

## Section No. 10

### LUBRICATORS, OILERS, OIL VALVES, AND GREASE CUPS

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*Bronze*

**Plain Engine Lubricators**

For Steam Chests, Steam Engines, and Pump Cylinders.  
200 Pounds Working Steam Pressure

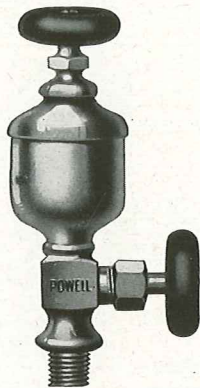


Fig. 700  
Without Condensing Tube  
and Drain Cock

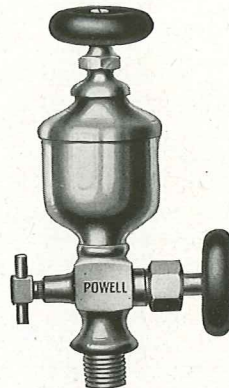


Fig. 701  
With Condensing Tube  
and Drain Cock

Fig. 700 and Fig. 701 embody the plain design of a substantial gravity type lubricator. Fig. 701 has an internal condensing tube and cock for draining the reservoir. Both are equipped with cut-off valve in shank to facilitate re-filling the oil reservoir while the engine is running.

Fig. 700 is adapted for lubricating bearings and journals. It may also be used as a steam cylinder lubricator although the Fig. 701 is better adapted for the latter use.

**PRICE LIST**

Number	00	0	1	2	3	4	5	6	7	8
Capacity.....	3/4	1	1 1/4	1 1/2	2 1/2	4	5	10	18	24
Diameter of Body.....	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	3	3 1/2	4
Shank Pipe Thread.....	1/4	3/8	3/8	1/2	1/2	1/2	3/4	3/4	3/4	3/4
Fig. 700—Plain.....	2.00	2.20	2.40	2.60	2.90	3.25	3.75	4.75	7.00	10.00
Fig. 701—With Condensing Tube and Drain Cock.....	3.00	3.20	3.40	3.60	3.90	4.25	4.75	5.75	8.00	11.00

**“Crescent”**

**Bronze Hydrostatic Lubricators**

With Single and Double Connections, and Sight Feed.

150 Pounds Working Steam Pressure

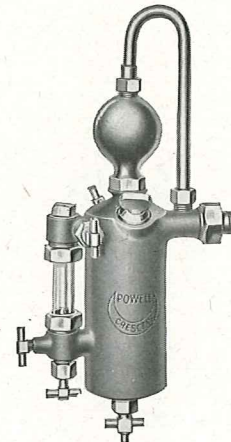


Fig. 706  
Single Connection

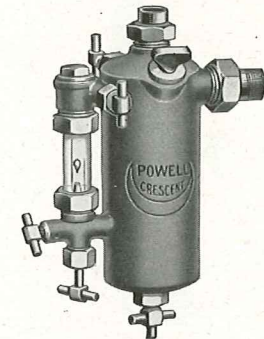


Fig. 710  
Double Connection

The oil reservoirs and arms of the Single and Double Connection “Crescent” Lubricators are cast in one piece—an exclusive Powell feature—having no joints to loosen or leak.

For parts list, see page 424.

**PRICE LIST**

Capacity.....	1/4 pt.	1/3 pt.	1/2 pt.	3/4 pt.	1 pt.	1 1/2 pt.	1 qt.
Attaching Shank Pipe Thread.....	Inches 3/8	3/8	1/2	1/2	1/2	1/2	1/2
Sight-Feed Glass.....	Inches 5/8x2	5/8x2 1/4	3/4x2 1/4	3/4x2 1/4	3/4x3 1/4	3/4x3 1/4	3/4x3 1/4
Fig. 706—Semi-Finished.....	Each 9.00	10.00	11.00	13.50	15.50	19.50	21.00
Fig. 707—Semi-Finished and Plated.....	Each 10.00	11.50	12.50	15.00	17.00	22.00	23.50
Fig. 708—Polished.....	Each 10.50	11.50	12.50	15.00	17.00	21.50	24.00
Fig. 709—Polished and Plated.....	Each 11.50	13.00	14.00	16.50	18.50	24.00	26.50
Fig. 710—Semi-Finished.....	Each 8.00	9.00	10.00	12.50	14.50	18.50	20.00
Fig. 711—Semi-Finished and Plated.....	Each 9.00	10.50	11.50	14.00	16.00	21.00	22.50
Fig. 712—Polished.....	Each 9.50	10.50	11.50	14.00	16.00	20.50	23.00
Fig. 713—Polished and plated.....	Each 10.50	12.00	13.00	15.50	17.50	23.00	25.50

This Powell Patent Trade  Mark is cast on the body



## “Trojan” and “Columbian” Bronze Hydrostatic Sight Up-Feed Lubricators

Double Connection. With Condenser,  
Sight Feed and Indicator.

200 and 300 Pounds Working Steam Pressures

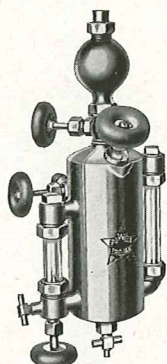


Fig. 702  
“Trojan” Lubricator  
200 Pounds W.S.P.

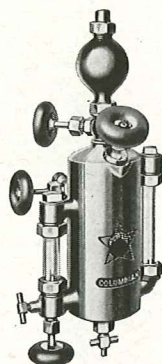


Fig. 704  
“Columbian” Lubricator  
300 Pounds W.S.P.

These Bronze Lubricators are made with double connection and condenser, with sight feed and index glass showing the amount of oil in the reservoir. The side arms are integral with the body, preventing joints becoming loose and leaking. This insures positive feed under all conditions. For “Trojan” parts list, see page 425.

The “Columbian” is built for higher steam pressures and more severe service.

### PRICE LIST—“TROJAN”

Capacity	1/3 pt.	1/2 pt.	3/4 pt.	1 pt.	1 1/2 pt.	1 qt.	1 1/2 gal.	1 gal.
Shank Pipe Thread.....Inches	3/8	1/2	1/2	1/2	1/2	1/2	3/4	3/4
Index Glass.....Inches	1 1/2 x 2 3/4	5/8 x 3 3/4	5/8 x 4 1/4	5/8 x 4 1/2	5/8 x 4 1/2	5/8 x 5	5/8 x 6 1/4	3/4 x 9
Sight Feed Glass.....Inches	5/8 x 2 1/4	3/4 x 2 1/4	3/4 x 3 1/4	3/4 x 3 1/4	3/4 x 3 1/4	3/4 x 3 1/4	3/4 x 3 1/4	3/4 x 5 1/2
Fig. 702—Polished.....Each	12.00	13.00	15.50	18.00	22.00	24.00	34.00	42.50
Fig. 703—Nickel Plated.....Each	13.00	14.50	17.00	19.50	24.00	26.50	37.00	46.50

### PRICE LIST—“COLUMBIAN”

Capacity	1/3 pt.	1/2 pt.	3/4 pt.	1 pt.	1 qt.	1 1/2 gal.	1 gal.
Shank Pipe Thread.....Inches	3/8	1/2	1/2	1/2	1/2	3/4	3/4
Index Glass.....Inches	1 1/2 x 2 3/4	5/8 x 3 3/4	5/8 x 4 1/4	5/8 x 4 1/2	5/8 x 5	5/8 x 6 1/4	3/4 x 9
Sight Feed Glass.....Inches	5/8 x 2 1/4	3/4 x 2 1/4	3/4 x 3 1/4	3/4 x 3 1/4	3/4 x 3 1/4	3/4 x 3 1/4	3/4 x 5 1/2
Fig. 704—Polished.....Each	12.00	13.00	15.50	18.00	24.00	34.00	42.50
Fig. 705—Nickel Plated.....Each	13.00	14.50	17.00	19.50	26.50	37.00	46.50

## “Pennant” Lever Handle Oil Pumps

Glass Body. Cast Bronze Base and Top.

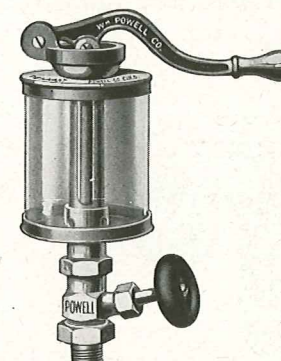


Fig. 800

The Powell “Pennant” Lever Handle Oil Pump is adapted as an auxiliary to the regular sight feed lubricator, lubricating devices, or compressor lubricators. It is intended for emergencies to supply oil quickly to the cylinder. It has a union shank connection which is quite a convenience in attaching, making it unnecessary to dismantle the pump to get it in place.

For Oiler Glasses, see page 428.

