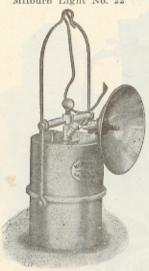
MILBURN HAND LIGHTS

Using ORDINARY Carbide

Milburn Light No. 22



Height over bail, 11 in. Diameter, 6 in. Reflector, 6 in. Weight Empty, 3 lb. Carbide Charge, 1 lb. Burning Capacity, 8 to 12 hr. Operating Cost, ½c per hr.

THE MILBURN "BUILDER" LIGHT

This contractors' acetylene hand light gives 500 candle-power-an illumination of unusual brilliance, producing working conditions equal to daylight. An area of 40 feet radius is brightly lighted.

A polished aluminum reflector, 10 inches in diameter, concentrates the light, while two swing joints on the reflector arm enable it to be directed at any angle up or down.

The "Builder" Light burns 10 hours without recharging and costs about 10 cents per charge. Only carbide and water are required. The body is fitted with a water tight cover. The construction is extremely simple and durable throughout.

Price\$25.00

METAL MINE LAMP NO. 22

This little 100 candle-power lamp is a handy friend on almost any kind of work. Burns 8 hours on a charge. Has a long bail and a hook. Hangs easily at arm's length or hooks anywhere. Strongly made of seamless steel stampings with steel and malleable fittings. May be had with or without reflector, or with special windshield.

The lamp is extremely simple. The water feed is automatic and uniform, generating gas only as needed. It is started and shut off by the needle valve on top. The carbide chamber has a wide mouth for easy charging and dumping. The water chamber has a funnel top, making filling easy, even in the dark. A positive-acting screw cap closes the water inlets and prevents slopping.

Price, without Reflector......\$ 9.00 Price, with Reflector or Windshield...... 10.00

Milburn "Builder" Light



FIG. 3806

500 Candlepower for 10 Hours Body, 7x14 inches. Reflector, 10 inches in diameter. Weight, empty, 11 lb. Carbide charge, 21/4 lb. Operating cost, 1c per hour.

MINER'S CARBIDE

Miner's Lamp Union Carbide is specially prepared, it is of uniform size and quality and on account of its high gas yield is most economical and satisfactory for use in miner's lamp.

Union Carbide
Packed in gray drums
with blue bands
Capacity 100 lbs.



Union Carbide Packed in blue and gray drums Capacity 25 lbs.



FIG. 4133

Miner's Lamp Union Carbide is packed in 100 and 25-lb. steel drums with screw top to protect it from air and moisture.

The handy 25-lb. Drum enables the dealer to get carbide into the hands of the miner in an unbroken package, with no labor, scooping, weighing or wrapping—with no loss of carbide from spilling or exposure.

100-lb. Drums.....each \$..... 25-lb. Drums.....each \$.....

Each order to call for at least four drums.

Union Carbide Packed in gray cans with blue bands Capacity 10 lbs.



FIG. 4134

Union Carbide Packed in gray cans with blue bands Capacity 2 lbs.



PIG. 4135

Miner's Lamp Union Carbide is also packed in 10-lb. cans (6 cans to case) and 2-lb. cans (24 cans to case). The 10-lb. and 2-lb. cans are equipped with a compression top which can be easily replaced in position, so that the carbide remaining in the can will be thoroughly protected from air and moisture.

Carbide for House Lighting Machine—Contractor's machine and special sizes can be supplied.

10-lb. Cans.......Per case \$..... 2-lb. Cans......Per case

Sold in case lots only.

Union Carbide is always packed in blue and gray drums or cans.

BALDWIN'S CARBIDE MINE LAMPS

NO. 130 CAP LAMP



FIG. 4136

All of these lamps can be equipped with the wind

shield which screws on to the burner tube.

No. 130—Cap Lamp. Has no-trouble valve and embodies all the advantages of the old reliable Baldwin

bodies all the advantages of the old reliable Baldwin straight wire feed, plus a strong water valve.

If dirt clogs the water tube, simply rake or pump the raking wire and it is cleared. If wire needs cleaning, pull it out, scrape and put it back. If the valve needs attention it is unscrewed with your fingers—tools are never needed.

Also has non-leaking water cap, unbreakable hook, strongly re-inforced on inside and reflector brace soldered to lamp body.

Made of Brass, Height 4 in. Weight 51/2 oz. Burns 3 hours on a charge.

Price, lamp only.....each \$1.00
Price, wind shieldeach .10

NO. 160 SUPERINTENDENTS' LAMP



FIG. 4137

Made of brass, polished pickel finish. Height 54 in., weight 11 oz. Reflector 31/8 in. in diameter equipped with self-lighter and wind shield.

Operates with the ITP float feed which automatically regulates the production of gas. Requires no hand regulation or adjustment.

