ORE SACKS
COTTON DUCK—SEWED

<table>
<thead>
<tr>
<th>No.</th>
<th>Size, Inches</th>
<th>Duck.</th>
<th>Price, Each</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>14 x 12</td>
<td>14</td>
<td>$1.00</td>
</tr>
<tr>
<td>5</td>
<td>14 x 12</td>
<td>14</td>
<td>$1.50</td>
</tr>
<tr>
<td>6</td>
<td>14 x 12</td>
<td>14</td>
<td>$2.00</td>
</tr>
<tr>
<td>7</td>
<td>14 x 12</td>
<td>14</td>
<td>$2.50</td>
</tr>
<tr>
<td>8</td>
<td>14 x 12</td>
<td>14</td>
<td>$3.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td>$3.50</td>
</tr>
</tbody>
</table>

Plain ore sacks equipped with press fasteners, each 8 cents extra.
Site of sack is based on size cut, before sewing, which makes all sizes finished about one-half inch less than size specified.

SPECIE OR SAMPLE BAGS
8-OUNCE DUCK WITH TIE STRINGS

<table>
<thead>
<tr>
<th>Size</th>
<th>Price per 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>0—4x7</td>
<td>$0.50</td>
</tr>
<tr>
<td>1—6x9</td>
<td>15.00</td>
</tr>
<tr>
<td>2—9x12</td>
<td>20.00</td>
</tr>
</tbody>
</table>

Any size not listed made to order if desired. Made with or without tie strings at 25 per cent additional. Also made of light drill or any weight duck at proportionate prices.

WILLSON RESPIRATORS
Fig. 28-B
TWO RELIEF VALVES

RUBBER RESPIRATORS
Fig. 28-C
FOR PRICES, SEE PAGE 390

ELECTRIC BLASTING CAPS
FOR USE WITH BLASTING MACHINES

<table>
<thead>
<tr>
<th>Size</th>
<th>Price per Hundred</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$1.00</td>
</tr>
<tr>
<td>1</td>
<td>15.00</td>
</tr>
<tr>
<td>2</td>
<td>20.00</td>
</tr>
<tr>
<td>3</td>
<td>30.00</td>
</tr>
<tr>
<td>4</td>
<td>50.00</td>
</tr>
</tbody>
</table>

Blasting machines are small, portable electric generators built for generating current to fire electric blasting caps and electric squibs. The mechanism is operated by a rack bar or plunging protruding through the top of the machine. When operating this bar is pulled up as far as possible, and then forced down with a quick, hard thrust. This sets the motion the armature and builds up the current until the bottom is reached, when the connections are automatically completed and the current flows out through leading wires to the electric blasting caps placed in the charges of explosives.

GENERAL USES OF MACHINES
Pocket—Coal mining, stamp and boulter blasting. No. 1—Spraying bits holes, shotting small rounds. No. 2—Standard for mine and quarry work. No. 2A—More extensive than mine, quarry and excavation work. No. 5GM—Bolted for severe usage and large-scale work. Davis Pocket—Coal mining, stamp and boulter blasting.

Pocket machines are operated by turning key. No 2, 3, 3A, 5GM are the push-down type.

Maximum capacity in electric blasting caps when using copper wire.

LEADING WIRE

Leading wire is insulated copper wire for conducting the current from the blasting machine to the blast. Has a strong insulation especially suited for the rough usage it must receive. There are two kinds, single and duplex, in coils of 200, 250, 300 and 500 feet.

No. 14—B & S. gauge, single leading wire, 52 feet per pound.
No. 14—B & S. gauge, duplex leading wire, 26 feet per pound.

CONNECTING WIRE

Connecting wire is used to complete the circuit when the holes are placed too far apart for the electric blasting cap wires to reach. Put up in 1-pound spools.
No. 26—B & S. gauge, connecting wire, about 216 feet per pound.
BLASTING CAPS

Supplied in two strengths, Nos. 6 and 8, corresponding to the same numbers in electric blasting caps. No. 6, in red boxes, are 1½ inches long; No. 8, in green boxes, 2½ long.

