1	30 0 0	"	
Ditto 35 x 9½ x 3	1	25 0 0	"	
Ditto 35 x 8 x 4	1	25 0 0	"	
Ditto 35 x 7½ x 4½	1	20 0 0	"	
Ditto 35 x 6 x 3½	3	25 0 0	"	
Ditto 35 x 6 x 2½	3	20 0 0	"	
Ditto 34 x 10 x 3½	4	25 0 0	"	
Ditto 30 x 10 x 3	1	20 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).

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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 19 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 16"	1	7 0 0	"	
Ditto 18"	3	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 bow	17	8 0 0 0	"	
Ditto cross-cut	1	1 0 0 0	"	
Ditto compass	4	1 8 0 0	"	
Ditto tenon	4	3 0 0 0	"	
Ditto pit	1	400 0 0	"	
Saving machine, Band 36", by Ransome. In good order	1	800 0 0	"	
Ditto 42" nearly new	1	75 0 0	"	
Saw brazing machine, by Ransome. In good order	2	250 0 0	"	
Saw sharpening machine, for circular saws, by Ransome. Will take in a 4-foot saw. In good order	1	350 0 0	"	
Saw sharpening and setting machine for hand saw, by Ransome, self acting. Practically new	1	250 0 0	"	
Shafting, main driving 3" diam. 2 x 20'	1	350 0 0	"	
Ditto " do.	40 feet.	2 8 0 0	foot, run.	
Ditto " do.	82 "	2 0 0 0	"	
Ditto 2½" diam.	20 "	3 0 0 0	"	
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	95	1 0 0 0	"	
Smith's squares 2½'	22	0 8 0 0	"	
Spanners, Clyburn, 1½ feet	3	18 0 0	"	
Spanners, double ended, of sizes				
Ditto angle				
Swage blocks (1 with stand)				

210 P. T. 3 to Soap Co.

Spare hand saws available.
Ditto.

Spare Emery discs available.

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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	15 0 0	"	
Squares, fitters, 18 inches...	1	3 0 0	"	
" 12 "	1	1 12 0	"	
" 10 "	4	1 8 0	"	
" 6 "	4	1 0 0	"	
" 12 "	1	5 0 0	"	
Trammel, fitters	1	20 0 0	"	
Tube expanders, boiler 14"	1	35 0 0	"	
" 21"	1	20 0 0	"	
Tube cutting wrench 2 1/2" to 3"	1	0 2 6	lb.	
Vices, bench. In good order	22	25 0 0	each.	
" C. I. table for	1			
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	900 0 0	"	
Do. do., No. 18, with 2 feet of piping and 1 bend. No foot valve	1	500 0 0	"	
Do. do., No. 17, with 39 feet piping and 4 bends. In fair order	1	600 0 0	"	
Do. do., 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., No. 11, with 50 feet of piping and 2 bends. In very good order	1	400 0 0	"	
Do. do., 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 breastplates. In good order	8	50 0 0	each.	
Rubber, Air hose with couplings	439 feet	0 4 0	foot.	
IX.—HAULING AND LIFTING TACKLE (HAND).				
Chains of sizes, chiefly 3" and 4"	Mds. 382	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 Heley's patent, 8 ton, ditto	6	50 0 0	"	
Do. tramcar 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	"	
Lewis 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	"	

Name and description of articles.	Number available.	Rate.	Per	Remarks.
IX.—HAULING AND LIFTING TACKLE (HAND)— (continued).				
Single chain 10" shaf to take 1" chain	1	10 0 0	each.	
Double chain 4½"	1	5 0 0	"	
Treble " 6½"	1	7 0 0	"	
Do. " 9"	1	15 0 0	"	
Do. " 6"	7	7 0 0	"	
Do. " 9"	2	20 0 0	"	
Single rope 6"	33	5 0 0	"	
Do. " 4"	1	4 0 0	"	
Do. " 6"	6	4 0 0	"	
Do. " 7"	1	4 0 0	"	
Do. " 8"	3	5 0 0	"	
Do. " 8"	6	6 0 0	"	
Do. " 8"	11	6 0 0	"	
Do. " 8"	6	6 0 0	"	
Do. " 8"	3	6 0 0	"	
Do. " 8"	1	6 0 0	"	
Do. " 7"	1	8 0 0	"	
Do. " 4"	1	125 0 0	"	
Weston's patent differential blocks with chain complete— Tested to 10 tons. In good order	1	100 0 0	"	
Do. 8 " very good order	1	75 0 0	"	
Do. 5 " " "	1	40 0 0	"	
Do. 3 " " "	2	600 0 0	"	
Winch, crab, ten ton power, Marks patent, single and double— purchase, with brake by Tangye; nearly new	1			

Do.	ten ton power by Richardson and Criddas, double and treble purchase, with brake strap, in good condition, side frame repaired	1	300 0 0	"
Do.	four ton power, double purchase, with strap brake, by Tangye. In fair condition	1	125 0 0	"
Do.	two ton power, single purchase, no brake, W. I. Cheek plate. In good order	1	75 7 0	"
Do.	two ton power, single purchase, no brake, triangular side frames. In good order	8	60 0 0	"

X.—MISCELLANEOUS TOOLS AND PLANT.