Burns 6 hours on a charge.

Price, lamp only.....each \$3.00

NO. 200 TRIP LAMP



PIG. 4138

Shows a Red Light

Made of steel, tinned. Bracket furnished to fit any steel or wooden mine car. Reflector 4½ in. in diameter, 1½ in. deep, furnished in red enamel. Shows a strong red light at a great distance without the use of glass. It is held in place by a 1-in. heavy steel band welded to body of the lamp which slides into a tongue on car bracket.

Equipped with wind shield. Requires no attention while burning.

Price, completeeach \$5.50

In ordering give width of bracket desired.

Miles

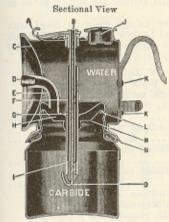
JUSTRITE

FIG. 4139

JUSTRITE MINERS' CARBIDE LAMPS

WITH LEVER FEED AND LIGHTER ATTACHMENT

16.7 CANDLE POWER WEIGHT 5 OUNCES

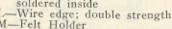


-Lever; regulates water feed B-Excess gas cape German silver reflector; part of lamp -Air hole tip -Gas tube -Water channel

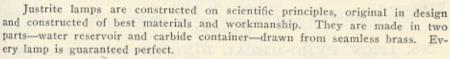
-Water intake: slot -Felt gas strainer -Valve seat -Water cap; with

air chamber
Rivets, securing
hook and clasp; soldered inside

L—Wire edge; double strength, M—Felt Holder



N-Rubber gasket O-Bent wire; turns with lever;



A new principle in water feed-a valve enclosed in a 1/4-inch tube, so constructed that it increases or decreases the supply of water, enabling the user to burn the flame at any size desired. The valve is operated by a lever sliding back and forth over notches, and held firmly in place by a small spring. This new feeds overcomes two serious objections to the wire feed lamps: (1) It will not clog and does not require agitation in order to obtain water as needed. (2) Prevents waste of carbide when through using-all gas is burned and the refuse is slacked.

| No. 85. | Polished brass, with No. 77 Carbide Can\$1.00 |
|---------|---|
| No. 57. | " " extra bottom 1.10 |
| No. 86. | Nickel plated, " No. 77 Carbide Can 1.25 |
| No. 58. | " " extra bottom 1,25 |
| No. 89. | Gun Metal Finish with No. 77 Carbide Can 1.00 |
| No. 59. | " " extra bottom 1.10 |

No matches required to light the "Matchless" Justrite. Cover the reflector with palm of the hand, hold few seconds, then draw hand downward quickly, rubbing over the steel wheel.

This lamp has the new lever feed and a 21/4-inch polished brass reflector with a sparker attachment. There are other lamps with lighter attachment, but the Justrite is the only one which has the reflector permanently attached It is part of the lamp and cannot get loose or fall off.

THE AMERICAN WOLF TYPE MINERS' SAFETY LAMP

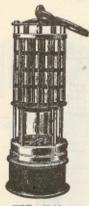


FIG. 4140

The standard lamp for general use burns naphtha as fuel, is fitted with double gauzes, pyro metal or match tape internal igniter, key or magnetic lock, and burner for either round or

American Wolf Type Safety Lamps may be fitted with either our No. 122 CV Pyro-Metal Igniter or the No. 119 Match Tape Igniter. Either of these igniters will give excellent service and the selection is a matter of personal choice.

PRICE LIST OF LAMPS Model 1B500. Steel American Wolf Type Miner's Safety Lamp, brass trimmings, magnetic lock, No. 122CV igniter, round burner, double gauze, complete ready for use......each Model 1B501. Steel. As above except with flat wickeach \$..... burnereach Model 1B502. Steel. Same as 1B500 except key lock.each \$

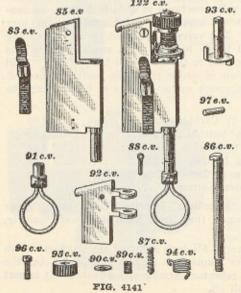
Model 1B503. Steel. Same as 1B501 except key lock each \$... each \$

Model 1B504. Aluminum. Same as 1B502 except made from light weight aluminum alloy. The aluminum lamp is made with round wick burner onlyea

Above lamps may be fitted with one or more lenses as desired.each \$.....

With one lens. ... extra \$....
With two " \$....
With three " \$....
NOTE: Lamps are listed with pyro-igniters. Paraffin igniters supplied if specified.