Packed in boxes of 100 caps, in cases as follows:

<table>
<thead>
<tr>
<th>Number of case</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity of caps, per case</td>
<td>500</td>
<td>1,000</td>
<td>2,000</td>
<td>3,000</td>
<td>5,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Shipping weight, pounds</td>
<td>No. 6 caps</td>
<td>6</td>
<td>11</td>
<td>15</td>
<td>23</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>No. 8 caps</td>
<td>11</td>
<td>15</td>
<td>24</td>
<td>44</td>
<td>62</td>
</tr>
</tbody>
</table>

Blasting caps cannot be sent by express or parcel post.

Prices on application.

DU PONT CAP CRIMPERS

No. 1—Made of white steel with sleeve type crimping jaws. One handle pointed for use as punch when making primers. Length, 5½ inches. No. 1 Cap Crimpler. Price, each $0.90

No. 2—Made of steel, nickel plated. Combined crimper and fuse cutter. One handle pointed for use as punch, the other has screwdriver bit. Length, 7 inches. No. 2 Cap Crimpler. Price, each $1.25

DYNAMITE

FOR BLASTING PURPOSES

Dynamite differs from blasting powder, commonly called black powder, in that it is more powerful, detonates with much greater rapidity, and has a greater shattering effect. There are many different kinds of high explosives, but for mining, quarrying, agricultural work, etc., we list the grades most general in use.

RED CROSS EXTRA—LOW FREEZING

20% strength, in sticks, 1½ x 3 inches, for tree-planting, sub-sodding and general agricultural use.

40% strength, in sticks, ½ to 1½ x 3 inches, for stump blasting, quarrying and metal mining.

GELATIN—LOW FREEZING FOR UNDERGROUND WORK

40% strength, in sticks, ½ to 1½ x 3 inches, for hard rock.

60% strength, in sticks, ½ to 1½ x 3 inches, for very hard rock.

Put up in tight wooden cases which contain 25 or 50 pounds (net) of dynamite. Prices on application.

We are in position to furnish dynamite for all purposes such as stump blasting, ditching, etc. Write for information.

Fig. 40-A

Fig. 40-B

Fig. 40-C

Fig. 40-D

Fig. 40-E

Fig. 40-F

Blasting powder is produced in granulations or grain of various sizes. Specially adapted for coal mining, quarrying, general excavating, etc.

Put up in steel kegs containing 25 pounds of powder.

Fig. 49-A

Fig. 49-B

Blasting powder is an improved detonating explosive for use in mining coal. It is made in cylinders with a central perforation, and these cylinders, or pellets are placed end to end and wrapped in thin paraffined paper to form cartridges. Made in several different speeds. Which speed of pellet powder is best adapted for mining a particular seam of coal can be most satisfactorily determined by trial. Cartridges of pellet powder are packed in wooden boxes, 25 or 59 pounds to the box.

Prices on application.

Explosives cannot be sent by parcel post or express.
JUTE BRATTICE CLOTH

H & B NON-INFLAMMABLE

This is a strong, durable jute fabric that is treated with a specially prepared chemical compound which renders it non-inflammable, making it a safe material for use in mines, particularly in places where it may be subject to flames. Being closely woven, of strong yarns, it is lighter, more durable and easier handled for such purpose than canvas or cord. The chemical treatment is for the primary purpose of making the fabric flame-proof, but it also protects it from damage due to excess moisture and moisture and materials added to the life of the suit, especially where subject to constant hard usage. These suits are of considerable interest to large users where suits are not of canvas.

Carried in stock for immediate shipment in two widths, 50 and 72 inches, in rolls of approximately fifty running yards. Weight, per square yard, about 1/2 pound.

H & B Brattice Cloth........... Price, per square yard $0.25

MINERS' CANVAS CAPS

SIDE OF HEAVY WEIGHT SPECIAL SHRUNK DUCK, FLANNEL LINING

Fig. 41-B

No. 122—Standard Southwest... Price, each $3.00

No. 127—Cap............... 2.00

Prices listed above include brackets listed below. Unless otherwise specified, No. 123-C leather bracket will be furnished.