Apparatus, set of, for chemical analysis of kankar, &c.	1	50 0 0	set.	
Balance setter	1	15 0 0	"	
Boring apparatus 2 inch with 2 pumps and 60 feet of piping and couplings. In good order	1	150 0 0	each.	
Ditto 3 inch with two pumps and 100 feet piping and couplings. Nearly new	1	250 0 0	"	
Ditto rod pattern with 5 lengthening bars 1 half piece with eye 10 feet 1 digger 1 clay auger and 1 shell auger, Thornton's patent for 12 x 10 plates and under, with 3 double slides. Strong leather cases for both Camera and slides. 1 Wray's 2½" large aperture portrait and landscape lens, 1 Dallmeyer's R. R. lens for 12 x 10 plates, 1 Grimston's instantaneous drop shutter, developing and printing dishes argenteometer, &c.	1	350 0 0	set.	
C. I. Sand Cylinders for lowering centerings of archwork	329	1 0 0	each.	
Cock C. I. 4 inch for engine tank	4 sets	2 0 0	set.	
Figures steel	1	40 0 0	"	
Fly wheel 48" x 4½" x 2½"	1	50 0 0	"	
Do. 51" x 6" x 3½"	1	50 0 0	"	
Do. 53½" x 6" x 3½"	1	60 0 0	"	
Do. 55½" x 6" x 3½"	1	60 0 0	"	
Do. 60" x 6" x 3½"	1	15 0 0	maund.	
Jumpers straight	17 No.			
Line Testing Machine, Adie's. Has been in constant use and is now in very good order.	1	500 0 0	each.	
Letters—Sets of steel	7 sets	2 0 0	"	

Available for transfer to other Divisions, Irrigation Branch, North-Western Provinces.

Name and description of article.	Number available.	Rate.	Per	Remarks.
X.—MISCELLANEOUS TOOLS AND PLANT—(concluded).				
Locomotives and railway wagons, broad and narrow gauge, available for transfer. List on application				
File driver teak staging 30 feet high without monkey with clips, serviceable	1	50 0 0	each.	
Pulleys, see page 13.				
Rammers shattering plunger block, &c.	212 No.	1 8 0	"	
Rail straightening and punching press by Canser Smith & Co., I. S. R. 1886. In good order	1	300 0 0	"	
Shovels, English	50	1 0 0	"	
Spirit level for Masons, 16"	1	2 8 0	"	
Ditto 12"	1	3 0 0	"	
Ditto 14"	2	3 8 0	"	
Ditto 15"	1	5 0 0	"	
Table, writing, teakwood	1	15 0 0	"	
Turbine water wheel, Houston's 20" wheel, new	1	1,000 0 0	"	
W. I. tank for engines and hoists for use at blacksmith's forges 3' x 12" x 13"	30	5 0 0	"	
Weighing machines Platform, by Avery of Birmingham on wheels, to weigh up to 40 cwt. with complete sets of Indian and English weights. In very good order	1	200 0 0	"	
Weighing machine counter to weigh up to 38 lbs. with weights 14 lbs. down. In very good order	2	25 0 0	"	
Weigh beam, 3 feet double end beam, with complete set of Indian weights from 1/4 seer to 1 maund, fitted with chains and 13" x 18" pans. In very good order	1	40 0 0	"	

XI.—MISCELLANEOUS STORES.

	Feet.			Foot.
Belting American Cotton 18" Gandy's...	52			0
Ditto 9"	68			0
Ditto 8"	135			0
Ditto 3"	1,200			0
Ditto 2"	696			0
Ditto Indian rubber 9"	862			0
Ditto 6"	68			0
Ditto Country leather 1 1/2"	139			0
Ditto fasteners brass	395			0
Ditto W. I.	90			0
Ditto 5"	50			0
Ditto 6"	59			0
Ditto 9"	42			0
Ditto fastening hooks 3" x 3"	20			0
Brass sheets	M. S. c.			each.
Ditto	0-13-9			maund.
Bolt heads, square	3-24-0			"
Ditto	480			"
Ditto	38-34-8			"
Ditto	32			"
Ditto	303			"
Ditto	14-37-4			"
Ditto	104			"
Ditto	4-1-0			"
Ditto	552			"
Ditto	10-30-8			"
Ditto	371			"
Ditto	4-36-8			"
Ditto	24			"
Ditto	0-7-12			"
Ditto	...			"
Ditto	400			"
Ditto	1-30-0			"
Ditto	110			"
Ditto	1-20-8			"
Ditto	1214			"
Ditto	102-30-0			"