### PRICE LIST

Number	1	1 1/2	2	3
Capacity	1/4 pt.	1/2 pt.	1 pt.	1 qt.
Outside Diameter of Glass.....Inches	2 1/4	3	3 1/2	4 1/2
Height of Glass.....Inches	2 1/8	3	4	5
Shank Pipe Thread.....Inches	3/8	3/8	1/2	1/2
Fig. 800—Polished.....Each	7.50	8.50	10.00	15.00
Fig. 801—Nickel Plated.....Each	8.00	9.50	11.00	16.50



## Bronze Independent Sight Feed Lubricating Devices

Plain or Enlarged Pattern.  
With or Without Equalizing Attachment.

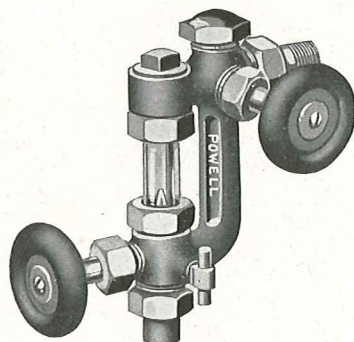


Fig. 854  
Plain Pattern

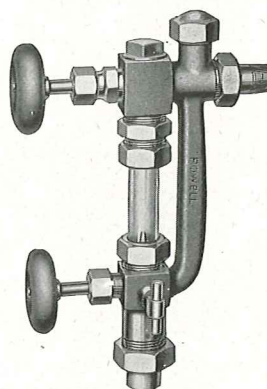


Fig. 855  
Enlarged Pattern

Bronze Independent Sight Feed Lubricating Devices are intended for use when it is desired to lubricate two or more cylinders from one pressure tank or oil reservoir. Fig. 854 is designed for use on high pressure cylinders of compound engines or simple steam engines.

To prevent oil from syphoning on low pressure compound steam engine units, these lubricating devices are furnished with equalizing coupling to replace cap on top of device. The equalizing coupling is  $\frac{1}{4}$ " female union for equalizing pressure in discharge shank with that of oil inlet. A  $\frac{1}{4}$ " pipe with cut-off valve should be connected with engine branch of steam main to this coupling.

Attaching shank on side of device is made with  $\frac{3}{8}$ " Iron Pipe Size male union end to be screwed into steam pipe. The female union connection at the bottom of the device is  $\frac{1}{4}$ " on Fig. 854 and  $\frac{3}{8}$ " on Fig. 855. It should be connected to top of oil tank.

### PRICE LIST

Fig. 854—Bronze.....	Each	5.00
Fig. 854—Nickel Plated.....	Each	6.00
Fig. 855—Polished.....	Each	6.00
Fig. 855—Polished and Plated.....	Each	7.00
Add to above prices for any style with equalizing tube.....		.50

## "Boson" and "Middy" Bronze Lubricators

With Ball Check Valve in Shank.

For Gas, Gasoline, Oil Engine and Compressor Cylinders.

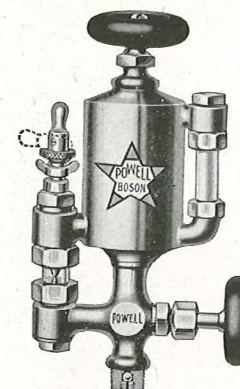


Fig. 730  
"Boson" Lubricator  
With Sight-Feed and Index

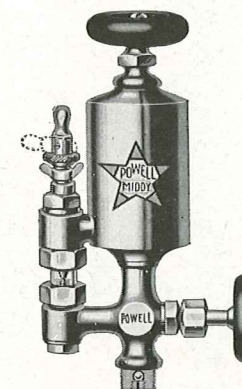


Fig. 732  
"Middy" Lubricator  
With Sight-Feed

The "Boson" and "Middy" Lubricators are designed with ball check valve in shank for lubricating cylinders of compressors or internal combustion engines.

The body and side arms are cast of bronze in one piece. Shut-off valve enables filling the cup while the engine is in motion. The "Boson" is equipped with a gauge glass showing the oil level. Both the "Boson" and the "Middy" are equipped with sight feed, and have a large filling hole.

These lubricators are simple in construction and easy to operate. They have the patent signal lever feed and instantaneous shut-off—the original lever-up and lever-down mechanism.

For "Boson" parts list, see page 426.

### PRICE LIST

Capacity.....	$\frac{1}{8}$ pt.	$\frac{1}{4}$ pt.	$\frac{1}{3}$ pt.	$\frac{1}{2}$ pt.	1 pt.	1 qt.
Shank Pipe Thread.....Inches	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{4}$
Sight-Feed Glass.....Inches	$\frac{5}{8} \times 1\frac{3}{4}$	$\frac{5}{8} \times 1\frac{3}{4}$	$\frac{5}{8} \times 1\frac{3}{4}$	$\frac{5}{8} \times 1\frac{3}{4}$	$\frac{5}{8} \times 2$	$\frac{5}{8} \times 2$
Index Glass, "Boson".....Inches	$\frac{1}{2} \times 1\frac{1}{4}$	$\frac{1}{2} \times 1\frac{3}{4}$	$\frac{1}{2} \times 2\frac{1}{2}$	$\frac{1}{2} \times 2\frac{3}{4}$	$\frac{1}{2} \times 3\frac{1}{2}$	$\frac{1}{2} \times 3\frac{1}{2}$
Fig. 730—"Boson," Polished.....Each	12.00	14.00	18.00	22.00	26.00	26.00
Fig. 731—"Boson," Polished and Plated.....Each	14.00	16.50	21.00	26.00	30.00	30.00
Fig. 732—"Middy," Polished.....Each	8.00	10.00	12.00	16.00	20.00	24.00
Fig. 733—"Middy," Polished and Plated.....Each	10.00	12.00	14.50	19.00	24.00	28.00



## "Admiral" and "Captain" Bronze Lubricators

With Sight Feed.

For Compressor Cylinders and Blowers.

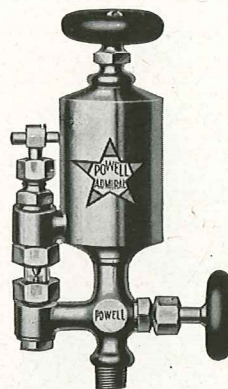


Fig. 725  
"Admiral" Lubricator  
Without Index

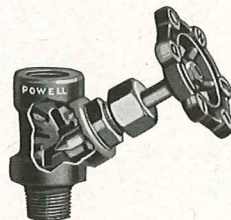


Fig. 729  
Cut-Off Valve

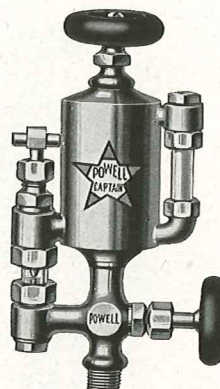


Fig. 727  
"Captain" Lubricator  
With Index

"Admiral" and "Captain" Lubricators are designed to operate against a pulsating back pressure. They are particularly adapted for delivering oil to the cylinders of compressors and ammonia engines. When these lubricators are used on ammonia engines we recommend an iron body cut-off valve (Fig. 729) to prevent the corrosive action of ammonia on the lubricator when not in use.

The structural details are similar to the "Boson" and "Middy" Lubricators except that the shank is plain, without ball check valve. A shut-off valve permits the cup to be refilled while the engine is in use.

The "Captain" has an index or gauge glass at the side of the reservoir to indicate the height of the oil—a convenience showing when the cup needs refilling.

### PRICE LIST

Capacity.....	1/4 pt.	1/3 pt.	1/2 pt.	1 pt.	1 qt.
Shank Pipe Thread.....Inches	3/8	3/8	1/2	1/2	3/4
Sight-Feed Glass.....Inches	5/8x1 3/4	5/8x1 3/4	5/8x1 3/4	5/8x2	5/8x2
Index Glass, "Captain".....Inches	1/2x1 1/4	1/2x1 3/4	1/2x2 1/4	1/2x2 3/4	1/2x3 1/2
Fig. 725—"Admiral," Polished.....Each	10.00	12.00	16.00	20.00	24.00
Fig. 726—"Admiral," Polished and Plated.....Each	12.00	14.50	19.00	24.00	28.00
Fig. 727—"Captain," Polished.....Each	12.00	14.00	18.00	22.00	26.00
Fig. 728—"Captain," Polished and Plated.....Each	14.00	16.50	21.00	26.00	30.00

Size.....Inches	3/8	1/2	3/4
Fig. 729—Cut-Off Valve, Painted Iron Body.....Each	3.20	4.00	5.30
Fig. 748—Cut-Off Valve, Nickel Plated.....Each	3.70	4.50	5.80

## "Neptune" Bronze Lubricators

With Sight Feed.

For Gas, Gasoline, Oil Engine and Compressor Cylinders.

