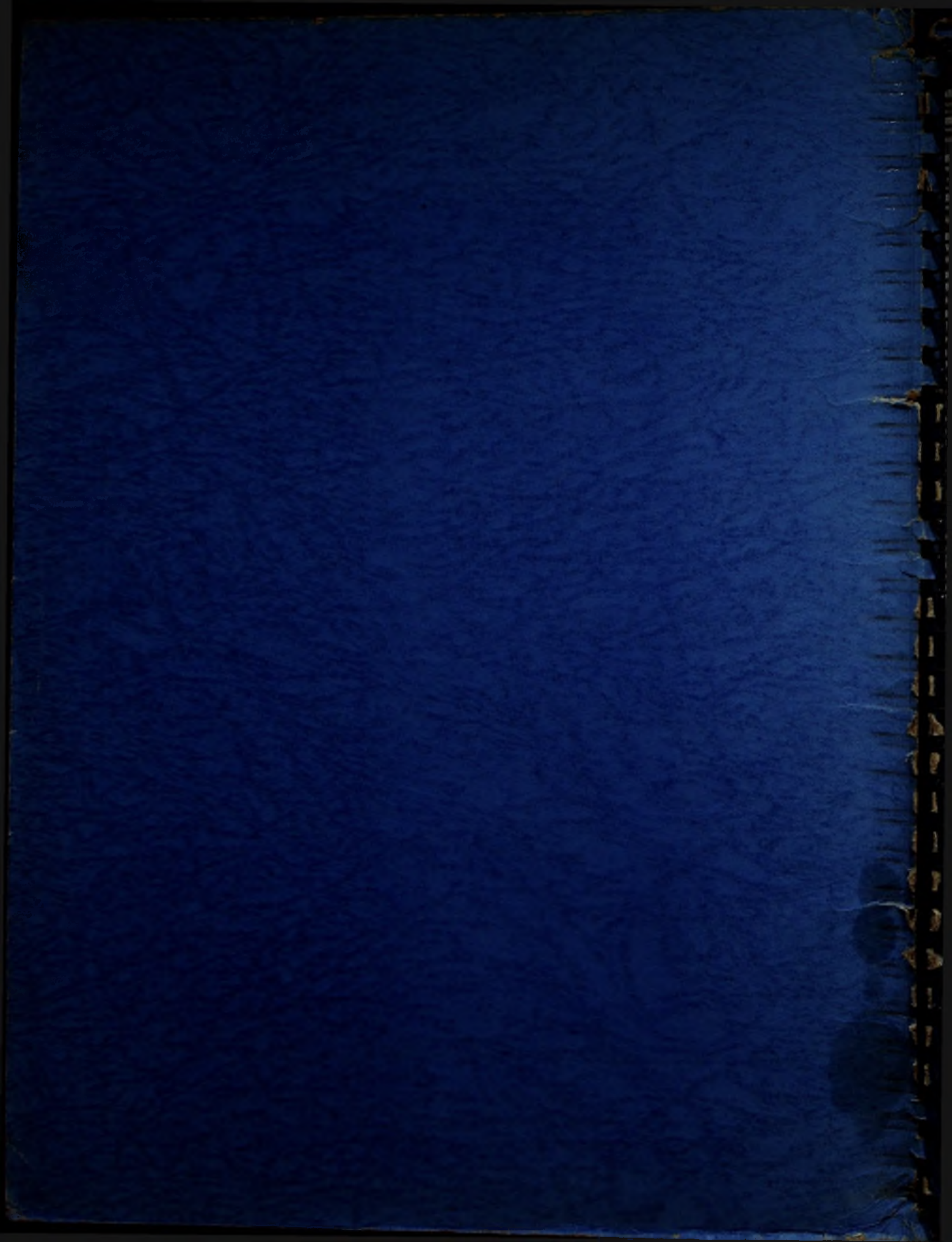




PERKO

CATALOG 90
1939

Perkins Marine Lamp & Hardware Corp.
1943 Pitkin Avenue
Brooklyn, N. Y.



Perkins Marine Lamp And Hardware Corp.

(Incorporated 1917)

1943 Pitkin Ave., Brooklyn, N. Y.

Manufacturers of
Running Lights, Searchlights, Binnacles, Steering Wheels, Stoves, Gear Pumps,
Air Whistles, Toilets, Lavatories, Yacht Blocks, Brass and
Galvanized Marine Hardware and Sheet Metal Specialties
of Every Description for All Types of Boats from
Canoes to Ocean Liners

Catalog No. 90 1939



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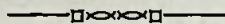
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REPRESENTATIVES IN MANY FOREIGN COUNTRIES

FOREWORD AND GENERAL INFORMATION



This catalog presents our full line of marine equipment to date, and has been arranged for convenient reference by grouping the material according to its application in the marine field. We have added a number of new items to our fast growing line which are shown in this catalog. We have made tremendous strides in the marine equipment field, and are not exaggerating when we claim that we are the fastest growing manufacturing organization in that field. The "PERKO" trade mark is now known throughout the world in maritime circles, and this expansion would not have been possible if we had not adhered strictly to our most stringent rule of high quality and quick service, and we guarantee to continue that course.

PRICES AND TERMS	Prices in this catalog are subject to change without notice and are all F. O. B. New York, unless quoted otherwise. Terms are 30 days net; 2% if payment is sent 10 days from date of invoice.
GUARANTEE	Every item bearing our trade-mark is guaranteed free from defects at time of shipment. In case of defect, adjustments will gladly be made, provided the material is returned to our factory and repairs have not been attempted by other than our own workmen.
RETURN GOODS	Material made to order is not returnable. Stock material is only returnable when permission has been granted by us, and is subject to a 10% handling charge.
WEIGHTS	The weights given in this catalog are not guaranteed, but have been carefully determined and should be sufficient for general purposes.
RATING	Orders from firms unknown to us and having no satisfactory commercial rating must be accompanied by cash or satisfactory references. C. O. D. shipments will be made if a 25% deposit is sent with order.
SHIPPING INSTRUCTIONS	Customers should send specific shipping instructions. But if this is not done, we will use our own judgment in selecting route.
EXPORT ORDERS	We are thoroughly familiar with the proper methods of handling orders and shipments to all parts of the world, and guarantee to do so to your satisfaction.



Frederick Perkins - President

Mr. Perkins has been manufacturing marine lamps since 1908. He was President of the National Marine Lamp Co. from 1912 to 1916 and founded the Perkins Marine Lamp Corp. in 1917. Under his able guidance and keen judgment this company has grown to its present highly respected position in the marine field.



REGULATIONS OF MOTOR BOATS

DEPT. OF COMMERCE
BUREAU OF NAVIGATION

DEPT. CIRCULAR NO. 236
NINETEENTH EDITION
May 25, 1938

To collectors of customs, supervising and local inspectors. Steamboat Inspection Service, and others concerned:
Your attention is invited to the following act of Congress, approved June 9, 1910:
An Act to amend laws for preventing collisions of vessels and to regulate equipment of certain motor boats on the navigable waters of the United States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That the words "motor boat" where used in this Act shall include every vessel propelled by machinery and not more than sixty-five feet in length, except tug boats and tow boats propelled by steam. The length shall be measured from end to end over the deck, excluding sheer: *Provided*, That the engine, boiler, or other operating machinery shall be subject to inspection by the local inspectors of steam vessels, and to their approval of the design thereof, on all said motor boats, which are more than forty feet in length, and which are propelled by machinery driven by steam.

SEC. 2. That motor boats subject to the provisions of this Act shall be divided into classes as follows:
Class one. Less than twenty-six feet in length.

Class two. Twenty-six feet or over and less than forty feet in length.

Class three. Forty feet or over and not more than sixty-five feet in length.

SEC. 3. That every motor boat in all weathers from sunset to sunrise shall carry the following lights, and during such time no other lights which may be mistaken for those prescribed shall be exhibited.

(a) Every motor boat of class one shall carry the following lights:

First. A white light aft to show all around the horizon.

Second. A combined lantern in the forepart of the vessel and lower than the white light aft showing green to starboard and red to port, so fixed as to throw the light from right ahead to two points abaft the beam on their respective sides.

(b) Every motor boat of classes two and three shall carry the following lights:

First. A bright white light in the fore part of the vessel as near the stem as practicable, so constructed as to show an unbroken light over an arc of the horizon of twenty points of the compass, so fixed as to throw the light ten points on each side of the vessel, namely, from right ahead to two points abaft the beam on either side. The glass or lens shall be of not less than the following dimensions:

Class two. Nineteen square inches.

Class three. Thirty-one square inches.

Second. A white light aft to show all around the horizon.

Third. On the starboard side a green light so constructed as to show an unbroken light over an arc of the horizon of ten points of the compass, so fixed as to throw the light from right ahead to two points abaft the beam on the starboard side. On the port side a red light so constructed as to show an unbroken light over an arc of the horizon of ten points of the compass, so fixed as to throw the light from right ahead to two points abaft the beam on the port side. The glasses or lenses in the said side lights shall be of not less than the following dimensions on motor boats of—

Class two. Sixteen square inches.

Class three. Twenty-five square inches.

On and after July first, nineteen hundred and eleven, all glasses or lenses prescribed by paragraph (b) of section three shall be fresnel or fluted. The said lights shall be fitted with inboard screens of sufficient height and so set as to prevent these lights from being seen across the bow and shall be of not less than the following dimensions on motor boats of—

Class two. Eighteen inches long.

Class three. Twenty-four inches long:

Provided, That motor boats as defined in this Act, when propelled by sail and machinery or under sail alone, shall carry the colored lights suitably screened but not the white lights prescribed by this section.

SEC. 4. (a) Every motor boat under the provisions of this Act shall be provided with a whistle or other sound-producing mechanical appliance capable of producing a blast of two seconds or more in duration, and in the case of such boats so provided a blast of at least two seconds shall be deemed a prolonged blast within the meaning of the law.