STANDARD HARDBOILED LAMP BRACKETS

Fig. 41-E

NO. 150-A

Fiber and Metal Bracket for carbide lamp. Either round or flat hook type. Specify type of hook used.

Leather Lamp Bracket with zinc clip for electric lamp or carbide flat hook lamp.

NO. 152-C

Leather bracket for carbide lamp. Standard on slicker type.

MINERS' BELTS

Fig. 41-H

This is an all-leather belt used by miners to carry the batteries for electric lamps. A sturdy belt that will stand severe service a long time. Made in two sizes.

Number............... 175 300

Price.................. Per dozen $16.00 $24.00
CARBIC PORTABLE FLOOD LIGHTS
AN ACETYLENE LIGHT, OPERATING WITH THE CARBIC CAKE

Carbic flare lights are powerful, automatic, reliable, fool-proof and non-explosive. They are a combination of simplicity, strength, economy and durability. All Carbic lights are Carbic cakes, which permits intermittent use, insures accurate charging, gives pure gas and effects material saving in cost of operation.

They operate automatically without use of pumps or moving parts. No mantles, globes, troys, panes, buckets or intricate parts.

All burners are wind and storm-proof. Flame is sootless, smokeless and sparkless. They give many times the light furnished by oil or kerosene for many hours at less money.

Special swing joints make possible the adjusting of reflector to any desired angle. Carbic light does not over-generate. Gas is generated only as required. All Carbic lights consist of but three parts: water tank, cake holder and gas bell, and any light may be fully charged in less than three minutes.

| Number | 14 | 15 | 2 | 2 | 13 |
| Price | $55.00 | $40.00 | $35.00 | $50.00 | $55.00 |
| Weight, empty | 16 | 36 | 36 | 79 | 66 |
| Weight, charged | 20 | 51 | 115 | 209 | 196 |
| Height (reflectors up) | 72 | 73 | 79 | 84 3/4 |
| Diameter of reflector | 10 | 10 | 13 | (2) | 15 |
| Charge Carbic Cakes | 4 No. 5 | 2 No. 20 | 4 No. 20 | 5 8 No. 20 | 8 No. 20 |
| Earnings | 6 | 12 | 12 | 20 |
| Operating cost per hour | $0.05 | $0.64 | $0.06 | $6.12 | $9.08 |

Special catalogue on request.

CARBIC CAKES
Carbic cakes are made from the highest grade gas-producing material, compressed into briquet form by a special process. It is the most efficient means of supplying gas to portable torches, and by far the safest.

| Number of Carbic cake | 5 | 5 |
| Weight of drum | 76 | 197 |
| Number of cakes in drum | 108 | 40 |
| Size of cakes (diameter) | 2 | 4 |
| Price | $9.00 | $9.00 |
JUSTRITE CARBIDE MINE LAMPS

Fig. 52-A
Fig. 52-B
Fig. 52-C
Fig. 52-D
Fig. 52-E
Fig. 52-F
Fig. 52-G

The lamps are made in two parts, water reservoir and carbide container. Every lamp is perfect in material and workmanship.

A new principle in water feed—a valve enclosed in a tube, so constructed that it increases or decreases the supply of water, enabling the user to burn the lamp at any size desired. The valve is operated by a lever sliding back and forth over notches.

Water cap has water chamber to prevent leakage. Fits snug and is easy to open and close.

The knob is riveted and soldered, fits all caps.

The clasp is made of spring brass, holds lamp secure to cap; will fit all standard cap shields.

**No. Description**

- No. 56 (Polished brass) ........................................ Darnel 5 8 5 21/2
- No. 55 (Polished brass, with carbide can) .................. Darnel 5 5 21/2
- No. 18 (Polished brass, steel,) ................................. Darnel 5 2 21/2
- No. 17 (Polished brass, steel, with carbide can) .......... Darnel 5 2 4
- No. 6 (Steel, brass, with carbide can) ....................... Darnel 5 2 4

**Wire feed**

All above lamps are equipped with lighters.