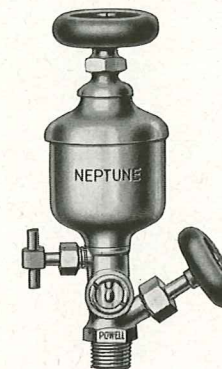


Fig. 742

The Powell "Neptune" Lubricator is adapted for lubricating the cylinders of internal combustion engines or compressors, particularly where a bronze cup is desired. It is designed with large filling hole which is a great convenience for rapid refilling.

The feed is regulated by the feed adjustment valve. The cup can be filled without stopping the engine or changing the feed adjustment, by closing off pressure with cut-off valve in shank. This lubricator is provided with an internal relief tube which allows back pressure of explosion to pass through oil in cup, thus providing pressure so oil will feed from cup. The feed is seen in drops passing through the bull's-eye. The shank can be furnished with a ball check valve when specified.

### PRICE LIST

Number.....	0	1	2	3	4	5	6
Capacity.....Ounces	1	1 1/2	2 1/2	4	5	10	18
Outside Diameter of Body.....Inches	1 1/2	1 3/4	2	2 1/4	2 1/2	3	3 1/2
Shank Pipe Thread.....Inches	3/8	3/8	1/2	1/2	1/2	1/2	3/4
Fig. 742—Polished.....Each	7.00	8.00	10.00	12.00	16.00	20.00	24.00



## "Viking" Bronze Glass Body Lubricator

Needle Valve Feed with Sight Feed and  
Signal Snap Lever Regulating Device.

For Gas, Gasoline, and Oil Engine Cylinders.

The lever on top of the  
cup cylinder signifies  
whether the cup is feeding.  
Lever up—feeding  
Lever down—closed



Fig. 734

This lever adjustment is  
of Powell origin, and pat-  
ented. The feed is set by  
adjusting the milled screw  
at the top of the cup and is  
secured in that position by  
the wing lock nut.

The "Viking" is made with cast bronze base and top. The shock of the explosion lifts the small brass ball against its seat, closing the passage and preventing the shock from entering the sight chamber, and relieves itself through the air tube into the oil reservoir. Thus the oil drop is never shattered, nor the sight glass spattered with oil, obscuring the rate of feed.

On the returning stroke of the engine the ball valve is released from its seat and drops on the retaining bar, permitting the oil to pass out through the shank to the engine cylinder.

The sight glass is packed top and bottom, making an air-tight compartment.  
For Lubricator Glasses, see page 428.

### PRICE LIST

Number.....	1	1½	2	3	4	5	6	7	8
Capacity.....	1 oz.	1½ oz.	2½ oz.	4 oz.	6 oz.	8 oz.	16 oz.	1½ pt.	1 qt.
Outside Diameter									
Body Glass...Inches	1½	1¾	2	2¼	2½	3	3½	4	4½
Length of Glass...Inches	1¾	1⅝	1⅞	2⅞	2⅞	3	4	4½	5
Outside Diameter and Length of Sight Glass.....Inches	¾x⅝	¾x⅝	7⁄8x¾	7⁄8x¾	1x7⁄8	1x7⁄8	1x7⁄8	1¼x1⅞	1¼x1⅞
Shank Pipe									
Thread.....Inches	¼	¾	¾	¾	½	½	½	¾	¾
Fig. 734— Polished.....Each	4.50	4.75	5.25	5.75	6.50	9.00	12.00	20.50	25.00

## Bronze "Signal" and "Pilgrim" Glass Body Oil Cups

Cast Bronze Base and Top.



Fig. 774  
"Signal"

Without Sight Feed



Fig. 774  
"Signal"

With Sight Feed



Fig. 770  
"Pilgrim"

Without Sight Feed



Fig. 770  
"Pilgrim"

With Sight Feed

The Powell "Signal" Oil Cup is the original snap-lever sight feed oiler. The feed can be instantly stopped or started without disturbing the regulation, by moving the lever up or down.

"Signal" Lever Up—Feeding  
"Signal" Lever Down—Closed

The "Pilgrim" is a very simple and practical glass body oil cup. A slide lever covers the large filling hole. Swing this lever either to the right or to the left for filling the cup. The regulating screw feed needle point stem is convenient to adjust. A lock-nut secures the feed adjustment at any desired point.

For Oiler Glasses, see page 428.

### PRICE LIST

Number.....	00	0	1	1½	2	3	4	5	6	7	8
Capacity.....	⅓ oz	⅝ oz	1 oz	1½ oz	2½ oz	¼ pt	⅓ pt	½ pt	1 pt	1½ pt	2 pt
Shank Pipe Thread											
.....In.	⅛	¼	¼	¾	¾	¾	½	½	½	¾	¾
Outside Diameter of Glass.....In.	1	1¼	1½	1¾	2	2¼	2½	3	3½	4	4½
Height of Glass...In.	7⁄8	1⅛	1⅝	1⅞	1⅞	2⅞	2⅞	3	4	4½	5

### "SIGNAL"

Fig. 774—Polished Ea	2.85	3.00	3.25	3.50	3.75	4.25	5.25	7.25	9.25	15.00	20.00
Fig. 775—Nickel Plated.....Ea	3.35	3.50	3.75	4.00	4.25	4.75	5.75	8.00	10.25	17.00	22.00
Fig. 774—Polished Ea	1.70	1.90	2.10	2.30	2.50	2.80	3.60	5.00	6.40	9.80	14.80
Fig. 775—Nickel Plated.....Ea	2.10	2.30	2.50	2.65	2.80	3.20	4.00	5.60	6.95	11.25	16.25

### "PILGRIM"

Fig. 770—Polished Ea	.75	.80	1.00	1.25	1.50	1.90	2.40	3.10	4.00	6.00	8.50
Fig. 771—Nickel Plated.....Ea	.85	.95	1.20	1.50	1.75	2.20	2.75	3.50	4.50	7.00	9.50
Fig. 770—Polished Ea	1.10	1.25	1.50	1.75	2.10	2.55	3.15	3.90	4.80	7.50	10.00
Fig. 771—Nickel Plated.....Ea	1.20	1.40	1.70	2.00	2.35	2.85	3.50	4.30	5.30	9.50	12.00



## "Planet" and "Parole" Crank Pin Oilers

For Rotary Bearings.  
Plunger Feed. Cast Bronze Base and Top.

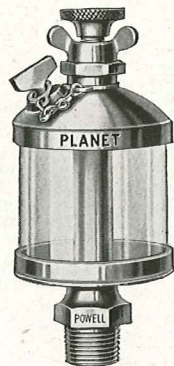


Fig. 784  
"Planet"  
With Plain Glass



Fig. 786  
"Parole"  
With Bronze Protecting Shield

These Crank Pin Oilers are provided with a plunger feed which acts as a piston, forcing the oil to a bearing at each revolution.

The filler plug is attached to the center post by a chain.

The protecting shield of the "Parole" is a bronze shell completely encircling the glass cylinder and guarding the glass from accidental blows. The four circular windows show at a glance the height of the oil.

For Oiler Glasses, see page 428.

### PRICE LIST

Number.....	0	1	1½	2	3	4
Capacity.....	5/8 oz.	1 oz.	1½ oz.	2½ oz.	¼ pt.	½ pt.
Outside Diameter of Glass.....Inches	1¼	1½	1¾	2	2¼	2½
Height of Glass.....Inches	1½	1¾	1¾	1¾	2½	2¾
Shank Pipe Thread.....Inches	¼	¼	¾	¾	¾	½
Fig. 784—"Planet," Polished...Each	1.35	1.60	1.80	2.30	2.75	3.75
Fig. 785—"Planet," Polished and Plated.....Each	1.75	2.05	2.30	2.80	3.35	4.45
Fig. 786—"Parole," Polished...Each	1.50	1.75	2.00	2.50	3.00	4.00
Fig. 787—"Parole," Polished and Plated.....Each	1.90	2.20	2.50	3.00	3.60	4.70

## Bronze Gravity or Pressure Feed Multiple Oilers

With Independent Sight Feed and  
Snap Lever Regulating Valve for Each Outlet.



Fig. 819  
Brackets for Reservoir

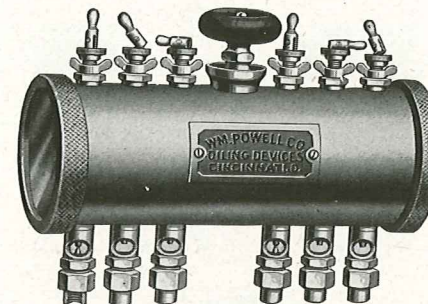


Fig. 812

Powell Bronze Gravity or Pressure Feed Multiple Oilers are made with single reservoir equipped with as many oiler outlets as size of reservoir will permit. This dispenses with the necessity of filling the various oil reservoirs of independent oilers.

Powell Fig. 812 is a simple type of Gravity Feed Multiple Oilier designed primarily for lubricating bearings. Fig. 1109 is designed for lubricating multiple cylinders of internal combustion engines and is particularly adapted where the same grade of oil is used in the cylinders and in the bearings.