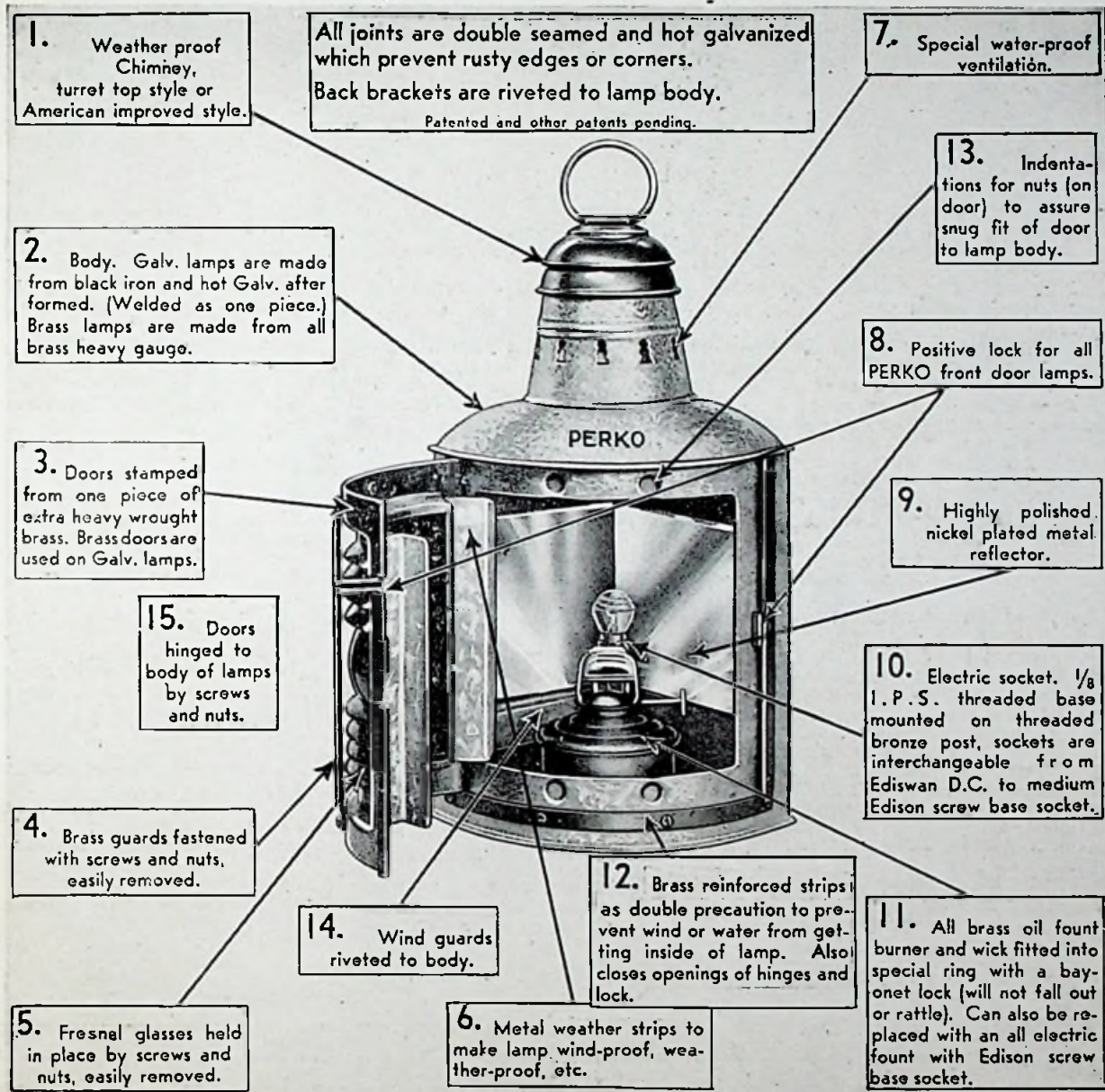
(b) Every motor boat of class two or three shall carry an efficient foghorn.

(c) Every motor boat of class two or three shall be provided with an efficient bell, which shall be not less than eight inches across the mouth, on board of vessels of class three.

Tabulated statement of equipment required

	Carrying passengers for hire				Not carrying passengers for hire			
	Sec. 3	Sec. 4	Sec. 5	Sec. 6	Sec. 3	Sec. 4	Sec. 5	Sec. 6
Class 1	Combination light forward. White light aft.	Whistle	Life preservers. Licensed operator.	Approved fire extinguishers.	Combination light forward. White light aft.	Whistle	Life preservers or life-saving devices prescribed by Act.	Approved fire extinguishers.
Class 2	White lights forward and aft and colored side lights, all with fresnel or fluted lenses.	Whistle, bell and foghorn.	Same as class 1.	Same as class 1.	White lights forward and aft and colored side lights, all with fresnel or fluted lenses.	Whistle, bell and foghorn.	Same as class 1.	Same as class 1.
Class 3	Same as class 2.	Same as class 2.	Same as class 1.	Same as class 1.	Same as class 2.	Same as class 2.	Same as class 1.	Same as class 1.

A Diagram That Shows a Few of the Many Reasons Why "Perko" De-Lite Lights Are the Most Practical and Desirable of All Marine Running Lights



"PERKO" DE-LITE LIGHTS ARE PATENTED AND OTHER PATENTS PENDING
 NONE GENUINE WITHOUT THE "PERKO" TRADE MARK



“Perko” De-Lite Combination Lights

TURRET TOP
FOR CLASS ONE BOATS—LESS THAN 26 FEET IN LENGTH
OIL AND ELECTRIC

Green Lens for Starboard. Red Lens for Port

Height, less ring, 9 3/4 inches

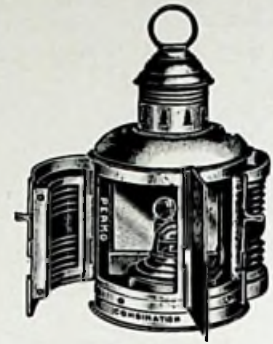
Measurements of base, 5 inches x 5 1/2 inches

Size of lens, 3 3/8 inches x 3 3/8 inches

Weight, 3 pounds



(Closed)



(Opened)

FIG. 0-1

Galvanized Each	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
\$5.50	\$6.75	\$7.25	\$8.00

“Perko” De-Lite Combination Lights

FLAT TOP
ELECTRIC ONLY—DOUBLE CONTACT SOCKET

Height, less ring, 6 1/2 inches

Measurements of base, 5 inches x 5 1/2 inches

Size of lens, 3 3/8 inches x 3 3/8 inches

Weight, 2 1/2 pounds



(Closed)



(Opened)

FIG. 0-10

Galvanized Each	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
\$5.00	\$6.50	\$7.00	\$8.00

Old Style Combination Lights

FOR CLASS 1 BOATS—LESS THAN 26 FT. LONG
WITH RED AND GREEN LENSES

Height less Ring, 9 inches.

Meas. of Base, 4 3/4 x 4 1/2 inches.

Size of Lenses, 3 3/8 x 3 3/8 inches.

Weight, 3 3/4 pounds.



Fig. 1

	Galvanized Each	Polished Brass Each
Oil or Elec. Only	\$4.25	\$5.75
Oil and Electric	4.50	6.00

Old Style Combination Lights

FLAT TOP
FOR CLASS 1 BOATS—LESS THAN 26 FT. LONG
ELECTRIC ONLY—DOUBLE CONTACT SOCKET
WITH RED AND GREEN
LENSES

Height less Ring, 6 1/4 inches.
 Meas. of Base, 4 3/4 x 4 1/2 inches.
 Size of Lenses, 3 3/8 x 3 3/8 inches.
 Weight, 2 pounds.

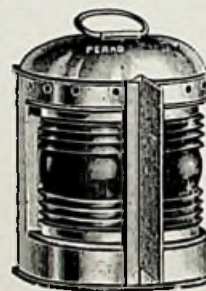


Fig. 3

Galvanized Each	Polished Brass Each
\$4.00	\$5.50

ALL LIGHTS ON THIS PAGE WITH MEDIUM SCREW ELECTRIC SOCKETS ADD \$.50 EACH
 EXTRACT FROM MOTOR BOAT LAW IN EFFECT DECEMBER 1, 1936

(a) Every motor boat of class 1 shall carry the following lights:

First. A white light aft to show all around the horizon.

Second. A combined lantern in the fore part of the vessel and lower than the white light aft showing green to starboard and red to port, so fixed as to throw the light from right ahead to two points abaft the beam on their respective sides.



“Perko” De-Lite Stern and Anchor Lights

TURRET TOP—BOLTED GUARDS

All guards are made of heavy brass wire securely fastened to body by bolts, easily removed to replace broken lens.

FOR CLASS 1 BOATS—LESS THAN 26 FEET LONG

FOR CLASS 2 AND 3 BOATS
26 TO 65 FEET LONG INCLUSIVE



Fig. 0-2

Height
Less Ring
Inches
8 5/8

Diam.
Base
Inches
4 1/2



Fig. 735

Size of
Lens
Inches
3 3/8 x 3 1/2

Weight
Each
Pounds
2



Fig. 0-6

Height
Less Ring
Inches
11 1/4

Diam.
Base
Inches
5 3/8



Fig. 736

Size of
Lens
Inches
4 1/4 x 4 1/4

Weight
Each
Pounds
3

CLEAR LENS

OIL OR ELECTRIC ONLY

Galv. Each \$3.25	Polished Brass Each \$4.50	Polished Copper Each \$8.00	Nickel Plated Each \$5.00	Chromium Plated Each \$5.50
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OIL AND ELECTRIC COMBINED

Galv. Each \$3.50	Polished Brass Each \$4.75	Polished Copper Each \$8.25	Nickel Plated Each \$5.25	Chromium Plated Each \$5.75
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With Red, Green, or Blue Lens add \$1.00 each.