JUSTRITE WIRE TIP CLEANERS

Fig. 52-E

No. 57 contains 50 hard rustproof steel wires. Sliding cover protects wires when not in use.

No. 52—Wire tip cleaner with hard rustproof steel wires, without sliding cover.

WATERPROOF MATCH BOXES

Fig. 52-F

Round, seamless brass, nickel-plated. Size, 2½x1/2 inch.

No. 76—Match box.

JUSTRITE TIP REAMERS

Fig. 52-G

No. 145—Reamers, 1 dozen in metal tube.
No. 146—Reamers, 1 gross in paper.
No. 159—Empty reamer cases.

We will gladly furnish anyone interested with special circulators and catalogues covering the complete line, together with prices, upon request.

WOLF CARBIDE MINE LAMPS

STEEL AND BRASS

Fig. 52-H
Fig. 52-I

The No. 856 Lamp is very simple, but nevertheless strongly constructed. As it is equipped with a non-adjustable automatic water feed, it burns with a steady and bright flame without requiring any attention during the shift. The lamp is made with a sharp hook, convenient for hanging on timbers or wall.

The No. 1000 Lamp is equipped with a non-adjustable water feed in order to prevent waste of carbide. When starting your lamp, fill container with carbide half full and charge water container full. Screw carbide and water container together and turn knob of the water feed all the way up. Should the light get dim, move the knob up and down, which automatically will clean any residue carbide at the point where the water discharges inside the carbide container. This lamp is especially suitable for use in wet mines. The flame is horizontal and is protected from dripping water. It has a patented eyetlet and handle that prevent the swinging of the lamp, thus reducing the fire hazard to a minimum, and will burn eight hours on one charge provided water is added after five hours. It is equipped with self-lighting securely fastened to the reflector and is made of heavy gauge metal.

NO. 856 REGULAR CARBIDE MINE LAMPS

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Carbide</th>
<th>Water</th>
<th>Capacity</th>
<th>Batteries</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td>84.00</td>
<td>1 1/2</td>
<td>7 to 8</td>
<td>5</td>
<td>3 1/2</td>
<td>4 1/2</td>
</tr>
<tr>
<td>III</td>
<td>3.75</td>
<td>1 1/2</td>
<td>5 to 6</td>
<td>5</td>
<td>4 1/3</td>
<td>4 1/3</td>
</tr>
</tbody>
</table>

NO. 1000 CARBIDE HAND LAMPS

<table>
<thead>
<tr>
<th>No. 1000</th>
<th>Description</th>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-OT</td>
<td>Handle, with sharp hook, complete.</td>
<td>01</td>
<td>Camera, complete.</td>
</tr>
<tr>
<td>13-OT</td>
<td>Water Plug, complete.</td>
<td>02</td>
<td>Water Plug, complete.</td>
</tr>
<tr>
<td>17-OT</td>
<td>Knob and upper part for water feed.</td>
<td>03</td>
<td>Knob and upper part for water feed.</td>
</tr>
<tr>
<td>19-OT</td>
<td>Rod and knurled nut for water feed.</td>
<td>04</td>
<td>Rod and knurled nut for water feed.</td>
</tr>
<tr>
<td>20-OT</td>
<td>Water Spinello, complete.</td>
<td>05</td>
<td>Water Spinello, complete.</td>
</tr>
<tr>
<td>23-OT</td>
<td>Rubber Washer</td>
<td>06</td>
<td>Rubber Washer</td>
</tr>
</tbody>
</table>
SUPPLY PARTS FOR JUSTRITE CAP LAMPS

PARTS FOR LIGHTERS

JUSTRITE REPAIR OUTFIT NO. 3

Handsome metal show case with glass cover. Sliding drawer opening from back. White enamel finish, and contains:

10 No. 61 Gaskets
10 No. 62 Feats
14 No. 64 Felt Holders
72 No. 64 Tips
72 No. 64 Burner Tips
72 No. 37 Tip Cleaners
72 No. 145 Reamers
36 No. 177 Lighters
48 No. 172 Flints
72 No. 173 Springs
72 No. 174 Screw Caps
24 No. 182 Hex. Nuts

For No. 59-B and 59-C, order: No. 52, felt washer; No. 61, felt holder; No. 61, rubber gasket.