The end of lubricator reservoir is provided with a sight glass for viewing the height of oil. Oil outlets are provided with independent regulation and sight feed.

### PRICE LIST

Capacity.....	1 Pt.	1 Qt.	½ Gal.	1 Gal.	2 Gal.	3 Gal.
Diameter of Reservoir.....Inches	2½	3	4	5	6	6
Length Over All.....Inches	11¾	10	11	13¾	19	28
Maximum Number of Feeds.....	7	6	6	8	12	18
Size of Connection Pipe Thread.....Inches	1/8	1/8	¼	¼	¼	¼

### Gravity Multiple Oilers

No. Feeds	Capacities of Reservoirs						Pressure Multiple Oilers					
	1 Pt.	1 Qt.	½ Gal.	1 Gal.	2 Gal.	3 Gal.	1 Pt.	1 Qt.	½ Gal.	1 Gal.	2 Gal.	3 Gal.
1	19.50	24.00	33.00	46.00	68.00	83.00	21.00	25.00	37.00	47.00	69.00	84.00
2	22.00	27.00	36.00	49.00	71.00	86.00	25.00	29.00	41.00	51.00	73.00	88.00
3	24.50	30.00	39.00	52.00	74.00	89.00	29.00	33.00	45.00	55.00	77.00	92.00
4	27.00	34.00	43.00	55.00	77.00	92.00	33.00	38.00	47.00	59.00	81.00	96.00
5	30.50	35.00	46.00	58.00	80.00	95.00	38.00	40.00	51.00	63.00	85.00	100.00
6	33.00	39.00	49.00	61.00	83.00	98.00	43.00	45.00	55.00	67.00	89.00	104.00
7	35.70	.....	.....	64.00	86.00	101.00	48.00	.....	.....	71.00	93.00	108.00
8	.....	.....	.....	68.00	89.00	104.00	.....	.....	.....	76.00	97.00	112.00
9	.....	.....	.....	.....	92.00	107.00	.....	.....	.....	.....	101.00	116.00
10	.....	.....	.....	.....	.....	110.00	.....	.....	.....	.....	105.00	120.00

Add 10% to the above list prices for Nickel-Plated Multiple Oilers.

### Brackets For Reservoirs

	1 Pt.	1 Qt.	½ Gal.	1 Gal.	2 Gal.	3 Gal.
Fig. 818 and 819, Finished .....Pair	8.00	10.00	13.00	17.00	20.00	20.00



# *Bronze* Plain Oil Cups

With and Without Cut-Off Valve



Fig. 874  
Screw Lid

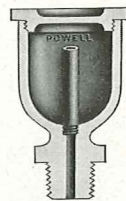


Fig. 874  
With Internal Tube for Wick



Fig. 875  
Hinged Lid

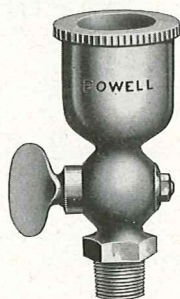


Fig. 878  
Screw Lid  
Tee Handle Cock

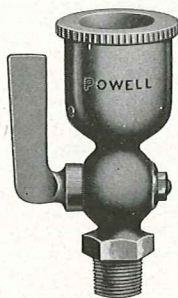


Fig. 879  
Screw Lid  
Lever Handle Cock

Screw or hinged lid oilers are available, on special order, with internal tube for wick. Prices on application.

## PRICE LIST

Outside Diameter of Body.....Inches	5/8	3/4	7/8	1	1 1/8	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3
Shank Pipe Thread.....Inches	1/8	1/8	1/8	1/4	1/4	1/4	3/8	3/8	1/2	1/2	1/2	3/4	3/4
Fig. 874—Screw Lid.....Each	.25	.30	.35	.40	.50	.60	.90	1.25	1.75	2.25	2.75	3.50	4.50
Fig. 875—Hinged Lid.....Each	.55	.60	.70	.85	1.10	1.20	1.60	2.10	2.70	3.50	4.50	.....	.....
Fig. 878—Tee Handle Cock.....Each	.....	.....	.....	1.00	1.25	1.50	2.00	2.50	3.00	3.75	4.50	.....	6.00
Fig. 879—Lever Handle Cock.....Each	.....	.....	.....	1.10	1.35	1.60	2.20	2.75	3.25	4.00	5.00	.....	6.50
Add for Internal Tube.....Each	.10	.10	.10	.10	.15	.15	.15	.15	.15	.20	.20	.25	.25

# *Bronze* Plain and Sight Feed Oil Valves with Signal Lever Stop Feed

With Female Union Shank and Sight Feed

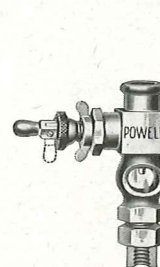


Fig. 820—Vertical



Fig. 821—Angle



Fig. 822—Cross



Fig. 823—Corner

With Female End and Sight Feed

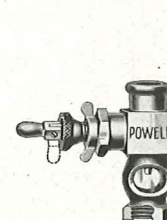


Fig. 824—Vertical



Fig. 825—Angle



Fig. 826—Cross



Fig. 827—Corner

Without Sight Chamber

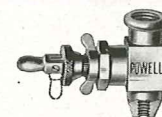


Fig. 828—Vertical



Fig. 829—Angle



Fig. 830—Cross



Fig. 831—Corner

## PRICE LIST

Polished Bronze

Nickel Plated

Size.....Inches	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1
Fig. 820—Vertical.....Each	2.50	2.50	2.50	3.50	2.80	2.80	2.80	3.80
Fig. 821—Angle.....Each	2.50	2.50	2.50	3.50	2.80	2.80	2.80	3.80
Fig. 822—Cross.....Each	2.80	2.80	2.80	3.70	3.10	3.10	3.10	4.00
Fig. 823—Corner.....Each	2.80	2.80	2.80	3.70	3.10	3.10	3.10	4.00
Fig. 824—Vertical.....Each	2.00	2.00	2.00	3.00	2.25	2.25	2.25	3.25
Fig. 825—Angle.....Each	2.00	2.00	2.00	3.00	2.25	2.25	2.25	3.25
Fig. 826—Cross.....Each	2.30	2.30	2.30	3.20	2.60	2.60	2.60	3.50
Fig. 827—Corner.....Each	2.30	2.30	2.30	3.20	2.60	2.60	2.60	3.50
Fig. 828—Vertical.....Each	1.25	1.25	1.25	1.40	1.50	1.50	1.50	1.65
Fig. 829—Angle.....Each	1.25	1.25	1.25	1.40	1.50	1.50	1.50	1.65
Fig. 830—Cross.....Each	1.50	1.50	1.50	1.60	1.75	1.75	1.75	1.85
Fig. 831—Corner.....Each	1.50	1.50	1.50	1.60	1.75	1.75	1.75	1.85



# *Bronze* Plain and Sight Feed Oil Valves For Pressure Service With Female Union Shank and Sight Feed

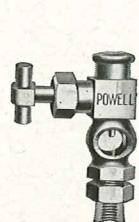


Fig. 832—Vertical



Fig. 833—Angle



Fig. 834—Cross

## With Female End and Sight Feed

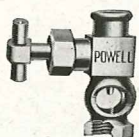


Fig. 836—Vertical



Fig. 837—Angle



Fig. 838—Cross

## Without Sight Chamber



Fig. 840—Vertical



Fig. 841—Angle



Fig. 842—Cross

### PRICE LIST

Polished Bronze					Nickel Plated			
Size.....Inches	1/8	1/4	3/8	1/2	1/8	1/4	3/8	1/2
Fig. 832—Vertical.....Each	2.50	2.50	2.50	3.50	2.80	2.80	2.80	3.80
Fig. 833—Angle.....Each	2.50	2.50	2.50	3.50	2.80	2.80	2.80	3.80
Fig. 834—Cross.....Each	2.80	2.80	2.80	3.70	3.10	3.10	3.10	4.00
Fig. 835—Corner.....Each	2.80	2.80	2.80	3.70	3.10	3.10	3.10	4.00
Fig. 836—Vertical.....Each	2.00	2.00	2.00	3.00	2.25	2.25	2.25	3.25
Fig. 837—Angle.....Each	2.00	2.00	2.00	3.00	2.25	2.25	2.25	3.25
Fig. 838—Cross.....Each	2.30	2.30	2.30	3.20	2.60	2.60	2.60	3.50
Fig. 839—Corner.....Each	2.30	2.30	2.30	3.20	2.60	2.60	2.60	3.50
Fig. 840—Vertical.....Each	1.25	1.25	1.25	1.40	1.50	1.50	1.50	1.65
Fig. 841—Angle.....Each	1.25	1.25	1.25	1.40	1.50	1.50	1.50	1.65
Fig. 842—Cross.....Each	1.50	1.50	1.50	1.60	1.75	1.75	1.75	1.85
Fig. 843—Corner.....Each	1.50	1.50	1.50	1.60	1.75	1.75	1.75	1.85