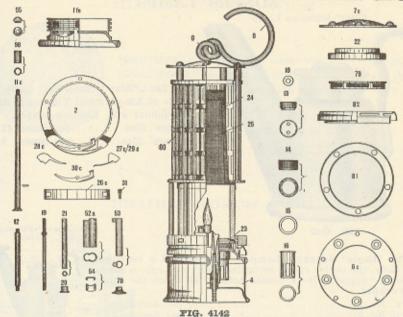
No. 122CV PYRO-METAL IGNITER-ALSO PARTS



| No. | Article | Per 100 |
|--------|--------------------|---------|
| 122CV. | Pyro Metal Ignite | r. |
| | complete | \$ |
| 83CV. | Side Spring | 8 |
| 85CV. | Igniter Case | 8 |
| 86CV. | Operating Spindle | S |
| 87CV. | Tension Spring for | |
| | Pyro-Metal Bar | \$ |
| SSCV. | Cotter Pin | S |
| 89CV. | Adjusting Screw | 8 |
| 90CV. | Washer with | |
| | square hole | \$ |
| 91CV. | Swivel with screw | |
| | nut | \$ |
| 92CV. | Main socket | \$ |
| 93CV. | Steel gear | 8 |
| 94CV. | Operating spring | 8 |
| 95CV. | Friction wheel | S |
| 96CV. | Fastening screw | \$ |
| 97CV. | Pyro-Metal bar | \$ |
| 98CV. | Rivets for fasten- | |
| | ing S3CV to S5CV | \$ |
| NOTE | Standard nackage | e con- |

Standard packages contain 25, 50 and 100 pieces.

AMERICAN WOLF TYPE MINERS' SAFETY LAMP



ith tch ent

| 210. 1112 | | | | | | | | | | |
|-----------|---|------------|---|--|--|--|--|--|--|--|
| | LIST OF | PARTS | | | | | | | | |
| Ref. No. | Parts and Supplies | Ref. No. | Parts and Supplies | | | | | | | |
| 1 FN | Top of lamp vessel only. | 27-C-29-C | Assembled spring pole with | | | | | | | |
| 1 FNC | Top of lamp vessel with | | spring. | | | | | | | |
| | Parts 52, 13, 14, 15, 16 and | 28-C | Anchor pole, | | | | | | | |
| | 94-FN assembled. | 30-C | Anchor beam. | | | | | | | |
| 2 | Magnetic lock ring with | 31-C | Pivot screw for anchor. | | | | | | | |
| 2-K | lock complete. | 32-C | Parts 26-C, 27-C, 28-C and | | | | | | | |
| n-17 | Key lock ring with lock complete. | | 29-C assembled complete. | | | | | | | |
| 3 | Lock screw for key lock, | 52 | Burner for round wick. | | | | | | | |
| 4 | Lamp vessel only. | 52F | Burner for flat wick. | | | | | | | |
| 4-C | Lamp vessel complete, as- | 53 | Wick holder for round wick. | | | | | | | |
| 100 | sembled with Parts 1-FNC, | 53-F | Wick holder for flat wick. | | | | | | | |
| | 16, 19, 21, 53, 54 and 78. | 54 | Wick stop for round wick. | | | | | | | |
| | This is the lamp bottom | 54-F | Wick stop for flat wick. | | | | | | | |
| | complete. | 55 | Wick for round burners in | | | | | | | |
| 6-C | Middle ring. | | 1-lb, rolls, or packages of 1 | | | | | | | |
| 7-C | Dome top of lamp. Lamp hook. | | dozen wicks, | | | | | | | |
| 8 9 | Top dead eye. | 55-F | Wick for flat burners in 1- | | | | | | | |
| 10 | Washer for top dead eye. | | lb. rolls, or packages of 1 | | | | | | | |
| 11-C | Top standards with screw . | | dozen wicks. | | | | | | | |
| | heads. | 78 | Thumb screw for wick ad- | | | | | | | |
| 12 | Glass standards. | | juster. | | | | | | | |
| 13 | Filling hole stopper. | 79 | Air admission ring with | | | | | | | |
| 14 | Filling hole bushing. | 000 | double gauze. | | | | | | | |
| 15 | Leather washer for filling | 80 81 | Corrugated shield. Top ring for stiffening | | | | | | | |
| 16 | hole. | 91 | shield. | | | | | | | |
| 19 | Cotton spreader. Wick adjusting screw. | 82 | Smooth air ring. | | | | | | | |
| 20 | Bushing for tube No. 21. | 94-FN | Igniter well. | | | | | | | |
| 20 21 | Wick adjuster tube. | 95 | Nut for Part 11-C. | | | | | | | |
| 22 23 | Gauze ring. | 98 | Spacing bushing between | | | | | | | |
| 23 | Expansion ring. | | 7-C and 81. | | | | | | | |
| 24 | Outer gauze, steel. | 300 | Special high grade heat re- | | | | | | | |
| 24-B | Outer gauze, brass. | *000 | sisting glass globes. | | | | | | | |
| 25 | Inner gauze, steel. | 1200 | Regular grade glass globes. | | | | | | | |
| 25-B | Inner gauze, brass, | 306 307 | Red glass globes. Asbestos gaskets between | | | | | | | |
| 26-C | Plate covering magnetic lock. | 301 | globe and lamp frame. | | | | | | | |
| | 200000 | | | | | | | | | |