Packed in heavy cardboard box, covered with waterproof paper, reinforced corners. Strong and durable.

CARBIDE CONTAINERS

POCKET CARBIDE CANS

Made of light steel, tin coated, ribbed, double sealed and sliding cover, airtight, concaved to fit the boot or hip pocket. Holds full day's supply. Lithographed in three colors, strong and durable. A most convenient and safe carbide supply can. Won't rust.

Capacity, 10 ounces carbide.

No. 77—Pocket carbide can.......................... $.....

CARBIDE FLASKS

Made of heavy tin, double sealed. Large opening empties freely. A strong, durable flask with screw cap. Oval shape, size 6 1/4 x 2 1/2 inches.

No. 25—Carbide flasks.................................. $...

COMPARTMENT CANTEENS

FOR CARBIDE, WATER AND MATCHES

No. 21

Where the miners use acetylene lamps, these canteens will be found very useful. They are made of tin, and weigh 5 1/2 ounces.


Price........................................... Per dozen $4.00
PARTS FOR WOLF CARBIDE MINE LAMPS

ILLUSTRATED ON PAGE 52

Fig. 54-A

NAMES OF THE SINGLE PARTS

When ordering, specify the size and whether for steel or brass lamp.

No. 4 ov—Complete carbide holder.
No. 4 ov—Complete water holder.
No. 6 ov—Sheet cover for carbide.
No. 8 ov—Lamp hook.
No. 9 ov—Thread.
No. 10 ov—Washer.
No. 11 ov—Screw plug with chain.
No. 11 ov—Bush for same.
No. 12 ov—Water dropper.
No. 13 ov—Water plug spindle.
No. 14 ov—Bush for same.
No. 16 ov—Water distributor.
No. 18 ov—Support spring for water spindle.
No. 19 ov—Rubber washer for water spindle.
No. 20 ov—Water distributor tube.
No. 21 ov—Hole rubber washer.
No. 22 ov—Bush for water dropper.
No. 23 ov—Cover for water holder only.

No. 26 ov—Water holder only.
No. 28 ov—Washer for shank.
No. 30 ov—Complete locking bridge.
No. 31 ov—Locking slider.
No. 32 ov—Bridge with 3 shank pins.
No. 33 ov—Right shank.
No. 34 ov—Left shank.
No. 35 ov—Shank pin.
No. 36 ov—Bridge bracket.
No. 37 ov—Burner bracket.
No. 40 ov—Stud for water distributor tube.
No. 41 ov—Burner, upper part. (318).
No. 42 ov—Burner, lower part. (318).
No. 54 ov—Burner, only (saw tip). (318).
No. 55 ov—Reflector. (318).
No. 56 ov—Reflector holder.
No. 77 ov—Strengthening ring for carbide holder.
No. 79 ov—Protecting tube for burner.

BURNERS FOR WOLF CARBIDE MINE LAMPS
WITH TWO OPENINGS

Fig. 54-B
Fig. 54-C
Fig. 54-D

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Item Each</th>
</tr>
</thead>
<tbody>
<tr>
<td>878</td>
<td>Burner tip</td>
<td>$0.00</td>
</tr>
<tr>
<td>881</td>
<td>Burner tip, lower part</td>
<td>.07</td>
</tr>
<tr>
<td>883</td>
<td>Burner tip, upper part</td>
<td>.10</td>
</tr>
</tbody>
</table>

When ordering, always give number of burner desired.

BURNER NEEDLES
For cleaning burner tips.
No. 886 Burner Needles . . . . . Price, each .00 .20

Special catalogue showing our complete line of Wolf Carbide Lamps and prices on application.
WOLF SAFETY MINE LAMPS
STEEL OR ALUMINUM
APPROVED BY BUREAU OF MINES

Fig. 55-A

No. 100—This lamp is equipped with a magnetic lock which renders unauthorized opening impossible.

See No. 3,000 Magnet below.