CLEAR LENS

OIL OR ELECTRIC ONLY

Galv. Each \$4.25	Polished Brass Each \$6.25	Polished Copper Each \$9.50	Nickel Plated Each \$6.75	Chromium Plated Each \$7.50
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OIL AND ELECTRIC COMBINED

Galv. Each \$4.50	Polished Brass Each \$6.50	Polished Copper Each \$9.75	Nickel Plated Each \$7.00	Chromium Plated Each \$7.75
-------------------------	-------------------------------------	--------------------------------------	------------------------------------	--------------------------------------

With Red, Green, or Blue Lens add \$1.50 each.

“Perko” De-Lite Stern and Anchor Lights

FLAT TOP—BOLTED GUARDS
ELECTRIC ONLY—DOUBLE CONTACT SOCKETS

CLASS 1



Fig. 11

Height
Less Ring
Inches
6

Diam.
Base
Inches
4 1/2

Size
of Lens
Inches
3 3/8 x 3 1/2

Weight
Each
Pounds
1 1/2

Galvanized Each \$3.00	Polished Brass Each \$4.25	Polished Copper Each \$7.75	Nickel Plated Each \$4.75	Chromium Plated Each \$5.25
------------------------------	-------------------------------------	--------------------------------------	------------------------------------	--------------------------------------

With Red, Green, or Blue Lens add \$1.00 each.

CLASS 2 AND 3



Fig. 12

Height
Less Ring
Inches
9

Diam.
Base
Inches
5 3/8

Size
of Lens
Inches
4 1/4 x 4 1/4

Weight
Each
Pounds
2 1/2

Galvanized Each \$4.00	Polished Brass Each \$6.00	Polished Copper Each \$9.25	Nickel Plated Each \$6.50	Chromium Plated Each \$7.25
------------------------------	-------------------------------------	--------------------------------------	------------------------------------	--------------------------------------

With Red, Green, or Blue Lens add \$1.50 each.

ALL LIGHTS ON THIS PAGE WITH MEDIUM SCREW ELECTRIC SOCKETS ADD \$.50 EACH



"Perko" De-Lite Side Lights

TURRET TOP
FOR CLASS 2 BOATS—26 FEET OR OVER AND LESS THAN 40 FEET IN LENGTH
OIL AND ELECTRIC
Furnished in pairs—one green light for Starboard and one red light for Port



(Closed)

Height, less ring, 10½ inches
Measurements of base, 5¼ inches x 5¼ inches
Size of lens, 4¼ inches x 4¼ inches
Weight, per pair, 6¼ pounds

FIG. 0-4

Galvanized Per Pair	Polished Brass Per Pair	Nickel Plated Per Pair	Chromium Plated Per Pair
\$8.50	\$11.00	\$12.00	\$13.00



(Opened)

"Perko" De-Lite Bow Lights

TURRET TOP
CLASS 2—OIL AND ELECTRIC

Height, less ring, 10½ inches
Size of lens, 4¼ inches x 6½ inches
Measurements of base, 5 inches x 5½ inches
Weight, each, 3 pounds

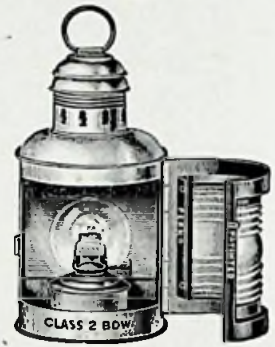
FIG. 0-5



(Closed)

With clear lens
With colored lens

Galvanized Each	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
\$4.25	\$5.50	\$6.00	\$6.50
5.25	6.50	7.00	7.50



(Opened)

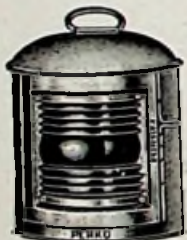
"Perko" De-Lite Side Lights

FLAT TOP—CLASS 2
ELECTRIC ONLY—DOUBLE CONTACT SOCKET

Height, less ring, 7¼ inches
Measurements of base, 5¼ inches x 5¼ inches
Size of lens, 4¼ inches x 4¼ inches
Weight, per pair, 5½ pounds

FIG. 0-40

Galvanized Per Pair	Polished Brass Per Pair	Nickel Plated Per Pair	Chromium Plated Per Pair
\$8.00	\$10.50	\$12.00	\$13.00



(Closed)



(Opened)

"Perko" De-Lite Bow Lights

FLAT TOP—CLASS 2
ELECTRIC ONLY—DOUBLE CONTACT SOCKET

Height, less ring, 7¾ inches
Measurements of base, 5 inches x 5½ inches
Size of lens, 4¼ inches x 6½ inches
Weight, each, 2¾ pounds

FIG. 0-50

Galvanized Each	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
\$4.00	\$5.25	\$6.00	\$6.50
5.00	6.25	7.00	7.50



(Closed)

With clear lens
With colored lens



(Opened)

ALL LIGHTS ON THIS PAGE WITH MEDIUM SCREW ELECTRIC SOCKETS ADD \$.50 EACH
Every motor boat of class 2 shall carry the following lights:

- First. A bright white light in the fore part of the vessel as near the stem as practicable, so fixed as to throw the light ten points on each side of the vessel, the fresnel lens shall not be less than 19 square inches.
- Second. A white light aft to show all around the horizon.
- Third. On the starboard side a green light and on the port side a red light, both to throw a light from right ahead to two points abaft the beam, the fresnel lens to be not less than 16 square inches.

"Perko" De-Lite Side Lights

TURRET TOP
FOR CLASS 3 BOATS—40 FEET OR OVER AND NOT MORE THAN 65 FEET IN LENGTH
OIL AND ELECTRIC



(Closed)

Size of lens, 5 1/4 inches x 5 5/8 inches
Height, less rings, 12 1/4 inches
Measurements of base, 5 5/8 inches x 5 5/8 inches
Weight, per pair, 8 pounds

FIG. 0-8

Galvanized Iron Per Pair	Polished Brass Per Pair	Nickel Plated Per Pair	Chromium Plated Per Pair
\$10.50	\$14.70	\$15.50	\$17.00



(Opened)

"Perko" De-Lite Bow Lights

TURRET TOP
CLASS 3—OIL AND ELECTRIC

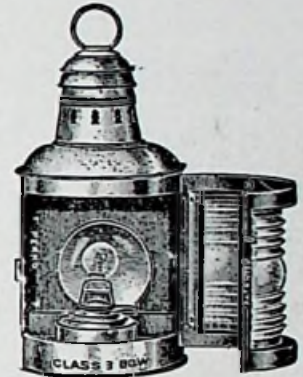
Size of lens, 5 1/4 inches x 7 3/4 inches
Height, less ring, 12 1/4 inches
Measurements of base, 5 1/2 inches x 6 1/8 inches
Weight, each, 4 pounds

FIG. 0-9

	Galvanized Iron Each	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
With clear lens	\$5.25	\$7.35	\$7.75	\$8.50
With colored lens	6.25	8.35	8.75	9.50



(Closed)



(Opened)

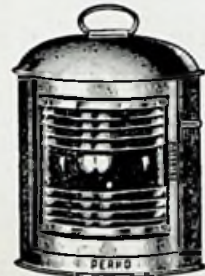
"Perko" De-Lite Side Lights

FLAT TOP—CLASS 3
ELECTRIC ONLY—DOUBLE CONTACT SOCKET

Size of lens, 5 1/4 inches x 5 5/8 inches
Height, less ring, 8 1/2 inches
Measurements of base, 5 5/8 inches x 5 5/8 inches
Weight, per pair, 7 pounds

FIG. 0-80

Galvanized Iron Per Pair	Polished Brass Per Pair	Nickel Plated Per Pair	Chromium Plated Per Pair
\$10.00	\$14.00	\$15.00	\$16.50



(Closed)



(Opened)

"Perko" De-Lite Bow Lights

FLAT TOP—CLASS 3
ELECTRIC ONLY—DOUBLE CONTACT SOCKET

Size of lens, 5 1/4 inches x 7 3/4 inches
Height, less ring, 8 1/2 inches
Measurements of base, 5 1/2 inches x 6 1/8 inches
Weight, each, 4 pounds

FIG. 0-90

	Galvanized Iron Each	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
With clear lens	\$5.00	\$7.00	\$7.50	\$8.25
With colored lens	6.00	8.00	8.50	9.25



(Closed)



(Opened)

ALL LIGHTS ON THIS PAGE WITH MEDIUM SCREW ELECTRIC SOCKETS ADD \$.50 EACH

Every motor boat of class 3 shall carry the following lights:

First. A bright white light in the fore part of the vessel as near the stem as practicable, so fixed as to throw the light ten points on each side of the vessel, the fresnel lens to be not less than 31 square inches.

Second. A white light aft to show all around the horizon.

Third. On the starboard side a green light and on the port side a red light, both to throw a light from right ahead to two points abaft the beam, the fresnel lens to be not less than 25 square inches.



Old Style Class 2 Side Lights

BOTTOM OPENING—SPRING FOUNT
FOR BOATS 26 to 39 FEET LONG INCLUSIVE



Fig. 17

Size of Lenses, 4¼x4¾"
Extreme Height, 10½"
Measure of Base, 4¼x5½"
Weight, per pair, 5½ lbs.

	Galvanized Per pair	Polished Brass Per pair
Oil or Elec. Only	\$6.50	\$9.00
Oil and Electric	7.00	9.50

Old Style Class 2 Bow Lights

BOTTOM OPENING—SPRING FOUNT
FOR BOATS 26 to 39 FEET LONG INCLUSIVE



Fig. 18

Size of Lens, 4¼x6½"
Extreme Height, 10½"
Measurement of Base, 4½x5"
Weight Each, 3 lbs.

WITH CLEAR LENS

	Galvanized Each	Polished Brass Each
Oil or Elec. Only	\$3.25	\$4.50
Oil and Electric	3.50	4.75

With Red, Green, or Blue Lens
Add \$1.00 Each

Old Style Class 3 Side Lights

BOTTOM OPENING—SPRING FOUNT
FOR BOATS 40 TO 65 FEET LONG INCLUSIVE



Fig. 19

Size of Lenses, 5¼x5¾"
Extreme Height, 12½"
Meas. of Base, 5x6¾"
Weight, per Pair, 7½ lbs.