# *Bronze* Oil Drip and Wiper Cups

## Adjustable Wick Wiper Cups

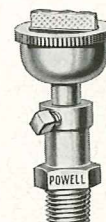


Fig. 844  
Straight Shank

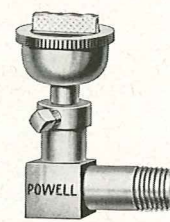


Fig. 845  
Elbow Shank



Fig. 849  
Plain Wiper Cup  
Straight Shank

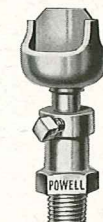


Fig. 846  
Straight Shank

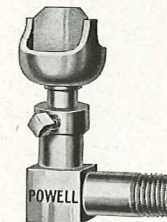


Fig. 847  
Elbow Shank

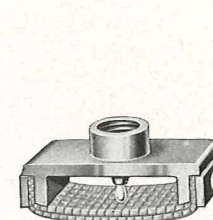


Fig. 850  
Wick Drip for  
Wiper Cup



Fig. 851  
Plain Drip for  
Wiper Cup

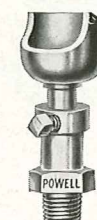


Fig. 848  
Adjustable Wiper  
Cup for Crank Pin  
Straight Shank



Fig. 852  
Drip Trough

### PRICE LIST

		Polished Bronze				Nickel Plated			
Size.....Inches		1/8	1/4	3/8	1/2	1/8	1/4	3/8	1/2
Fig. 844—Adjustable Wick Wiper Cup...Each	2.50	2.50	2.50	3.00	3.00	3.00	3.00	3.00	3.50
Fig. 845—Adjustable Wick Wiper Cup...Each	3.00	3.00	3.00	3.50	3.50	3.50	3.50	3.50	4.00
Fig. 846—Adjustable Plain Wiper Cup...Each	2.50	2.50	2.50	3.00	3.00	3.00	3.00	3.00	3.50
Fig. 847—Adjustable Plain Wiper Cup...Each	3.00	3.00	3.00	3.50	3.50	3.50	3.50	3.50	4.00
Fig. 848—Adjustable Wiper Cup—Crank Pin...Each	2.50	2.50	2.50	3.00	3.00	3.00	3.00	3.00	3.50
Fig. 849—Plain Wiper Cup.....Each	1.00	1.00	1.50	2.00	2.00	1.20	1.20	1.75	2.40
Fig. 850—Wick Drip for Wiper Cup.....Each	2.00	2.00	2.00	2.30	2.30	2.30	2.30	2.30	2.60
Fig. 851—Plain Drip for Wiper Cup.....Each	.40	.40	.40	.50	.50	.50	.50	.50	.60
Length.....Inches		3	5	7	9	3	5	7	9
Pipe Thread.....Inches		1/4	3/8	1/2	1/2	1/4	3/8	1/2	1/2
Fig. 852—Drip Trough.....Each	1.00	2.00	2.25	2.75	1.25	2.50	3.00	3.50	



Bronze

Oil Gauges

Integral Drain Cock

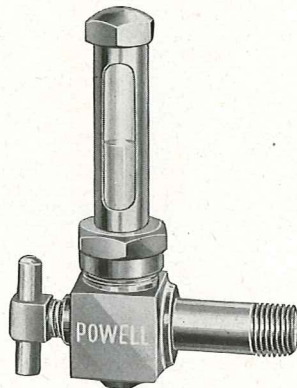


Fig. 802

These are stock sizes of oil gauges. Gauges with special length of shank or height of glass made to order.

The glass is packed and securely held by a packing nut on the gauge body. Shield is free and can be revolved to suitable position. No center rod, which ordinarily affords an obstruction when viewing the height of oil, is necessary for holding the glass or shield in place.

PRICE LIST

Shank Pipe Thread.....	Inches	1/8	1/4	3/8	1/2
Length of Glass.....	Inches	2 1/4	2 1/2	3	4
Diameter of Glass.....	Inches	1/2	1/2	1/2	5/8
Extreme Height from Center of Body.....	Inches	2 3/16	3 1/8	3 3/4	4 7/8
Length of Shank from Center of Body.....	Inches	1 5/8	1 3/4	2 1/16	4 1/16
Fig. 802—Polished.....	Each	1.60	1.80	2.10	2.80
Fig. 803—Nickel Plated.....	Each	2.00	2.20	2.50	3.30
Fig. 802-A—Without Drain Cock, Polished.....	Each	1.20	1.40	1.70	2.40
Fig. 803-A—Without Drain Cock, Nickel Plated.....	Each	1.60	1.80	2.10	2.90

Plain Compression Grease Cups

Short Pattern—Screw Cap Feed.

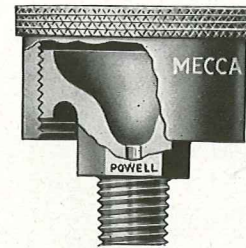


Fig. 869—Bronze  
"Mecca" Grease Cup



Fig. 870—Bronze  
"Mogul" Grease Cup  
With Leather Washer



Fig. 873—Steel  
Plain Grease Cup

The "Mecca" is a plain cast bronze compression type grease cup. The "Mogul" is designed with leak-proof inserted leather washer. The additional friction offered by the leather washer prevents loosening of top through vibration.

The Plain Steel Grease Cups are drawn from heavy gauge steel sheets. They are carefully threaded.

PRICE LIST—"MECCA" and "MOGUL"

Number.....	00	0	1	2	3	4
Capacity.....	1/2	2/3	1	2	3 1/2	5
Inside Diameter of Cup.....	1 1/4	1 1/2	2	2 1/2	3	
Shank Pipe Thread.....	1/8	1/4	1/4	3/8	1/2	1/2
Fig. 869—"Mecca," Rough.....	Each	.56	.74	.96	1.28	1.76
Fig. 1869—"Mecca," Polished.....	Each	.70	.90	1.15	1.50	2.15
Fig. 1883—"Mecca," Nickel Plated.....	Each	.82	1.06	1.35	1.80	2.60
Fig. 870—"Mogul," Rough.....	Each	.56	.74	.96	1.28	1.76
Fig. 1870—"Mogul," Polished.....	Each	.70	.90	1.15	1.50	2.15
Fig. 1884—"Mogul," Nickel Plated.....	Each	.82	1.06	1.35	1.80	2.60

PRICE LIST—PLAIN STEEL

Number.....	000	00	0	1	2	3	4	5
Capacity.....	1/4	1/2	2/3	1	2	3 1/2	5	8
Inside Diameter of Body.....	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2
Shank Pipe Thread.....	1/8	1/8	1/8 or 1/4	1/4	1/4 or 3/8	3/8 or 1/2	1/2	3/4
Fig. 873.....	Each	.40	.45	.60	.70	.85	1.20	1.80



## "Coin" and "Renown" Bronze Grease Cups

Automatic Feed.



Fig. 863  
"Coin" Grease Cup

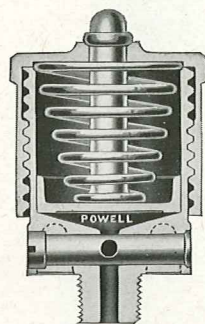


Fig. 863  
Sectional



Fig. 864  
"Renown" Grease Cup

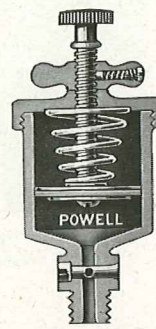


Fig. 864  
Sectional

The "Coin" Grease Cup is a heavy cast bronze cup designed for automatic feed and with feed regulating cut-off in base. The top and base are made with heavy, coarse thread. Screwing down top increases tension on plunger. The plunger is made to fit snug, preventing passage of grease, and with wide bearing on side of cup to prevent jamming or sticking.

The "Renown" is a cast bronze cup designed for automatic feed, with screw adjustment to regulate the flow of grease from the cup. The plunger or piston has a leather packing to insure a snug fit and prevent grease leaking past the plunger. To fill the cup, screw down on the handle which action raises plunger to top of cup; then unscrew cap. When cup is filled and cap again put in position, raising tee handle to top of stem releases spring to act on plunger. To secure tee handle against vibration at any point on plunger stem, a small spring locking arrangement is embodied in handle which engages flat on side of stem.

### PRICE LIST

Number	00	0	1	2	3	4	5
Capacity	1/8	1/4	1/2	3/4	1	1 1/2	2
Inside Diameter of Body	1/8	1/4	1/2	3/4	1	1 1/2	2
Shank Pipe Thread—"Coin"	1/8	1/4	1/2	3/4	1	1 1/2	2
Shank Pipe Thread—"Renown"	1/8	1/4	1/2	3/4	1	1 1/2	2
Fig. 863—"Coin," Polished	1.75	2.10	2.45	2.80	3.15	3.50	3.85
Fig. 1871—"Coin," Nickel Plated	2.00	2.35	2.70	3.05	3.40	3.75	4.10
Fig. 864—"Renown," Polished	1.50	2.00	2.50	3.00	3.50	4.00	4.50
Fig. 1875—"Renown," Nickel Plated	1.75	2.25	2.75	3.25	3.75	4.25	4.75

## "Progress" Bronze Grease Cups

Automatic Feed.