MINERS' LAMPS



The "Star" Sunshine Lamp is made of XX Charcoal Tin and is lined throughout with 12-ounce copper. Miners' Size......per dozen \$2.00 Drivers' Size.....per dozen 2.50

PIG. 4143

"Eagle" Sunshine Lamp

The "Eagle" Sunshine Lamp is composed of a seamless brass body, the entire spout, including patch and cup, is made of 12-ounce copper, also a double bottom, of which the inner one is copper.

| Miners' | No. | 1 | ١. | | | | | | | | | | | | per | dozen | \$2.25 |
|----------|-----|---|----|------|--|------|--|--|--|------|--|--|--|--|---------|-------|--------|
| Miners' | No. | 4 | 3. | | | | | | | | | | | | per | dozen | 2.50 |
| Drivers' | No. | J | | | | | | | | | | | | | ner | dozen | 3.00 |



"Star" Tin Lamps



The "Star" Lamps are made of XX Charcoal Tin with single or double Spouts and are adapted for burning all kinds of oil.

| Miners' | No. | 1, | Double | Spoutper dozen | \$1.50 |
|----------|-----|----|--------|----------------|--------|
| Miners' | No. | 2, | Double | Spoutper dozen | 1.75 |
| Drivers' | No. | 1, | Double | Spoutper dozen | 2.00 |
| Drivers' | No. | 2, | Single | Spoutper dozen | 1.85 |

"Eagle" Tin Lamps

The "Eagle" Lamps are made of XX Charcoal Tin, with single spout and cup. No. 3 Drivers' has brass collar.

| Miners' | No. | 3per | dozen | \$1.50 |
|----------|-----|------|-------|--------|
| Drivers' | No. | 2per | dozen | 1.85 |
| Drivers' | No. | 3per | dozen | 2.50 |



MINERS' CANDLE WICK



"BESTOVALL," fine grade, white wick.....per lb. \$0.60
"DUQUESNE," No. 2 or medium grade.....per lb. .50
Put up in 5-lb. bales, running from 8 to 9 balls to the pound.

FIG. 4147

BRAIDED TORCH WICK

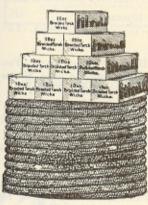


FIG. 4148

MINERS' TIME CHECKS



FIG. 4149

Standard size—1%-in. diam., %-in. hole, packed in wood boxes, 1,000 checks each.

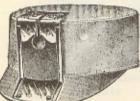
Checks of other diameters and shapes, also numbered checks can be furnished promptly to order.

MINERS' CAPS

This cap is made of extra heavy 12-ounce duck, double stitched throughout and entirely lined with flannel. The visor is made of heavy material so as not to become affected by water or dampness. They are covered with Heavy Duck or Oil Cloth.

The attachment number 2 used in the construction of this cap is made of XX Tin, interlined with Vulcanized Fibre which will not absorb oil or water. It is attached to the cap so as to insure perfect comfort to the wearer.

No. 400



PIG. 4150 No. 65



PIG. 4151 No. 1200

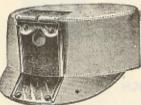


FIG. 4152

Our patent is so constructed as to force the lamp directly in front of the cap, no matter what the position of the wearer.

| No. 400-2. List | Extra Heavy White Duck per dozen, \$5.30 |
|--------------------|--|
| No. 400-2. | Extra Heavy Brown Duck. |
| List | per dozen, 5.30 |

This Cap is made of Heavy Weight Duck. The Attachment is of Sole Leather, largely used in the Anthracite Coal Fields,

| No. 65. Heavy White Duck. | | |
|---------------------------|--------|--------|
| Listper | dozen, | \$5.00 |
| No. 65. Heavy Brown Duck. | | |
| Listper | dozen, | 5.00 |

This cap is made of heavy weight White Duck and is universally known throughout the mining regions as the No. 9. The attachment is constructed of XX Tin, interlined with vulcanized fibre.

| No. 1200—9. Heavy White Duck. List | dozen, | \$5.00 |
|---------------------------------------|--------|--------|
| No. 1200-9. Heavy Brown Duck. | | |
| Listper | dozen, | 5.00 |

MINERS' BELTS

Made of Heavy Duck, Triple Stitched, with Leather Billets and Clapes securely riveted. This Belt is more comfortable than a leather belt.