	Galvanized Per pair	Polished Brass Per pair
Oil or Elec. Only	\$8.50	\$12.70
Oil and Electric	9.00	13.20

Old Style Class 3 Bow Lights

BOTTOM OPENING—SPRING FOUNT
FOR BOATS 40 TO 65 FEET LONG INCLUSIVE



Fig. 20

Size of Lens, 5¼x5½"
Extreme Height, 12½"
Meas. of Base, 5½x6¼"
Weight Each, 3½ lbs.

WITH CLEAR LENS

	Galvanized Each	Polished Brass Each
Oil or Electric Only	\$4.25	\$6.35
Oil and Electric	4.50	6.60

With Red, Green, or Blue Lens
Add \$1.50 Each

Old Style Flat Top Side Lights

CLASS 2 AND 3
BOTTOM OPENING—SPRING FOUNT
ELECTRIC ONLY—DOUBLE CONTACT SOCKET



Fig. 4

CLASS 2
Size of Lenses, 4¼x4¾"
Extreme Height, 7¼"
Measure of Base, 4¼x5½"
Weight, per Pair, 5½ lbs.

CLASS 3
Size of Lenses, 5¼x5½"
Extreme Height, 8½"
Measure of Base, 5x6¼"
Weight, per Pair, 7½ lbs.

Class	Galvanized Per Pair	Polished Brass Per Pair	Nickel Plated Per Pair	Chromium Plated Per Pair
2	\$6.00	\$ 8.50	\$10.00	\$11.00
3	8.50	12.70	14.00	15.50

Old Style Flat Top Bow Lights

CLASS 2 AND 3
BOTTOM OPENING—SPRING FOUNT
ELECTRIC ONLY—DOUBLE CONTACT SOCKET



Fig. 5

CLASS 2
Size of Lens, 4¼x6½"
Extreme Height, 7¼"
Measurement of Base, 4½x5"
Weight Each, 3 lbs.

CLASS 3
Size of Lens, 5¼x5½"
Extreme Height, 8½"
Measurement of Base, 5½x6¼"
Weight Each, 3½ lbs.

Class	Galvanized Each	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
2	\$3.00	\$4.25	\$5.00	\$5.50
3	4.25	6.35	7.00	7.75

Class 2 with Red, Green, or Blue lens add \$1.00 each.
Class 3 with Red, Green, or Blue lens add \$1.50 each.

ALL LIGHTS ON THIS PAGE WITH MEDIUM SCREW ELECTRIC SOCKETS ADD \$.50 EACH

10 Day Anchor Lights

OIL BURNING—IMPROVED



Fig. 596



Fig. 596-A

Guaranteed to burn at least ten days when a good grade of kerosene oil is used. Fount is the swivel type with heavy handle on bottom for turning, folds flush with bottom. Heavy brass hinge hasp prevents fount from turning or falling from the light, solid brass founts are furnished with both the galvanized and brass lights.

Extreme Height Inches	Diameter Fount Inches	Size of Lens Inches	Weight Lbs.
14	7	4 1/4 x 4 1/4	4
CLEAR LENS			
		Galvanized Each	Polished Brass Each
Fig. 596, Lamp Complete		\$10.50	\$12.50
Fig. 596A, Fount Complete		7.00	7.00
Lamp Only Without Fount		7.00	8.00

With Red, Green, or Blue Lens add \$1.50 each.
For Burners and Chimneys only, see Figs. 245 and 272.

Western Trap Lantern

OIL BURNING

WITH 8 DAY CAPACITY OIL FOUNT



Fig. 14

Also used as stake light, post light, or anchor light.

Galvanized body with cast bronze fittings, a clear 8 inch fresnel lens, galvanized fount and a special zenith burner with gear control for operating wick from bottom of fount.

With Clear Lens Each	With Colored Lens Each	Extreme Height Inches	Diam. Bottom Inches	Size Lens Inches
\$42.00	\$47.00	22	10	7x8

Colored Lenses are Red, Green or Blue

Oil Fount complete with gears and burner \$18.00 each
Capacity of fount, 6 pints.

30 Day Anchor Light

ELECTRIC—DRY BATTERIES
POLISHED COPPER



Fig. 13

Uses four ordinary 1 1/2 volt dry cell batteries, enclosed in a water and air tight container sealed with a gasket and bolts.

A guaranteed 1,000 hour heavy duty bulb is furnished as regular equipment, including a watertight toggle switch.

Made of heavy gauge material and is guaranteed to stay lit for 25 to 30 consecutive days without attention.

No.	Extreme Height Inches	Diameter Base Inches	Size of Lens Inches	Weight Pounds
1	16 1/2	6 1/2	4 1/4 x 4 1/4	5 1/2
2	18	6 1/2	5 3/8 x 6	8 1/2
CLEAR LENS				
	Without Batteries Each	With Batteries Each	Bulbs Only Each	
No. 1	\$15.00	\$18.50	\$.50	
No. 2	26.00	29.50	.50	

No. 1 with Red, Green, or Blue lens add \$1.50 each.
No. 2 with Red, Green, or Blue lens add \$2.50 each.

30 Day Anchor Light

ELECTRIC—DRY BATTERY
GALVANIZED

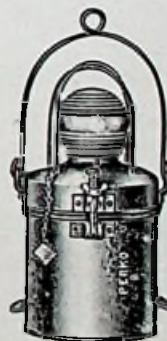


Fig. 35

Uses one Burgess Tri-six 4 1/2 volt battery and a heavy duty 1,000 hour bulb giving over 750 consecutive hours of light.

Top fastened to base by hinged bronze bolts and wing nuts, no screws to remove. Equipped with watertight toggle switch and fresnel ball globe.

Each	Bulb Only Each	Battery Only Each	Ex-treme Height Inches	Ex-treme Diam. Inches	Diam. Globe Inches	Weight Pounds
\$11.00	\$.50	\$1.50	11	5 3/4	3	3

Price does not include batteries. With Red, Green or Blue globe add \$.50 each.

Royal Combination Lights

HEAVY GALVANIZED IRON AND BRASS
ELECTRIC ONLY

FOR CLASS 1 BOATS

Made of heavy gauge material, flat back and double contact electric socket. Can be stored in very small space.



Fig. 89

Height Inches	Width Inches	Size Lens Inches	Weight Lbs.
3 3/4	4 1/4	3 3/8 x 3 3/8	1 1/4
Galvanized Each	Polished Brass Each	Chromium Plated Each	
\$3.50	\$4.00	\$5.00	

Battery Running Lights

WITH FRONT DOORS
GALVANIZED AND BRASS

These are self contained marine running lights using the regular easily obtained lantern battery such as Eveready No. 409 or Ray-O-Vac No. 941 or Burgess No. F-4-H.

The bulbs are heavy duty radio panel bulbs guaranteed for 300 to 1000 hour life and easily obtained in most radio supply stores.

With these lights aboard, all wiring or draining of storage battery is eliminated. None of the usual bother with oil lights, etc.

The construction and appearance is the same as standard flat top marine lights, with a waterproof hinged door on the front for quick changing of bulb or battery. No screws to remove, just open the door and make the change.

Furnished with brass nickel plated reflector, toggle switch with watertight cover and bulb, batteries extra.

Royal Side Lights

ELECTRIC ONLY

FOR CLASS 1, 2 AND 3 BOATS

Same construction as above.



Fig. 91

Class	Height Inches	Size Lens Inches	Weight per Pair Lbs.
Class 1	4	3 3/8 x 3 3/8	1 1/2
Class 2	5	4 1/4 x 4 1/4	2
Class 3	6	5 1/4 x 5 1/4	3
		Galv. Per Pair	Pol. Brass Per Pair
Class 1		\$4.50	\$6.50
Class 2		4.75	6.75
Class 3		6.00	8.00
			Chrom. Plated Per Pair
			\$ 8.50
			8.75
			10.00

Side Lights

FOR CLASS 2 AND 3 BOATS



Fig. 998

Class	Height Inches	Size Base Inches	Size Lens Inches	Weight Per Pair With Batteries Pounds
2	7 1/4	5 1/8 x 5 1/8	4 1/4 x 4 3/4	8
3	8 1/2	5 3/8 x 5 3/8	5 1/4 x 5 3/8	10
		Galvanized Per Pair	Polished Brass Per Pair	Chromium Plated Per Pair
Class 2		\$10.50	\$13.00	\$16.00
Class 3		12.50	16.50	19.50
				Bulbs Only Each
				\$.50
				Batteries Only Each
				\$.80
				.80

Royal Bow Lights

ELECTRIC ONLY

FOR CLASS 1, 2 AND 3 BOATS

Same construction as above.



Fig. 92

Class	Height Inches	Size Lens Inches	Weight Each Lbs.
Class 1	4	3 3/8 x 5 1/8	1
Class 2	5	4 1/4 x 6 1/2	1 1/2
Class 3	6	5 1/4 x 7 1/4	2
		Galv. Each	Pol. Brass Each
Class 1		\$2.25	\$3.25
Class 2		2.40	3.40
Class 3		3.00	4.00
			Chrom. Plated Each
			\$4.25
			4.40
			5.00

Bow Lights

FOR CLASS 2 AND 3 BOATS



Fig. 999

Class	Height Inches	Size Base Inches	Size Lens Inches	Weight Each With Battery Pounds
2	7 1/4	5 x 5 1/2	4 1/4 x 6 1/2	4
3	8 1/2	5 1/2 x 6 1/8	5 1/4 x 7 3/4	5
		Galvanized Each	Polished Brass Each	Chromium Plated Each
Class 2		\$5.25	\$6.50	\$8.00
Class 3		6.25	8.25	9.75
				Bulbs Only Each
				\$.50
				Batteries Only Each
				\$.80
				.80

Royal Stern Lights

ELECTRIC ONLY

FOR CLASS 1, 2 AND 3 BOATS



Fig. 90

Class	Height Inches	Size Lens Inches	Weight Each Lbs.
Class 1	4 1/2	3 3/8 x 3 3/8	1 1/4
Class 2 or 3	5 1/2	4 1/4 x 4 1/4	2
		Galv. Each	Pol. Brass Each
Class 1		\$2.50	\$3.50
Class 2 or 3		3.50	4.50
			Chrom. Plated Each
			\$4.50
			5.50

NEW IMPROVED BATTERY LIGHTS

WITH IMPROVED TOGGLE SWITCH

To meet the demand for self-contained marine running lights to eliminate the necessity of operation of the regular storage battery, especially in the case of non-auxiliary sail boats where the carrying of a heavy storage battery is not desired or practical.