Fig. 868

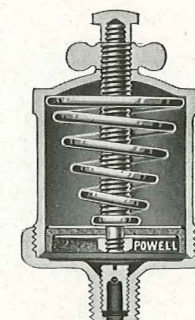


Fig. 868  
Sectional

The "Progress" Grease Cup is recommended for bearings inconveniently located for refilling and where it is desirable to remove the body of cup for filling. It is made of cast bronze, with feed regulating screw directly in the base of the cup. This allows for decreasing the length of shank and makes the cup more compact.

The plunger or piston is designed with leather cup washer secured between two metal plates.

### PRICE LIST

Number	000	00	0	1	2	3	4
Capacity	1/8	1/4	1/2	3/4	1	1 1/2	2
Inside Diameter of Body	1/8	1/4	1/2	3/4	1	1 1/2	2
Shank Pipe Thread	1/8	1/4	1/2	3/4	1	1 1/2	2
Fig. 868—Polished	.70	.80	1.00	1.30	1.70	2.30	3.20
Fig. 1868—Nickel Plated	.90	1.00	1.30	1.70	2.20	2.90	3.90



## "Colonial" Bronze Grease Cups

Screw Plunger Feed.



Fig. 867



Fig. 867—Sectional

The "Colonial" Grease Cup is designed with screw plunger feed. It is adapted for intermittent positive feed and for use wherever it is required to force grease some distance.

### PRICE LIST

Number.....	00	0	1	2	3	4
Capacity.....Ounces	1/8	1	1 1/2	3	6	10
Inside Diameter of Body.....Inches	1	1 1/4	1 1/2	2	2 1/2	3
Shank Pipe Thread.....Inches	1/8	1/4	1/4	3/8	1/2	1/2
Fig. 867—Polished.....Each	1.00	1.20	1.60	2.00	2.80	4.00
Fig. 1867—Nickel Plated.....Each	1.20	1.45	1.90	2.40	3.40	4.75

## "Bruno" and "Bear" All Iron Grease Cups

Automatic Feed.



Fig. 865  
"Bruno" Grease Cup

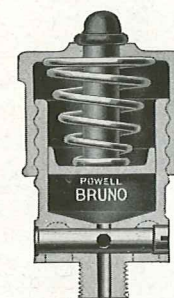


Fig. 865—Sectional



Fig. 866  
"Bear" Grease Cup

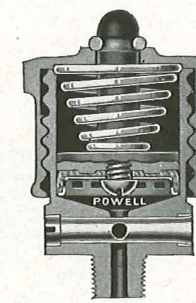


Fig. 866—Sectional

The Powell "Bruno" All Iron Grease Cup is recommended for any type of bearing where a highly polished bronze cup is not required. The plunger is made heavy with broad bearing on side of cup. This prevents grease from backing up and acts as a guide which prevents plunger from jamming. The "Bruno" feeds automatically and is also furnished with a feed regulating cut-off. It will function when used at any angle.

The "Bear" is similar in all respects to the "Bruno" except that the plunger is of a special Powell patented design. It is made with a flexible cup leather washer supported under the plunger by a flanged metal spring plate which is perforated with longitudinal slots or openings on the sides of the flange. Downward pressure of the plunger on the contents of the cup allows the grease or lubricant to be forced through these slots in metal spring plate against inside of cup leather, insuring a tight but yielding packing which effectually prevents all leakage past the plunger.

### PRICE LIST

Number.....	00	0	1	2	3
Capacity.....Ounces	1/8	1	1 1/2	3	6
Inside Diameter of Body.....Inches	1	1 1/4	1 1/2	2	2 1/2
Shank Pipe Thread.....Inches	1/8	1/4	3/8	1/2	1/2
Fig. 865—"Bruno".....Each	.85	.95	1.00	1.05	2.10
Fig. 866—"Bear".....Each	1.00	1.15	1.20	1.25	2.50



F	Page
Fractions of An Inch, Decimal Equivalents.....	552
Friction of Air in Pipes.....	522-525
Through Globe Valves, Tees, and Elbows.....	527
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*Manufacturers of Dependable Valves  
for Controlling Steam, Water, Oil, Gas,  
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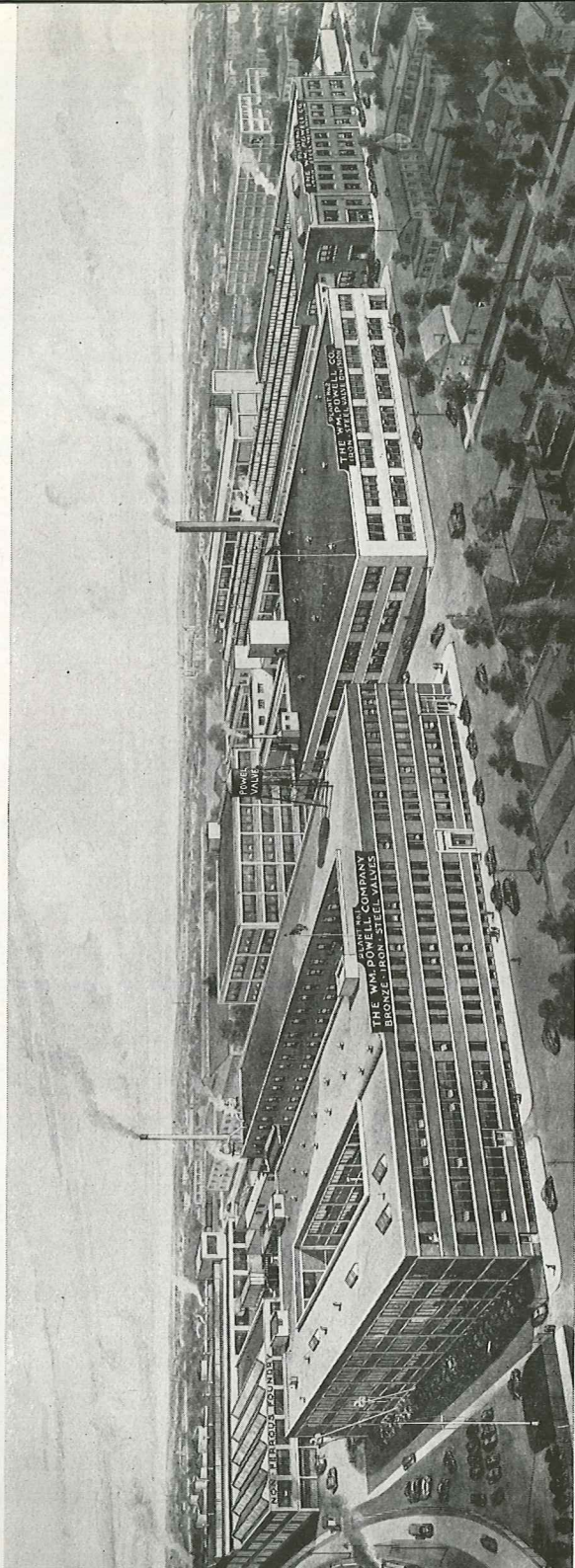
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1946

## **100 YEARS OF QUALITY VALVES**

★ FOR 100 YEARS the Powell "Star" has been the guide to high quality. The years to come will see no dimming of its prestige. This we guarantee.

If Powell Valves were not a quality product, The Wm. Powell Co. certainly would never have reached its hundredth anniversary . . . only a company whose products give consistently satisfactory service to customers could have weathered the stress and industrial storms encountered during a century of progress.

The Wm. Powell Co. has specialized in the manufacture of valves. A century of constant improvement in valve design, workmanship, and materials—coupled with Powell integrity—has made Powell Valves the accepted standard for controlling steam, water, oil, gas, air, liquids, and other media.



## TERMS AND CONDITIONS

1. This catalog supersedes all previous issues. The discounts quoted in the current Powell discount sheet apply to the list prices printed in this catalog.
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3. Terms are cash unless otherwise agreed upon.
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14. The responsibility for goods lost or damaged in transit rests with the carriers.
15. Stenographic and clerical errors are subject to correction.

## POWELL VALVES

### PIPE THREADS

★ Threaded connections on all Powell products will be furnished with American Standard Pipe Threads unless otherwise specified. Products with British (Whitworth) Standard Pipe Threads are made to order only; prices on application. For Pipe Thread Standards, refer to pages 476-477 on American Taper Pipe Threads and to page 478 for British (Whitworth) Standard Pipe Threads.