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Name and description of articles.	Number available.	Rate.	Per	Remarks.
NARORA DIVISION, LOWER GANGES CANAL—(continued).				
	38	Ra. S. P.		
	1-14-12	10 0 0	maund.	
	1030			
	23-27-8	10 0 0	"	
	172			
	3-4-12	10 0 0	"	
	1116			
	12-4-0	10 8 0	"	
	821			
	7-15-8	13 0 0	"	
	1069			
	6-15-8	13 0 0	"	
	1006			
	6-0-12	13 0 0	"	
	260			
	0-23-8	13 0 0	"	
	1116			
	23-17-8	10 0 0	"	
	1867			
	9-15-8	10 0 0	"	
	1476			
	3-23-12	10 0 0	"	
	40			
	0-5	13 0 0	"	
	6-8			
	0-0-8	13 0 0	"	
	741			
	0-11-4	14 0 0	"	
MISCELLANEOUS STORES—(continued).				
Bolt ends	9" x 1 1/2"	...	27 26 0...	
Ditto	9" x 1"	...	24 7 0...	
Ditto	9" x 1 1/2"	...	9 6 17 0...	
Ditto	6" x 1 1/2"	...	10 0 0...	
Ditto	6" x 1 1/2"	...	7 7 0...	
Ditto	6" x 1 1/2"	...	6 21 0...	
Ditto	6" x 1 1/2"	...	5 24 0...	
Ditto	6" x 1 1/2"	...	0 23 0...	
Bolt nuts, square head 1 1/2"		...	23 20 0...	
Ditto	1 1/2"	...	24 29 0...	
Ditto	1"	...	11 9 0	
Ditto	1 1/2"	...	...	
Ditto	3/4"	...	0 17 0	
Ditto	3/8"	...	...	

NARORA DIVISION, LOWER GANGES CANAL—(continued).

Rs.	a.	p.	maund.
38	1-4-13	10 0 0	maund.
1080	23-27-8	10 0 0	"
172	3-4-12	10 0 0	"
1116	12-4-0	10 8 0	"
821	7-15-8	13 0 0	"
1089	6-15-8	13 0 0	"
1693	6-6-12	13 0 0	"
290	0-23-8	13 0 0	"
1116	23-17-8	10 0 0	"
1587	9-15-8	10 0 0	"
1476	3-23-12	10 0 0	"
40	0-5	13 0 0	"
6-8	0-0-8	13 0 0	"
744	0-11-4	14 0 0	"

Bolt nut, hexagonal	1"	...	2 10 0	...	210	1-8-4	0 0 0	...	gross.
Ditto	3/4"	...	1 34 0	...	602	0 18-0	0 0 0	...	"
Bolt nuts, hexagonal, for Engines, polished bright 3/4"	...	...	...	...	84	...	20 0 0	...	"
Ditto	ditto	...	...	...	88	...	16 0 0	...	"
Ditto	ditto	...	...	...	70	...	13 0 0	...	"
Ditto	ditto	...	...	...	100	...	11 0 0	...	"
Bolt nuts, square, of sizes, from centerings : used	...	...	40 21 0	...	922	...	5 0 0	...	maund.
Bolts of sorts 6" x 1 1/2"	...	...	...	...	38-19-15	...	8 0 0	...	"
Ditto from centerings.	Used but good	...	29 4 0 0	...	245	...	5 0 0	...	maund.
Butt Hinges iron	5"	...	...	...	13008	...	0 4 0	...	each.
Ditto	4 1/2"	...	...	...	325-17-4	...	0 4 0	...	"
Ditto	4"	...	...	...	58	...	0 4 0	...	"
Ditto brass	3"	...	...	...	56	...	0 4 0	...	"
Ditto iron	6"	...	...	...	21	...	0 8 0	...	"
Copper sheet	1"	...	...	...	38	...	...	...	"
Coach screws	2 1/2" x 1 1/2"	...	...	...	St. ch.	...	45 0 0	...	maund.
Ditto	3 1/2" x 1 1/2"	...	0 6 12	...	14 11	...	11 0 0	...	"
Ditto	4" x 1 1/2"	...	0 14 0	...	185	...	11 0 0	...	"
Ditto	4" x 1 1/2"	...	0 13 0	...	0-5-12	...	11 0 0	...	"
Door bolts	12"	...	41 18 0	...	0-13-12	...	11 0 0	...	"
Ditto	8"	...	...	...	84	...	11 0 0	...	"
Ditto	6"	...	...	...	5117	...	11 0 0	...	"
Ditto	5"	...	...	...	38-14-0	...	11 0 0	...	"
Ditto	3"	...	...	...	17	...	11 0 0	...	"
Fire clay	...	...	...	...	49	...	11 0 0	...	"
Do. bricks	...	...	...	...	21	...	11 0 0	...	"
Do. tiles 18" x 18" x 3"	...	...	...	...	17	...	11 0 0	...	"
Galvanized roofing rivets 1/2" x 1 1/2"	...	...	...	...	16 bags.	...	11 0 0	...	dozen.
Ditto	ditto	...	...	...	390 No.	...	11 0 0	...	"
Ditto	ditto	...	...	...	1 5 0	...	11 0 0	...	"
Ditto	ditto	...	...	...	St. ch.	...	11 0 0	...	"
Ditto	gutters	...	...	...	0 14 3	...	11 0 0	...	"
Ditto	washers	...	...	...	2 15 0	...	11 0 0	...	"
Ditto	screws	...	...	...	956	...	11 0 0	...	"