The interior of the light is arranged to receive two ordinary flashlight type dry cells, no wiring or fuss of any kind necessary.

A sliding door on the back permits easy access to the interior for battery or bulb replacement.

Combination Lights

WITH BACK BRACKET



Fig. 1010

Back view with Door removed

	Polished Brass Each	Chromium Plated Each	Height Inches	Width Inches	Size Lens Inches
Galvanized Each	\$5.25	\$6.00	4 1/8	4 1/2	3 3/8 x 3 7/8

Combination Lights

WITH DECK BRACKET

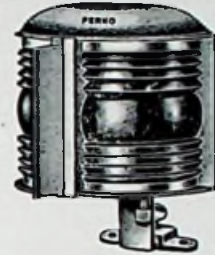


Fig. 15

	Polished Brass Each	Chromium Plated Each	Height Inches
Galvanized Each	\$5.75	\$6.50	5 1/2

Side Lights

FOR CLASS 1 AND 2 BOATS

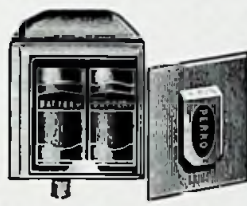


Fig. 1011

Back view with Door removed

Class	Galvanized Per Pair	Polished Brass Per Pair	Chromium Plated Per Pair	Height Inches	Size Lens Inches
1	\$9.00	\$10.50	\$12.50	4	3 3/8 x 3 3/8
2	9.50	11.00	13.00	5	4 1/4 x 4 3/4

Stern Lights



Fig. 76

Class	Polished Brass Each	Chromium Plated Each	Height Inches	Size Lens Inches	Weight Lbs.
1	\$5.00	\$6.25	6	3 3/8 x 3 1/2	2
2	6.50	8.00	6 3/4	4 1/4 x 4	2 3/4

Bow Lights

FOR CLASS 1 AND 2 BOATS



Fig. 1012

Back view with Door removed

Class	Galvanized Each	Polished Brass Each	Chromium Plated Each	Height Inches	Size Lens Inches
1	\$4.25	\$5.25	\$6.25	4	3 3/8 x 5 1/8
2	4.75	5.50	6.50	5	4 1/4 x 6 1/2

Sail Boat Side Lights

SPECIAL SMALL SIZE

FOR CLASS 1 BOATS—LESS THAN 26 FT. LONG

Made for the numerous Class 1 sail boats in use on which side lights of a small size to burn oil are desired.

Size of Lens Inches	Extreme Height Inches	Diam. of Base Inches	Weight Per Pair Pounds
3 3/8 x 3 3/8	9	4 1/4	4



Fig. 845

	Galvanized Per Pair	Pol. Brass Per Pair
Oil Only	\$6.00	\$8.50
Oil and Electric	7.00	9.50
Electric Only—Flat Top	5.00	7.50

All above prices do not include batteries—batteries used are the regular flashlight type, available at all hardware stores.



COMBINATION LIGHTS—ELECTRIC
FOR OUTBOARD MOTOR BOATS AND SMALL RUNABOUTS
UP TO 16 FEET LONG INCLUSIVE

Wrought Brass Type
FOR PERMANENT MOUNTING

Complete with red and green fresnel lenses and double contact electric socket.



Fig. 485

Height Overall Inches	Diam. Body Inches	Diam. Base Inches	Size Lens Inches	Weight Lbs.
4½	2½	2½	2½ x 3	¾
Polished Brass Each		Nickel Plated Each		Chromium Plated Each
\$2.60		\$2.85		\$3.25

Wrought Brass Type
FOR TEMPORARY MOUNTING
WITH REMOVABLE BRACKET

Quickly removed from deck without necessity of removing screws from deck. Complete with red and green fresnel lenses and double contact electric socket.

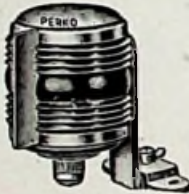


Fig. 486

Height inches	Diam. inches	Lens inches	Weight Lbs.
4	2½	2½ x 3	1
Polished Brass Each		Nickel Plated Each	Chromium Plated Each
\$2.80		\$3.20	\$3.50

Streamline Pattern
WITHOUT REBULBING FEATURE
CAST BRONZE

Same size as Fig. 512, except that bulb is changed by removing the lamp from the deck.



Fig. 536

Height Inches	Base Inches	Lens Inches	Flagpole Socket Inch	Weight Lbs.
3½	3 x 5	2½ x 3	¾	1½
Polished Bronze Each		Nickel Plated Each		Chromium Plated Each
\$5.00		\$5.50		\$6.00

Streamline Pattern

WITH REBULBING FEATURE
CAST BRONZE

It is not necessary to remove lamp from deck to change the bulb. Our rebulbing feature, as illustrated, makes it easy, as a few turns of a coin or screw driver inserted in slot removes plug to which electric socket is attached. Socket is set in swivel holder, wires will not twist while unscrewing. Plug is flush with back of lamp when closed.

Complete with red and green fresnel lenses and double contact electric socket.

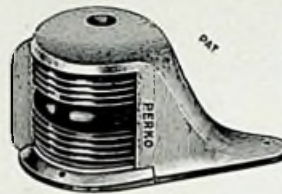


Fig. 512

Height Inches	Base Inches	Lens Inches	Flagpole Socket Inch	Weight Lbs.
3½	3 x 5	2½ x 3	¾	1½
Polished Bronze Each		Nickel Plated Each		Chromium Plated Each
\$5.50		\$6.00		\$6.50



Rear view showing method of changing bulb

Streamline Pattern

WITH CLEAT AND REBULBING FEATURE
CAST BRONZE

Same as Fig. 512, except for cleat on back to which electric socket is attached. Can be used as a bitt, as rope cannot slip over top of lamp.



Fig. 535

Height Inches	Base Inches	Lens Inches	Flagpole Socket Inches	Length Cleat Inches	Wt. Lbs.
3½	3 x 5	2½ x 3	¾	2½	2
Polished Bronze Each		Nickel Plated Each		Chromium Plated Each	
\$5.50		\$6.00		\$6.50	



Rear view showing method of changing bulb

COMBINATION LIGHTS—ELECTRIC

FOR LARGER OUTBOARD MOTOR BOATS, RUNABOUTS AND SMALL CRUISERS
FROM 16 TO 25 FEET LONG INCLUSIVE

Streamline Pattern

WITH REBULBING FEATURE
FOR RUNABOUTS 16 TO 20 FEET LONG
CAST BRONZE

Contains our famous rebulbing feature, as illustrated on Fig. 512. Complete with red and green lenses and double contact electric socket.

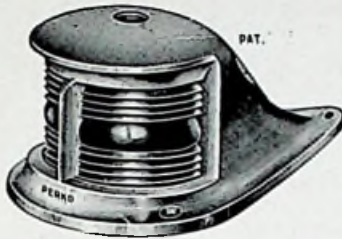


Fig. 598



Rear view showing method of changing bulb

Height Inches	Base Inches	Lens Inches	Flagpole Socket Inch	Weight Lbs.
3 3/4	4 7/8 x 8	2 1/2 x 3	3/4	2 1/2
Polished Bronze Each		Nickel Plated Each		Chromium Plated Each
\$6.50		\$7.00		\$7.50

Streamline Pattern

WITH REBULBING FEATURE
FOR RUNABOUTS AND CRUISERS
18 TO 25 FEET LONG
CAST BRONZE

Contains our popular flush type rebulbing feature, absolutely watertight.

A few turns of a coin or screw driver in slot brings out socket allowing instant removal of bulb.

IT IS NOT NECESSARY TO TAKE LIGHT OFF DECK TO CHANGE BULB.

Equipped with red and green fresnel lenses and double contact electric socket. Socket in top of light for flag-pole, 1 inch diameter.



Fig. 559

Height Inches	Base Inches	Lens Inches	Weight Lbs.
4 3/4	8 3/4 x 5 1/2	3 3/4 x 3 3/4	4 3/4
Polished Bronze Each		Nickel Plated Each	Chromium Plated Each
\$10.00		\$10.50	\$11.25

Streamline Pattern

WITHOUT REBULBING FEATURE
FOR RUNABOUTS 16 TO 20 FEET LONG
CAST BRONZE

Same style and size as Fig. 598, except that bulb is changed by removing lamp from the deck.



Fig. 606

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
\$6.00	\$6.50	\$7.00

Combination Light and Bitt

CAST BRONZE—ELECTRIC
FOR CLASS 1 BOATS—18 TO 25 FEET LONG



Fig. 502

One piece casting with removable top for rebulbing. Flag pole socket in top, furnished with red and green fresnel lenses and double contact socket.

Height Inches	Diam. Base Inches	Size Lens Inches	Flagpole Socket Inches	Weight Lbs.
4 3/4	6 1/2	3 3/4 x 3 3/4	1 1/4	5 1/2
Polished Bronze Each		Nickel Plated Each		Chromium Plated Each
\$10.00		\$10.75		\$11.50

Bow Light and Bitt

CAST BRONZE—ELECTRIC
FOR CLASS 2 BOATS—26 TO 39 FEET LONG



Fig. 503

Same construction as Fig. 502 above. Equipped with clear fresnel lens and double contact socket.