### TEMPERATURE RATINGS

**Bronze.** The pressure and temperature limitations of all Powell bronze products conform with existing standards.

Screwed or Flanged End Products—250 pounds or less steam working pressure—500° F.

Screwed or Flanged End Products—300 pounds steam working pressure—550° F.

**Iron.** All Powell Cast Iron products are recommended for temperatures up to 450° F., in conformity with A. S. M. E. Boiler Construction Code and the Rules and Regulations of the Steamboat Inspection Service, Department of Commerce, and other specifications.

**Steel.** Powell Cast Steel Valves—Class 150 pound to 2,500 pound, inclusive—are illustrated and described in Catalog No. 102.

**For intermediate working pressures (the non-shock working gas and liquid pressures) the limitation is 150° F.**

### PRESSURE RATINGS

All pressure ratings are given in pounds per square inch (gage). Secondary service pressures shown are the maximum non-shock working gas or liquid pressures at or near the ordinary range of air temperatures. All tests shall be made with water at temperatures not exceeding 125° F.

If products are to be supplied according to the A. S. M. E. Boiler Construction Code or to the General Rules and Regulations of the Bureau of Marine Inspection, Department of Commerce, the customer must definitely specify the code.

We have registered a large number of boiler accessories with certain Provinces in the Dominion of Canada. Therefore, any orders for boiler accessories should specify the Province in which they are to be used.



## Powell Materials

**I**N ADDITION to its corps of competent engineers, foundrymen, chemists, and metallurgists, The Wm. Powell Co. has facilities available for the production of high grade bronze, iron, and steel valves. This is evidenced by the following foundry, pattern shop, machine and assembly department, and laboratory illustrations.

A well-equipped chemical and physical test laboratory maintains continual check over raw materials and the finished product. The chemical laboratory is provided with the latest equipment for rapid determinations; the physical test laboratory with equipment for physical and metallographic work.

The Powell metallurgical staff, engaged in research and development work, is constantly improving present alloy materials and striving for betterment of product. For many years a comprehensive research program has been in progress to prove the corrosion resistance of pure metals and alloys suitable for valves and fittings, and to prove fatigue by long-time tension testing and wearability of alloy materials for valve seats and discs subjected to impingement and constant frictional contact.

The Powell engineering department is aware of the keen interest in the standardization of materials, dimensions, and other engineering standards rapidly being developed. The Wm. Powell Co. is a member of the Manufacturers' Standardization Society of the Valve and Fittings Industry and as one of the valve manufacturers, co-operates in the development of such standards.

The following materials are the ones most frequently used in the manufacture of Powell Valves.

### POWELL HIGH TENSILE BRONZE

Powell high tensile bronze, commonly known as U. S. Navy Composition "M", conforms to ASTM specification B-61 or MSS specification SP-20 Grade B. This bronze is suitable for valves handling up to 350 lb. per sq. in. and 550° F. This alloy, which is regularly supplied for valve bodies and bonnets, has an average tensile strength of 40,000 p.s.i.

### POWELL SPECIAL BRASS STEM ROD

This is a special rod developed for Powell, having a tensile strength of 75,000-80,000 P.S.I. Additions of small amounts of alloying constituents to this rod permit it to be used at 550° F without greatly affecting the physical properties.

### POWELL HIGH TEST CAST IRON

Powell Cast Iron is a high quality gray iron made with a large percentage of steel. For improving quality and giving a very close grained and homogeneous casting, the physical properties of Powell cast iron are in excess of those required by ASTM Specification A-126 Class B.

Where additional strength or corrosion resistance is required cast iron valves can be furnished with nickel additions up to 30% or made of either regular Ni-resist or copper free Ni-resist, trim materials being furnished to suit individual requirements.

### POWELL MALLEABLE IRON

By the application of careful furnace practice and proper heat treatment, a superior ductile ferrous product is produced for pressure containing parts. This alloy, which has an average tensile strength of 50,000 to 55,000 pounds p.s.i., is made by the Air Furnace Process conforming to ASTM A47-33 and ASME S-15.

### POWELL CAST CARBON STEEL

Powell Cast Carbon Steel is another product of the electric furnace which offers the maximum melting control and purity of product. It is properly heat treated to offer the range of physical characteristics best suited for pressure vessels when used at high temperatures and high pressures. Average physical properties after heat treatment meet ASTM Specification A-95, and are as follows:

Tensile Strength .....	70,000 p.s.i. Min.
Yield Point .....	36,000 p.s.i. Min.
Elongation in 2" .....	22% Min.
Reduction of Area .....	30% Min.



For extreme temperatures and pressure requirements there are available alloy steels, such as carbon molybdenum steel conforming to ASTM A 157-42 Class C-1 which is used for high pressure and temperature steam service, and chromium molybdenum steel conforming to ASTM A-157-42 Class C-5A which is used for refinery service. Beside those listed above there are numerous other alloy steels, each filling some particular need in industry. (For complete details of Powell Cast Steel Valves, see Catalog No. 102.)

### HIGH PRESSURE ALLOY STEEL BOLTING MATERIAL

All Powell steel valves for temperature service below 750° F are equipped with Bolting Materials conforming to ASTM A-96 Class C.

For services from 750° F-1100° F, bolting material conforms to Specifications A-193 and A-194.

### POWELL SEAT AND DISC MATERIAL

All Powell seat and disc materials are selected and designed to give maximum trouble-free service. Seats and discs are furnished of various compositions of specially alloyed materials for resisting erosion and corrosion.

"Powellium" Nickel-Bronze, is a composition developed by the Wm. Powell Co. for seats and discs. Because of the high nickel content it is non-corrosive to media which will attack regular bronze. It is particularly recommended for saturated steam, oil, gas or water.

Powell Heat Treated Stainless Steel seats and discs are resistant to corrosion encountered in the handling of oils at high temperatures.

Powell S-Monel Metal, for use where very hard discs are required, is a heat treated Monel Metal offering resistance to corrosion and erosion where stainless steel fails. It has a Brinell hardness above 300.

A combination of seat and disc made of heat-treated Monel Metal and Stainless Steel is especially recommended for high-pressure, high temperature steam service.

Large size valves can be furnished with seat and disc faces hard faced with Stellite, having a Brinell of 400 or more.

### MONEL METAL

Monel Metal is especially serviceable for valve trimmings. This is an alloy principally of nickel and copper, having extremely high physical characteristics and maintaining these characteristics well above 700 degrees Fahrenheit. Monel Metal, which is quite corrosion resistant, has an average tensile strength of 65,000 to 72,000 pounds p.s.i.

There is a broad field for Monel Metal valves and fittings that will withstand acids, high temperatures, the corrosive and erosive action of gases and superheated steam. In this catalog, and in the Powell Monel Metal Bulletin, we illustrate just a few of the standard types of valves and cocks. A complete line of Monel Metal globe, angle, cross, check, gate, safety, Y, and relief valves, cocks, liquid level gauges, etc., can be obtained in a full range of sizes, for various pressures.

Body and trim materials listed in this catalog are standard and are regularly supplied. Other ferrous and non-ferrous alloys are available for valve seats, discs and stems—alloys that prolong the life of these parts by providing greater corrosion resistance, and being more suitable for the particular service conditions involved.

### SPECIAL ALLOY VALVES

In the special alloy valve field "Powell Corrosion Resistant Valves" is synonymous to satisfactory valve performance. Pioneering in valve designs and materials for combating the corrosive and erosive media of diversified industries resulted in a wealth of experience and practical knowledge.

The Powell engineers and metallurgists will be glad to work with and assist you in the selection of the proper materials and suitably designed valves to give you the utmost satisfaction for any new or special process where standard bronze, iron, or steel products cannot be used satisfactorily.

For further information on Special Alloy Valves, refer to the special bulletin on Powell Corrosion Resistant Alloy Products.