This lamp is approved by the U. S. Bureau of Mines and meets the requirements of all states.

Lamps are made to take air from below, have corrugated shield, and have internal metal spark igniter.

The lamp vessel is filled with an absorbent material consisting of specially prepared cotton wool which lasts indefinitely.

The illuminating power of these lamps is about 1 ½ candle-power.

Height over all 11 inches.

Carried in stock with magnetic lock, made of steel or aluminum, with round burner and metal spark igniter.

A pair of swivel pliers and a forked key should also be ordered to operate the lamp.

No. 3,000 Horsehoe Magnets. Every mine using No. 100 lamps should have one of these special magnets for locking and unlocking the lamps. Magnet is never furnished with lamps but must be ordered as an extra.

<table>
<thead>
<tr>
<th>Number</th>
<th>Steel</th>
<th>Aluminum</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>$6.00</td>
<td>$8.75</td>
</tr>
</tbody>
</table>

Price, each:

No. 3099—Horseshoe Magnet: $25.00

No. 3595—Metal Spark Igniter, complete: $1.50

No. 3594—Metal Spark Plug, explosion proof: $0.30

No. 4011—Swivel Tong: $0.85

NAMES AND NUMBERS OF PARTS
NOS. 100 AND 131 WOLF NAPHTHA SAFETY LAMPS AND MAGNETIC LOCK

No. | Name of Parts
---|-----------------|
1 | Top of lamp front
2 | Lamp found.
3 | Middle ring
4 | Dome top of lamp
5 | Handle of lamp
6 | Pyrolyte
7 | Washer
8 | Rods with screw heads
9 | Rods forming glass chimney
10 | Filling hole stopper
11 | Filling hole cover
12 | Leash of wood
13 | Cylindrical cotton spreader
14 | Wick Adjutant
15 | Bushing
16 | Wick adjuster guide tube
17 | Gauze ring
18 | Expansion ring
19 | Outer wire gauze
20 | Inner wire gauze
21 | Burner for round wick
22 | Wick holder for round wick
23 | Wick stop for round wick
24 | Wick adjuster knob
25 | Air admission ring with double wire gauze
26 | Corrugated shield
27 | Strengthening ring for shield
28 | Not for 11 am.
29 | Tube for fastening 11 am.
30 | Complete magnetic lock
31 | Protecting ring for air admission
32 | Anchor spring and spring pole
33 | Anchor pole
34 | Spring
35 | Anchor beam
36 | Anchor screw

Special catalogue covering our complete line of Wolf Naphtha Safety Lamps and prices on application.
STANDARD ORE CARS

Standard ore cars are made of the very best materials and are designed for the most severe service. Regularly furnished with standard plain bearing wheels. Can also be furnished with either Hyatt roller, solid roller or self-oiling plain bearing wheels.

<table>
<thead>
<tr>
<th>No.</th>
<th>Price, Each</th>
<th>Weight, Pounds</th>
<th>Length, Inches</th>
<th>Width, Inches</th>
<th>Depth, Inches</th>
<th>No.</th>
<th>3-Inch Axle, Inches</th>
<th>3-Inch Wheel, Inches</th>
<th>Capacity, Cubic Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>O1</td>
<td>80.00</td>
<td>375</td>
<td>44</td>
<td>24</td>
<td>20</td>
<td>No. 11</td>
<td>11/4</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>O2</td>
<td>80.00</td>
<td>375</td>
<td>44</td>
<td>24</td>
<td>20</td>
<td>No. 12</td>
<td>11/4</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>O3</td>
<td>80.00</td>
<td>375</td>
<td>44</td>
<td>24</td>
<td>20</td>
<td>No. 10</td>
<td>11/4</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>O4</td>
<td>110.00</td>
<td>540</td>
<td>48</td>
<td>24</td>
<td>20</td>
<td>1/4</td>
<td>11/4</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>O5</td>
<td>130.00</td>
<td>550</td>
<td>48</td>
<td>24</td>
<td>24</td>
<td>1/4</td>
<td>11/4</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>O6</td>
<td>160.00</td>
<td>730</td>
<td>54</td>
<td>30</td>
<td>24</td>
<td>1/4</td>
<td>11/4</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>O7</td>
<td>190.00</td>
<td>890</td>
<td>54</td>
<td>30</td>
<td>24</td>
<td>1/4</td>
<td>11/4</td>
<td>12</td>
<td>24</td>
</tr>
</tbody>
</table>

We are prepared to quote prices on any type or style of ore car upon receipt of specifications.