Height Inches	Diam. Base Inches	Size Lens Inches	Flagpole Socket Inches	Weight Pounds
6 1/2	7 1/4	4 1/4 x 6 1/2	1 1/4	8
Polished Bronze Each		Nickel Plated Each		Chromium Plated Each
\$10.00		\$10.75		\$12.00



Streamline Side Lights

FOR CLASSES 1, 2 AND 3 BOATS
CAST BRONZE

With our popular rebulbing feature which makes it unnecessary to remove light from the boat to change bulb.

Furnished in pairs, with red and green fresnel lenses and double contact electric sockets.



Fig. 563

Class	Height Inches	Length Inches	Size Lens Inches	Weight Per Pair Lbs.
1	4 $\frac{1}{8}$	6	3 $\frac{3}{8}$ x 3 $\frac{3}{8}$	3
2	5 $\frac{1}{8}$	7 $\frac{1}{2}$	4 $\frac{1}{4}$ x 4 $\frac{3}{4}$	5
3	6	9 $\frac{1}{4}$	5 $\frac{1}{4}$ x 5 $\frac{3}{8}$	7

Class	Polished Bronze Per Pair	Nickel Plated Per Pair	Chromium Plated Per Pair
1	\$10.00	\$11.00	\$12.00
2	12.00	13.00	14.00
3	18.00	20.00	25.00

De-Lite Side Lights

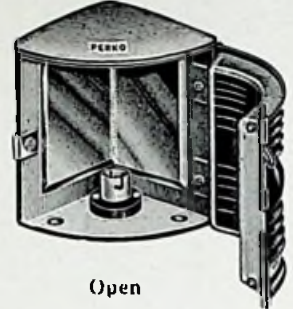
WITH FRONT DOORS
FOR CLASSES 2 AND 3 BOATS
CAST BRONZE

A quick change of bulb or lens is assured. Lenses are fastened in doors by brass straps and machine screws, doors have positive latch which cannot work loose due to vibration or wind.

Furnished in pairs, with red and green fresnel lenses and double contact or standard screw sockets.



Closed



Open

Fig. 504

Class	Height Inches	Angle Inches	Size Lens Inches	Weight Per Pair Lbs.
2	5 $\frac{1}{2}$	3 $\frac{3}{4}$ x 3 $\frac{3}{4}$	4 $\frac{1}{4}$ x 4 $\frac{3}{4}$	6 $\frac{1}{2}$
3	6	4 x 4	5 $\frac{1}{4}$ x 5 $\frac{3}{8}$	8

Class	Polished Bronze Per Pair	Nickel Plated Per Pair	Chromium Plated Per Pair
2	\$10.00	\$11.00	\$12.00
3	13.00	14.00	15.50

Double contact sockets furnished unless otherwise specified

With clear lens, Class 2 and 3, add \$1.00 per pair

Streamline Bow Lights

WITH REBULBING FEATURE
FOR CLASSES 1, 2 AND 3 BOATS
CAST BRONZE

Furnished with clear fresnel lens and double contact electric socket.

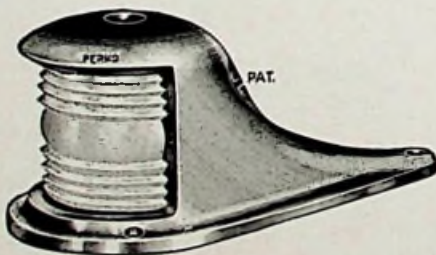


Fig. 561

Class	Height Inches	Base Inches	Size Lens Inches	Weight Pounds	Flarepole Socket Inches
1	4 $\frac{3}{8}$	5 x 8 $\frac{1}{2}$	3 $\frac{3}{8}$ x 5 $\frac{1}{8}$	4	7 $\frac{7}{8}$
2	5	5 $\frac{5}{8}$ x 9 $\frac{7}{8}$	4 $\frac{1}{4}$ x 6 $\frac{1}{2}$	4 $\frac{3}{4}$	1
3	6 $\frac{3}{8}$	6 $\frac{3}{8}$ x 13	5 $\frac{1}{4}$ x 7 $\frac{3}{4}$	8 $\frac{3}{4}$	1

Class	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
1	\$ 9.00	\$10.00	\$10.00
2	11.00	12.00	12.25
3	16.00	17.50	17.50

De-Lite Bow Lights

WITH FRONT DOORS
FOR CLASSES 2 AND 3 BOATS
CAST BRONZE

Same construction as Fig. 504 above. Furnished with clear fresnel lens and double contact or standard screw socket.



Fig. 505

Class	Height Inches	Width Inches	Size Lens Inches	Weight Lbs.
2	5 $\frac{1}{2}$	5 $\frac{1}{2}$	4 $\frac{1}{4}$ x 6 $\frac{1}{2}$	3 $\frac{1}{4}$
3	6 $\frac{1}{2}$	6	5 $\frac{1}{4}$ x 7 $\frac{3}{4}$	4 $\frac{1}{4}$

Class	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
2	\$5.00	\$5.50	\$6.00
3	6.50	7.00	7.75

Double contact sockets furnished unless otherwise specified

With Red or Green Lens, Class 2 and 3, add \$.50 Each



NEW REGULATION LIGHTS FOR OIL BARGES AND TANKERS

↓ WATERPROOF—SELF CONTAINED BATTERY TYPE—WATERPROOF SWITCH

New regulations are being drawn up by the U. S. Department of Commerce, Bureau of Marine Inspection and Navigation, which will require the use of self contained running lights on river oil carriers, tankers and barges. The following lights have been inspected and passed by the above Bureau and meet all of the specifications.

Loading and Anchor Lights

360 DEGREE CLEAR OR RED LENS



Fig. 470

Uses four ordinary 1½ volt dry cells, enclosed in a water and air tight container which is fastened to upper unit by elbow type bolts and wing nuts.

Will stay lit for 25 to 30 consecutive days without attention.

Furnished complete with watertight switch and heavy duty bulb—batteries extra.

No.	Extreme Height Inches	Diameter Base Inches	Size of Lens Inches	Weight Pounds
1	16½	6½	4¼ x 4¼	5½
2	18	6½	5⅜ x 6	8½

No.	Clear Lens		Red Lens	
	Galv. Each	Polished Copper Each	Galv. Each	Polished Copper Each
1	\$12.50	\$15.00	\$14.00	\$16.50
2	23.50	26.00	26.00	28.50

With batteries, add \$3.50 to above prices. Bulbs only, \$.50 each.

Side Lights

112½ DEGREE LENSES—10 POINTS OF COMPASS
GREEN FOR STARBOARD—RED FOR PORT

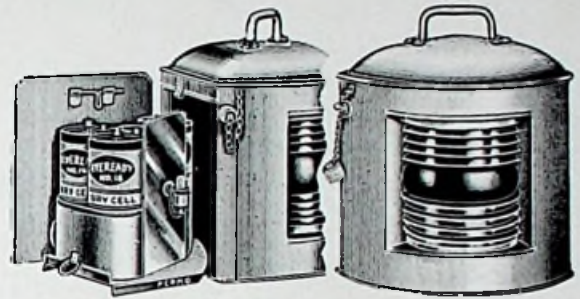


Fig. 1008

Uses four ordinary 1½ volt dry cells obtainable in all hardware and electrical supply stores.

Batteries are placed in cup like receptacles mounted on sliding platform for quick replacement. Light has a sliding back door held closed and locked by a sliding latch. Door slides in grooves ¼ inch deep on all sides except bottom.

Lights are waterproof and furnished complete with brass, nickel plated reflector, bulb and waterproof switch. Batteries extra.

Will stay lit 25 to 30 consecutive days without attention, 2 mile visibility.

Galvanized Per Pair	Polished Brass Per Pair	Polished Copper Per Pair	Size of Lens Inches	Height Less Handle Inches	Size Base Inches
\$25.00	\$28.00	\$32.00	5½ x 6	10	7½ x 7½

With batteries, add \$3.50 to above prices. Bulbs only, \$.50 each.

Auxiliary Generators

TO BE DRIVEN FROM MAIN MOTOR BY V BELT AND PULLEY

6-12 AND 32 VOLTS



Fig. 659

This outfit now consists of an air cooled generator with V pulley, ammeter in panel, cutout and terminals all mounted on a base.

Volts	Each	Amperes	Overall Length Inches	Overall Width Inches	Diameter Pulley Inches
6	\$27.00	20	10	7¾	4
12	29.00	15	10	7¾	4
32	32.00	7	10	7¾	4

Battery Marker Light

COPPER CASE—WATERTIGHT

LONG LIFE BURNING



Fig. 295

Uses ordinary lantern battery such as Eveready No. 409 or equal. Bulb is Mazda No. 502.

Furnished with clear fresnel ball globe 3 inch diameter with threaded bottom, bail handle, turn switch and bulb.

Without Battery Each	With Battery Each	Height Overall Inches	Diameter at Base Inches
\$8.00	\$8.70	9	4⅜

With red, green or blue globe, add \$.50 each.



Improved Pole Light Assembly

COMPLETE WITH FLAG POLE SOCKET AND
ELECTRIC CONNECTIONS IN POLE AND SOCKET
HOLLOW MAHOGANY POLE
FOUR COATS VARNISH—HAND RUBBED



Fig. 531

Insert pole in socket and electric connection is complete. No wires exposed, no springs to corrode. A real positive hook-up, unaffected by water or corrosion.

Pole may remain in socket at all times, no switch necessary. Female part of connector in base of pole has four holes, two for on position, two for off position. Male part of connector in flag pole socket has two prongs (no springs). To light, loosen thumb screw, lift pole, give half turn and reset. To disconnect, reverse operation.