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

Name.	Number available.	Description or locality.	Condition.	Present value.		Remarks.
				Rate.	Amount.	
Milestones	12	MAINPURI DIVISION, LOWER GANGES CANAL. (Mainpuri via Sitohabad, East Indian Railway.) Chahuramau	Good	Rs. a. p.	Rs. a. p.	
Stock.		CAWNPORE DIVISION, LOWER GANGES CANAL. (Cawnpore, East Indian Railway.)		5 0 0	60 0 0	
Head-quarters.		At Cawnpore	Useful	0 2 0	1 0 0	Strong square bolts.
Bolts iron, 2" x 1 1/2" x 1 1/2"	8	Maswanpur bridge	Ditto	4 11 6	31 4 0	
Iron	6-25	At Cawnpore	Ditto	4 4 0	85 0 0	Cast-iron socket pipes, 4" diameter.
Piles iron, 9' long	20	Ditto	Ditto	6 0 0	7 3 8	
Rods iron	1 m. 8 seers.	Maswanpur bridge	Ditto	0 3 5	4 8 0	
Rails	21 feet.	At Cawnpore	Ditto	4 2 0	38 2 6	Parts serviceable, part bad.
Rubber, Indian, sheeting	9 1/2 c.ft.	Ditto	Ditto	1 8 0	54 0 0	
Ditto Suction Hose	36					
TOOLS AND PLANT.						
1st Sub-Division.						
Mortar mill fitting	10		Useful	Not known	Not known.	
Ditto poles	10		Ditto			
Ditto stones	30		Ditto			
Pickaxes	18		Ditto			
Rammers	25		Ditto			
Wedges	40		Ditto			
2nd Sub-Division.						
American bush scythes	3	At Cawnpore	Useful	Not known	Not known.	
Pumps, Roorkee pattern	2	Ditto				
Country Jhams	1	Ditto	Old			
Boxes, Taps and Dies	2	Ditto				

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		AGRA CANAL.		BETWA CANAL.	
		(At Okhla, 9 miles from Delhi).		(Orai, Indian Midland Railway).	
Axle boxes	89	Good	445 0 0	Very bad	500 0 0
Crab wrenches	10	Can be repaired	70 0 0	Good	600 0 0
Rock drill	1	Good	42 0 0	Reparable	13-8 0 0
File Engine with monkey	1	Bad	200 0 0	Fair	65 0 0
Bullock sowing machine with iron	1	Fair order	500 0 0	Good	250 0 0
bench	3	Ditto	10 0 0	Good	120 0 0
Circular saws	10	Ditto	298 0 0	Good	264 0 0
Stone Trucks	6	Good	4 0 0	Worn	400 0 0
Wheels	1	Out of order	300 0 0	Worn	700 0 0
Double pump					
		BETWA CANAL.			
		(Orai, Indian Midland Railway).			
Engine, 10 H.P.	1	Portable	500 0 0	Very bad	500 0 0
Portable crang	1	2 ton	600 0 0	Good	600 0 0
Pairs of waggon wheels	56	Iron wheel	13-8 0 0	Reparable	486 0 0
Bull's dredgers	10	2 1/2 feet	65 0 0	Fair	650 0 0
Single purchase crabs	2	Ordinary type	125 0 0	Good	250 0 0
Country Jhams	15	Ditto	8 0 0	Good	120 0 0
Lathe	1	For wood work	264 0 0	Good	264 0 0
Crowbars	100	Under 5 1/2 feet	4 0 0	Worn	400 0 0
Jumpers	100		7 0 0	Worn	700 0 0

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ALLAHABAD:

The 1st September 1891.

C. W. I. HARRISON, Col., R. E.,

Chief Engineer.

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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]
J. Assistant Secretary.

*Enclos
4 spare copies }*

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

No 2608 w/ 30 Sept 1891

Communicated
Wm. S. V. Circle

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