Correspondence solicited.

STANDARD CAGE CARS

This car is made for the most severe service. The body is of plate steel and all forgings of the best quality of iron and steel. Regularly furnished with standard plain bearing wheels. Can also be had with either Hyatt roller, solid roller or self-oiling plain bearing wheels.

<table>
<thead>
<tr>
<th>No.</th>
<th>Price, Each</th>
<th>Weight, Pounds</th>
<th>Thickness of Steel, Inches</th>
<th>Size of Box, Inches</th>
<th>Capacity, Cubic Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>110.00</td>
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<td>1/4</td>
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</tbody>
</table>
The body is well braced and riveted and nicely balanced on the truck frame. Two angles are used to reinforce the bottom. Cars of 20 cubic foot capacity and larger are regularly furnished with one reinforcing strap on the side of the body. Bumpers, which are used as handles when dumping, are located at the strongest part of the body. The door has a reinforcing strap at the bottom, so that it is well protected when cars come together. The door rod at the rear is forged down and bolted to the handle, so the bolt is in shear. A sturdy construction and one easily and cheaply renewed. The turntable is cast iron with a grease-lubricated machined groove, which takes most of the load off the king pin in turning, and is dirt proof. The truck frame is in one piece without riveted corners to work loose or cause trouble. It is held rigid at the top by the turntable and at the bottom by the truck. Type "Z" cars are regularly equipped with the Standard Roller Bearing Track. When used in heavy trains, they can be specially equipped with Spring Drawbar Track. For lighter haulage in trains these cars may be equipped with a solid drawbar with chain and hook. Coupling chains and hooks on the side of the body can be furnished. Where possible, we recommend taking the pull on the track rather than on the body or frame. Brakes may be attached to any standard "Z" type car. Unless otherwise specified, 18-inch gauge cars will be furnished.

<table>
<thead>
<tr>
<th>No.</th>
<th>Price, Each</th>
<th>Weight, Pounds</th>
<th>Capacity, Cubic Feet</th>
<th>Length, Inches</th>
<th>Width, Inches</th>
<th>Depth, Inches</th>
<th>Bottom, Inches</th>
<th>Door and Bead, Oc, In.</th>
<th>Size, All, Inches</th>
<th>Surf, Half, Inches</th>
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<td>Z-12</td>
<td>$73.00</td>
<td>630</td>
<td>11.7</td>
<td>42</td>
<td>24</td>
<td>24</td>
<td>7/8</td>
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<td>1 1/2</td>
<td>10</td>
</tr>
<tr>
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<td>76.00</td>
<td>660</td>
<td>14.0</td>
<td>42</td>
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<td>24</td>
<td>7/8</td>
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<td>1 1/2</td>
<td>10</td>
</tr>
<tr>
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<td>730</td>
<td>15.9</td>
<td>44</td>
<td>26</td>
<td>24</td>
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</tr>
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<td>780</td>
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<tr>
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<tr>
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<td>12</td>
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</tbody>
</table>
ROCKER DUMP CARS

The car dumps and is righted easily. As it dumps to either side, it can be made into trains more readily than a one-way side dump car.

The body is well riveted and braced and is carried on cast steel rockers and rocker pedestals. The rocker pedestals are tightly fitted and well riveted to the structural steel frame. Any forces of the body and load are carried against the pedestals due to the frame. The body is held at the bottom by a spring leaf, which locks automatically. It is unlocked for dumping by a foot treadle attachment. Two locks operated by one treadle as used on larger cars.

Equally equipped with combination spring bumper and drawbar of cast steel, link and pin type coupling. Can be equipped with automatic couplers if desired, at slight increase in cost.