Length Overall Inches	Polished Brass Each	Nickel Plated Each	Chromlum Plated Each	Diam. Base of Pole Inches
20	\$5.75	\$ 6.25	\$ 6.75	1 1/4
24	5.75	6.25	6.75	1 1/4
30	5.75	6.25	6.75	1 1/4
36	6.00	6.50	7.00	1 1/4
42	6.50	7.00	7.50	1 1/4
48	7.00	7.50	8.00	1 1/4
60	8.00	8.50	9.00	1 1/4
72	9.50	10.00	10.50	1 1/4

Flag Pole Lights

ELECTRIC ONLY—HOLLOW MAHOGANY POLE

This pole is turned from one solid piece of mahogany and drilled through center for electric wire. Natural finish, varnished, equipped with pole light. Fig. 491, 2 1/2 or 3 inch globe, double contact electric socket. All wired ready for use. Threaded base of globe allows easy change of bulb. Brass ferrule on base of pole to prevent splitting or swelling.



Fig. 492

Length Overall Inches	Diameter Base Inches
20	1 1/4
24	1 1/4
30	1 1/4
36	1 1/4
42	1 1/4
48	1 1/4
60	1 1/4
72	1 1/4

Length Overall Inches	Polished Brass Each	Nickel Plated Each	Chromlum Plated Each
20	\$3.25	\$3.65	\$4.00
24	3.25	3.65	4.00
30	3.25	3.65	4.00
36	3.50	3.90	4.25
42	4.00	4.40	4.75
48	4.50	4.90	5.25
60	5.50	5.90	6.25
72	7.00	7.40	7.75

NOTE—Furnished with wire outlet in side of pole instead of bottom if desired.

2 1/2 inch globes furnished unless 3 inch is specified.

Battery Pole Lights

BRASS BATTERY CASE—FRESNEL BALL GLOBE

MAHOGANY FINISH POLE



Fig. 710

Two ordinary flashlight battery cells installed in case on top of pole.

A wireless flag pole light which will furnish 14 hours of continuous light on one set of batteries, or enough for several weeks of ordinary use.

Furnished complete with bulb and switch, no batteries. Diameter base—1 inch.

Length Overall Inches	Chromlum Plated Each
24	\$4.00
30	4.25

Colored globes (red, green or blue) desired on any of the above pole lights, add \$.50 to above prices.



Flag Pole Lights

ELECTRIC ONLY—MAHOGANY POLE
FOR OUTBOARD MOTOR BOATS AND SMALL
RUNABOUTS

An extra small size fresnel globe, 1 1/8 inch diameter, just large enough to admit a 3 c. p. electric bulb. Fitted on our high grade solid mahogany flag pole, which is drilled through center for wires.



Fig. 602

Length Overall Inches	Diam. Base Inches	Weight Oz.
20	3/4	7
24	3/4	8
30	3/4	9

Height Inches	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
20	\$2.75	\$3.15	\$3.50
24	3.00	3.40	3.75
30	3.25	3.65	4.00

For information on light fixture only, refer to Fig. 600.

Flag Pole Light

WITH 2 1/2 INCH GLOBE—HOLLOW BRASS POLE
FOR OUTBOARD MOTOR BOATS AND RUNABOUTS

Complete with cast bronze flag pole socket, wired ready for use, wires concealed in pole.



Fig. 538

Length Overall Inches	Outside Diam. Pole Inches	Weight Lbs.
20	3/4	1
24	3/4	1 1/4
30	3/4	1 1/2

Length Inches	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
20	\$3.25	\$3.75	\$4.25
24	3.50	4.00	4.50
30	3.75	4.25	4.75

Flag Pole Lights

ELECTRIC ONLY—HOLLOW BRASS POLE

With 1 3/8 inch fresnel globe, hollow brass pole, wiring concealed inside pole, and cast bronze flag pole socket complete ready for installation.



Fig. 603

Length Overall Inches	Outside Diam. Pole Inches	Weight Oz.
20	3/4	11
24	3/4	12
30	3/4	16

Length Inches	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
20	\$3.00	\$3.50	\$4.00
24	3.25	3.75	4.25
30	3.50	4.00	4.50



Fig. 846

For outboard motor boats and small runabouts

No wires to bother with when pole is removed; insert pole in socket with a half turn which makes contact and locks pole in socket. All double contact connections.

Length Pole Inches	Polished Brass Each	Nickel Plated Each	Chromium Plated Each	Diam. Globe Inches	Size Socket Inches
20	\$4.25	\$4.75	\$5.25	1 3/8	3/4
24	4.50	5.00	5.50	1 3/8	3/4
30	4.75	5.25	5.75	1 3/8	3/4

Maple Flag Poles POLISHED



Fig. 713

Length Overall Inches	Diameter Base Inches	Each
18	1	\$.40
24	1	.45
30	1	.50
36	1 1/4	.55
42	1 1/4	.65
48	1 1/4	.75
54	1 1/4	.90
60	1 1/2	.95
66	1 1/2	1.10

Mahogany Flag Poles

Turned from solid seasoned mahogany. Natural finish—varnished. Diameter base 1 1/4 inches.



Fig. 496

Length Overall Inches	Weight Oz.	Price Each
18	2 1/2	\$1.00
20	3	1.20
24	3 1/2	1.40
30	4	2.00
36	4 3/4	2.40
42	5 1/4	2.60
48	6	2.80

Can be furnished with 1 inch base if specified.

With brass or nickel plated ferrule—add \$.25 to above prices.



Pole Lights

WROUGHT BRASS

All with screw type fresnel ball globes, double contact electric sockets and 5 feet of rubber covered waterproof cable. Opening in globes is 1 1/2 inch which will admit a 50 C. P. bulb.



Fig. 482

WITH 2 1/2 INCH GLOBE
FOR SOLID POLE
CABLE THROUGH SIDE

Height Overall Inches	Inside Diam. Neck Inches	Weight Oz.
5	3/4	12
Polished Brass Each	Nickel Plated Each	Chromium Plated Each
\$2.25	\$2.50	\$3.00

Pole Lights

CAST BRONZE

All furnished complete with fresnel ball globe, double contact socket and 5 feet of rubber covered waterproof cable. Screw type globes on Fig. 498 and 484, large opening to admit a 50 C. P. bulb.



Fig. 601

JUNIOR PATTERN
FOR SOLID POLE
CABLE THROUGH SIDE
Globe with brass ferrule, cut threads, opening will admit a 3 or 6 C. P. bulb.

Outside Diam. Globe Inches	Height Overall Inches	Inside Diam. Neck Inches	Weight Oz.
1 3/8	4 1/4	1/2	4
Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	
\$2.00	\$2.25	\$2.75	



Fig. 491

WITH 2 1/2 INCH GLOBE
FOR HOLLOW POLE
CABLE THROUGH BOTTOM

Height Overall Inches	Inside Diam. Neck Inches	Weight Oz.
5	3/4	12
Polished Brass Each	Nickel Plated Each	Chromium Plated Each
\$2.25	\$2.50	\$3.00



Fig. 600

JUNIOR PATTERN
FOR HOLLOW POLE
CABLE THROUGH BOTTOM
Globe with brass ferrule, cut threads opening will admit a 3 or 6 C. P. bulb.

Outside Diam. Globe Inches	Height Overall Inches	Inside Diam. Neck Inches	Weight Oz.
1 3/8	4 1/4	1/2	4
Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	
\$2.00	\$2.25	\$2.75	

Figs. 600 and 601 Pole Lights can be furnished with 1/4 inch pipe thread in bottom—add \$.20 each.

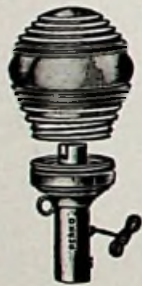


Fig. 508

WITH 3 INCH GLOBE
FOR SOLID POLE
CABLE THROUGH SIDE

Height Overall Inches	Inside Diam. Neck Inches	Weight Lbs.
5 3/4	3/4	1
Polished Brass Each	Nickel Plated Each	Chromium Plated Each
\$2.25	\$2.50	\$3.00



Fig. 498

HEAVY PATTERN
FOR SOLID POLE
CABLE THROUGH SIDE
WITH 2 1/2 OR 3 INCH GLOBE

Outside Diam. Globe Inches	Height Overall Inches	Inside Diam. Neck Inches	Weight Lbs.
2 1/2 or 3	5	3/4	1
Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	
\$3.50	\$3.75	\$4.50	



Fig. 483

WITH 3 INCH GLOBE
FOR HOLLOW POLE
CABLE THROUGH BOTTOM

Height Overall Inches	Inside Diam. Neck Inches	Weight Lbs.
5 3/4	3/4	1
Polished Brass Each	Nickel Plated Each	Chromium Plated Each
\$2.25	\$2.50	\$3.00



Fig. 484

HEAVY PATTERN
FOR HOLLOW POLE
CABLE THROUGH BOTTOM
WITH 2 1/2 OR 3 INCH GLOBE

Outside Diam. Globe Inches	Height Overall Inches	Inside Diam. Neck Inches	Weight Lbs.
2 1/2 or 3	5	3/4	1
Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	
\$3.50	\$3.75	\$4.50	

Stern Lights

BRASS

Made of heavy brass tubing with heavy brass base, 2½ or 3 inch fresnel ball globe, threaded base, double contact electric socket.



Fig. 422

Height Overall Inches	Diam. Base Inches	Diam. Globe Inches	Weight Oz.
7	2½	2½ or 3	12
Polished Brass Each		Nickel Plated Each	Chromium Plated Each
\$3.00		\$3.25	\$4.00

Can be had in any height from 4 inches up. For each additional inch above the standard height add 20c. 2½ inch globes furnished unless 3 inch are requested.

With red, green or blue globe, add \$.50 each

Stern Lights

CAST BRONZE

All cast bronze with 2½ or 3 inch fresnel ball globe, threaded base, double contact electric socket.



Fig. 506

Height Overall Inches	Diam. Base Inches	Diam. Globe Inches	Weight Oz.
6½	1½	2½ or 3	18
Polished Bronze Each		Nickel Plated Each	Chromium Plated Each
\$4.00		\$4.25	\$5.00

With red, green or blue globe, add \$.50.