# POWELL PLANT VIEWS



Engineering Department



Pattern Shop

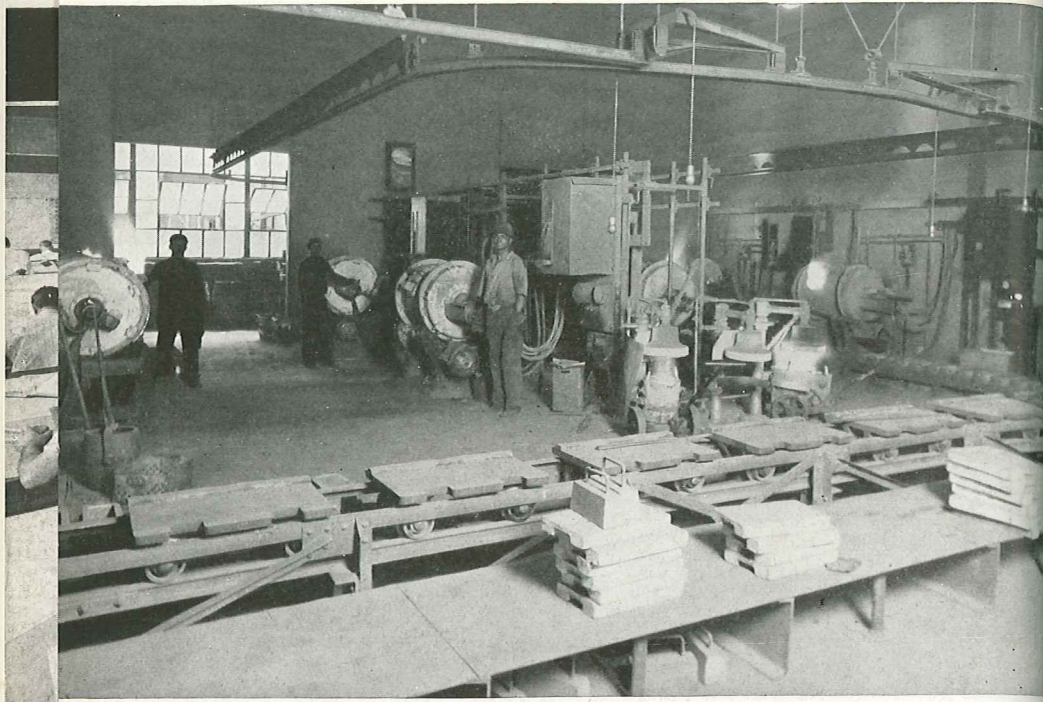


Engineering Department

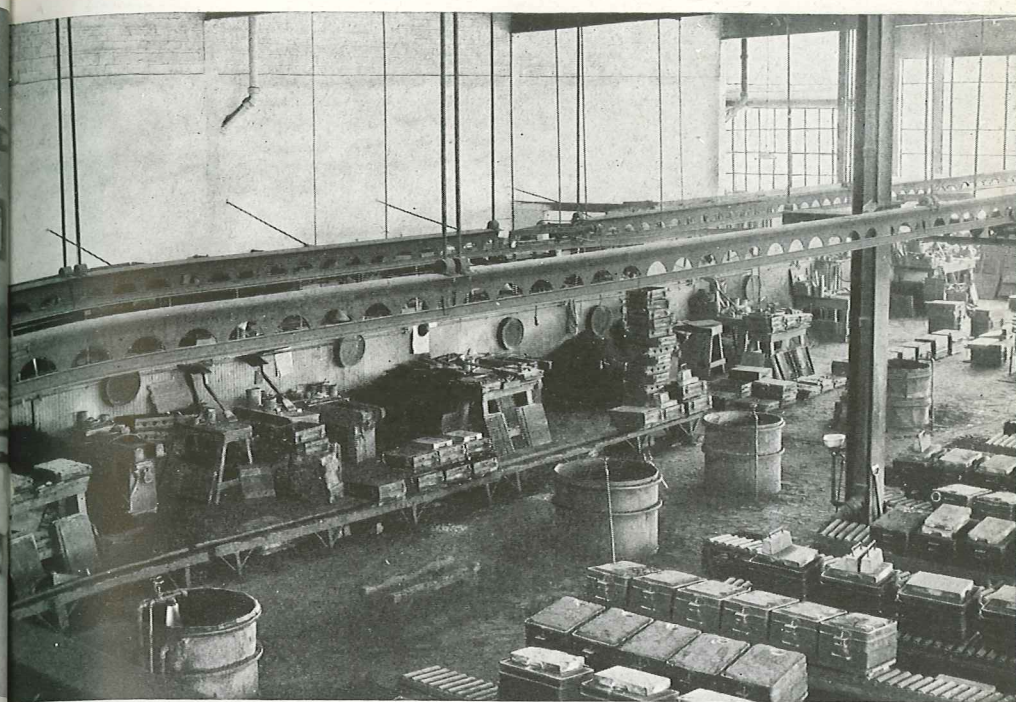


Sand Control Laboratory





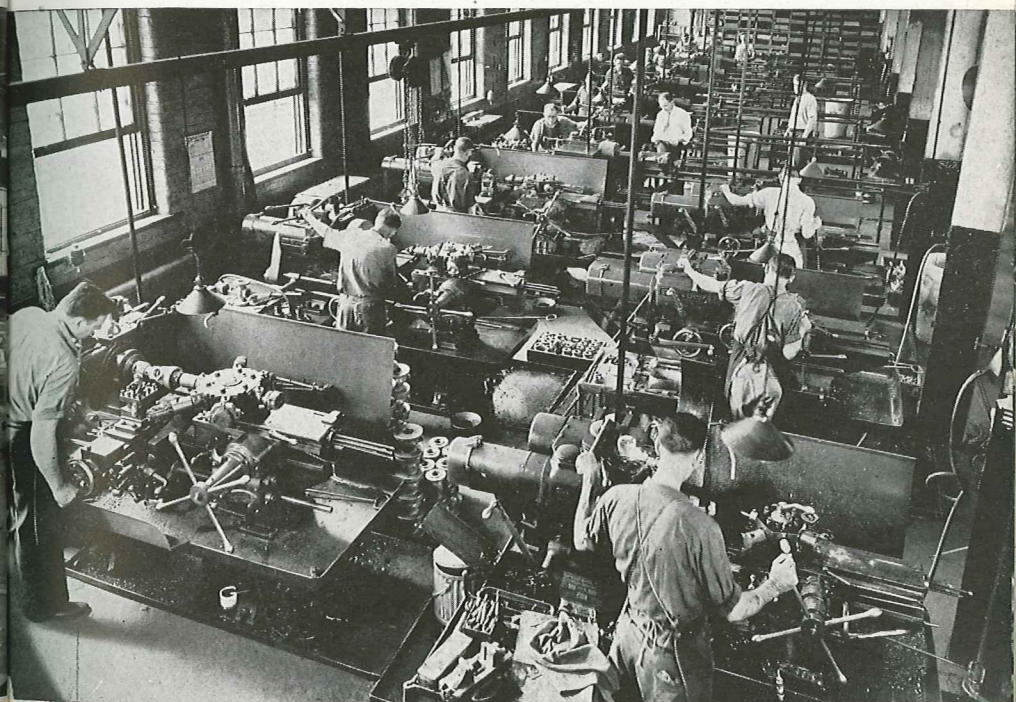
Section of Furnace Room, Non-Ferrous Foundry



Foundry—Moulding Department



Foundry—Moulding Department

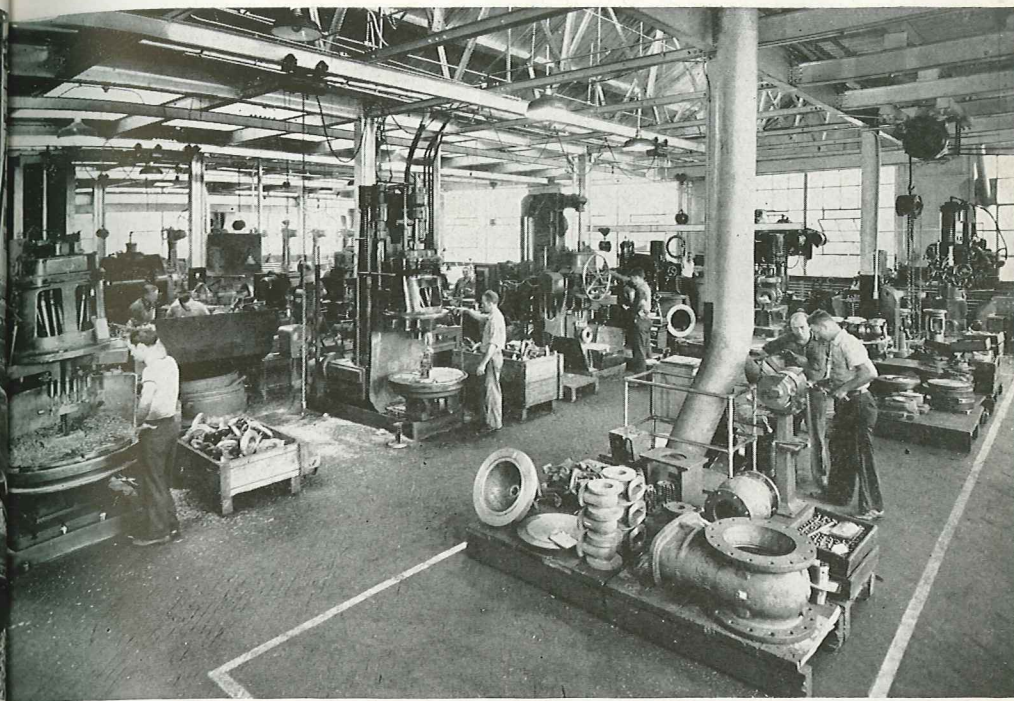


Small Valve Machining Department





Small Valve Machining Department



Large Valve Machining Department



Large Valve Machining Department



Large Valve Machining Department