Cars are regularly equipped with Standard Roller Bearing Truck.

<table>
<thead>
<tr>
<th>Guage</th>
<th>Size</th>
<th>Feet</th>
<th>Weight</th>
<th>Pounds</th>
<th>Thickness of Steel (Ends and Sides)</th>
<th>Length</th>
<th>Width</th>
<th>Size of Body</th>
<th>Depth</th>
<th>Axle</th>
<th>Wheel</th>
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<tbody>
<tr>
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<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tires and complete information on request.

SCOOP CARS

This is the familiar scoop car used by mines, industrial plants and contractors. It can be used to advantage in handling wet materials, such as concrete.

The body is mounted on a turntable, allowing the car to be dumped at the end or either side. It is locked by a treadle catch at the rear end. The track frame is steel securely braced. This design can also be furnished without turntable, to dump forward only. If the sizes listed do not fill your requirements, they can be built special to suit. Regularly equipped with Standard Roller Bearing Truck. 18-inch gauge unless otherwise specified.

<table>
<thead>
<tr>
<th>No.</th>
<th>Price, Each</th>
<th>Weight, Pounds</th>
<th>Width, Feet</th>
<th>Thickness of Steel (Sides and Bottoms)</th>
<th>Length</th>
<th>Width</th>
<th>Depth</th>
<th>Axle</th>
<th>Wheel</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2</td>
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<td>48</td>
<td>24</td>
<td>21</td>
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</tr>
</tbody>
</table>

205
INCLINE CARS

Fig. 201-A

A popular car for handling materials on inclines, usually surface inclines. Note that the door on the car shown is automatically opened by the roller and lever at the dump point.

These cars are built on special order and we can meet your requirements if furnished complete information of operating conditions. Also advise the incline on which the car will operate.

BOILER ROOM WAGONS

Fig. 206-C

Usually used for handling coal to the boilers, he has other uses. With the door dropped, the construction is very clearly shown by the cut.

Regularly equipped with flat tread, plain bearing wheels, for use without track. Can be equipped with regular car trucks with flanged wheels, either plain or roller bearing, for use on steel rail tracks, at additional cost.

FLAT TOP OR PLATFORM CARS

Fig. 201-B

The uses to which a car of this style can be put are unlimited.

They are furnished, regularly with an oak top mounted on structural steel frame, but can be built with steel top if conditions demand. Can also be furnished with cast steel spring drawbars and bumpers for use in trains, if desired.

Regularly equipped with Standard Roller Bearing Track.

WOOD ROLLERS

Fig. 206-D

PLAIN

Fig. 206-E

WITH SHAFT

Turned from oak. Fitted with plain or with shaft running through and extending 3 inches on each end.

LIGHT DUTY CAR—1½-INCH OAK TOP

<table>
<thead>
<tr>
<th>Track Cm</th>
<th>Platform Inches</th>
<th>Diameter Inches</th>
<th>Price</th>
<th>Weight</th>
</tr>
</thead>
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<td>35</td>
<td>45</td>
<td>12</td>
<td>20.00</td>
<td>14</td>
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</tbody>
</table>

HEAVY DUTY CAR—3-INCH OAK TOP

<table>
<thead>
<tr>
<th>Track Cm</th>
<th>Platform Inches</th>
<th>Diameter Inches</th>
<th>Price</th>
<th>Weight</th>
</tr>
</thead>
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<td>35</td>
<td>45</td>
<td>15</td>
<td>50.00</td>
<td>20</td>
</tr>
</tbody>
</table>

Approx. outside diameter...Inches 3 4 5
Standard length of roller..." 11 12 13
Shaft diameter.............." None None None
Roller only..................Price, each $0.25 $0.75 $1.25
Add or subtract for each in. of length .05 .07 .09

Approx. outside diameter...Inches 1 2 3
Standard length of roller..." 11 12 13
Shaft diameter.............." 3 4 5
Roller only..................Price, each $0.25 $0.75 $1.25
Add or subtract for each in. of length .08 .10 .12

Bolts..................Price, per pair 1.10 1.60 2.10