2½ inch globes furnished unless 3 inch are requested.

Stern Lights

CAST BRONZE



Fig. 375

Height Inches	Diam. Base Inches	Diam. Body Inches	Size Lens Inches	Weight Lbs.
7	3½	3½	3¾ x 3¾	2¾
Polished Bronze Each		Nickel Plated Each		Chromium Plated Each
\$7.00		\$7.50		\$8.00

Equipped with 360 degree fresnel lens and double contact electric socket. Any height desired can be secured by placing required length of 1 inch brass pipe at joint marked A. These parts have standard 1 inch pipe thread.

With red, green or blue lens, add \$1.00 each.
Furnished with standard screw socket at above prices if desired.

Mast Lights

CAST BRONZE



Fig. 521

Height Inches	Diam. Body Inches	Size Lens Inches	Inside Diam. Neck Inches	Weight Lbs.
6¾	3½	3¾ x 3¾	1¼ or 1½	2
Polished Bronze Each		Nickel Plated Each		Chromium Plated Each
\$6.50		\$6.90		\$7.50

Equipped with 360 degree clear fresnel lens and double contact electric socket. Extra long neck.

With red, green or blue lens, add \$1.00 each.
Furnished with standard screw sockets at above prices if desired.

Stern Lights

WITH THREADED BASE GLOBE



Fig. 112

CAST BRONZE

Equipped with clear fresnel lens and double contact or standard screw electric sockets.

Height Overall Inches	Diam. Base Inches	Size of Globe Inches	Plain Bronze Each	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
8¾	3½	5x3½	\$4.00	\$4.50	\$5.00	\$5.50

With red, green or blue globe, add \$1.00 Each

Mast Lights

WITH THREADED BASE GLOBE

CAST BRONZE



Fig. 113

Equipped with clear fresnel lens and double contact or standard screw electric socket.

Height Overall Inches	For Mast Inches	Diam. Mast Inches	Size of Globe Inches	Plain Bronze Each	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
9	2½	2½	5x3½	\$4.50	\$5.50	\$6.00	\$6.50

With red, green or blue globe, add \$1.00 Each

Yard Arm Light

CAST BRONZE

Threaded base fresnel ball globe, cast bronze body and base for mounting on yard arm or mast truck. Standard screw electric socket.



Diam. Globe Inches	Height Overall Inches	Size Base Inches	Weight Lbs.
4 1/4	5 1/2	2 3/4 x 1 3/8	1 1/4

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
\$4.50	\$5.00	\$5.50

Furnished with 2 inch diameter round base if desired.

Fig. 565

Furnished without base but having a 1/2 inch pipe thread for mounting on pipe—deduct \$.50 each from above prices—specify Fig. 564 when ordering.

Special Mast Light

MEDIUM SCREW SOCKET—PORCELAIN BASE
CAST BRONZE—THREADED GLOBE



Fig. 488

Especially designed for use with tubular bulb, medium screw base.

Fig. 488 has 1/2 inch female pipe thread in base for mounting on pipe.

Fig. 489 has flat base not threaded but drilled for mounting on mast truck.



Fig. 489

Plain Bronze Each	Polished Bronze Each	Height Overall Inches	Diam. Base Inches	Size Globe Inches	Opening In globe Inches
\$2.50	\$3.00	6	2 3/4	5 1/2 x 2 3/4	1 1/8

With Red, Green or Blue Globe add \$.50 Each
Clear Globes only80 Each
Extra Red, Green or Blue Globes only 2.00 Each
Special Porcelain Electric Sockets only50 Each

Mast Light

MEDIUM SCREW SOCKET—PORCELAIN BASE
CAST BRONZE—THREADED GLOBE



Fig. 309

Has 1/2 inch female pipe thread in base. Globe will accommodate up to 75 watt bulb.

Height Overall Inches	Size Globe Inches	Opening In globe Inches	Plain Bronze Each	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
6 1/2	5 x 3 1/2	2 3/4	\$4.00	\$5.00	\$5.50	\$6.00

With Red, Green or Blue Globe, add \$1.00 each.

Mast Truck and Yardarm Fixture

CAST BRONZE



Fig. 104

Threaded base, fresnel ball globe, cast bronze fittings, standard Edison socket (medium screw base). Water-tight stuffing gland on side for wiring, two lugs on bottom for fastening to truck or yardarm, rubber gasket between globe and support. Absolutely water-tight.

Height Overall Inches	Height Globe Inches	Width to Ends of Lugs Inches	Inside Diam. Globe Inches	Weight Lbs.
5 5/8	2 7/8	4 1/4	2 1/4	2

Plain Bronze Each	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
\$4.50	\$5.50	\$6.00	\$6.50

With colored globe (red, green or blue), add \$1.00 each

Mast Light

CAST BRONZE



Fig. 103

Threaded base, fresnel ball globe, cast bronze support and fittings, standard Edison socket (medium screw base). Globe is large enough to take 110 volt, 25 watt lamp. Base of light is threaded for 1/2 inch pipe, standard thread. Rubber gasket insures water-tight fitting.

Height Overall Inches	Height Globe Inches	Outside Diam. Globe Inches	Inside Diam. Globe Inches	Weight Lbs.
5 5/8	2 7/8	3	2 1/4	2

Plain Bronze Each	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
\$4.00	\$5.00	\$5.50	\$6.00

With colored globe (red, green or blue), add \$1.00 each

Mast Light

CAST BRONZE—THREADED GLOBE
DOUBLE CONTACT SOCKET



Fig. 362

Cast bronze base threaded for mounting on 1/2 inch pipe. Furnished with 2 1/2 or 3 inch diameter fresnel ball globe; globe is large enough to use with 50 candle power bulb.

Height Overall Inches	Diameter Base Inches	Size Globe Inches	Weight Pounds	Plain Bronze Each	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
3 1/2	2 1/4	2 1/2 or 3	1	\$2.50	\$3.00	\$3.50	\$4.00

With Red, Green or Blue Globe, add \$.50 each.



NEW OCEAN AND COASTWISE REGULATIONS

New ocean and coastwise regulations of the U. S. Department of Commerce, Bureau of Marine Inspection and Navigation call for an efficient signaling lamp on all ocean and coastwise passenger ships over 150 gross tons. Such lamp to be equipped with fresnel lens and high speed Morse bulb of at least 50 C. P. and operated by a weatherproof key fitted with a suitable condenser. Effective on existing vessels November 7, 1937 and on new vessels immediately.

Our Fig. 403 Blinker Signaling Lights and the following keys have been officially approved by the Bureau.

Watertight Blinker Key

WITH CONDENSER

CAST BRONZE—BLACK FINISH—APPROVED



Fig. 9

A cast bronze watertight box fitted with special key, externally operated by cast bronze lever.

Each	Length Inches	Width Inches	Height Inches	Weight Pounds
\$18.00	4 1/8	3 1/2	2 1/4	2 1/2

Open Type Blinker Key

WITH CONDENSER

APPROVED

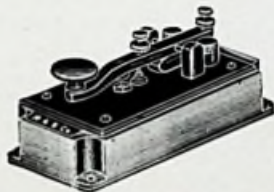


Fig. 10

Standard Morse key with condenser for reducing arcing, mounted on cast aluminum base.

Each	Length Inches	Width Inches	Height Inches	Weight Pounds
\$15.00	6 1/2	3 1/8	2 3/4	1 1/2

Yardarm Fixture

FOR MEAL AND ABSENT LIGHT

CAST BRONZE



Fig. 573

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Length Without Bulbs Inches	Size of Base Inches
\$5.00	\$5.50	\$6.00	4 3/8	3 1/8 x 2 1/8

Mast or Blinker Signaling Lights

WITH MEDIUM SCREW SOCKETS

WATERTIGHT—CAST BRONZE—BLACK FINISH



Fig. 403

With hinged top for quick replacement of bulb. Bottom is hexagon shape threaded for pipe. Used on yachts and ships for blinker signaling.

- No. 1. For vessels 150 feet in length or under.
- No. 2. For vessels over 150 feet but not over 450 feet in length.
- No. 3. For vessels over 450 feet in length.

No.	Each	Height Inches	Width Inches	Size Lens Inches	Threaded for Pipe Inches
1	\$10.00	6 3/4	4 3/4	3 3/8 x 3 1/2	1/2
2	12.50	8	5 7/8	4 1/4 x 4 1/4	3/4
3	18.00	9 1/2	7 1/4	5 3/8 x 5 3/8	1

New Meal and Absent Light

CAST BRONZE—WATERTIGHT



Fig. 330

Answering the yachtsman's prayers for a small watertight meal and absent light with medium screw sockets for mounting on the average small yardarm.

One solid bronze casting with a curved mounting base and two farnel ball globes, one blue, the other clear. Can also furnish with red or green globes if desired. 2 1/2 inch diameter globes are furnished unless 3 inch are specified.

For bulbs to fit, see Fig. 8.

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Length Overall Inches	Size Base Inches	Weight Pounds
\$6.00	\$6.50	\$7.00	8 3/4	3 1/4 x 1 3/4	2 1/4



LIGHTS FOR VESSELS OVER 65 FEET LONG TURRET TOP STYLE

Made of extra heavy metal. Galvanized lights are made of black steel and hot galvanized after they are formed. All have fresnel lenses and are furnished complete with burner and wick. Brass or copper lamps are highly polished. Solid brass swivel oil or electric founts for these lights are shown on page 43, Fig. Nos. 282, 288, 289.

Side Lights

112½ DEGREES—10 POINTS OF COMPASS
FURNISHED IN PAIRS, GREEN FOR STARBOARD AND RED FOR PORT
WITH CHANNEL SHAPED SOCKET AND BRACKET FOR MOUNTING



Fig. 21

No.	Size of Lens		Height Less Ring Inches	Size Base Inches	For Size Vessel Feet
	Height Inches	Circum. Inches			
9	5¾	8½	14	6½x6½	65 to 90
10	6¾	8¾	15	7½x7½	91 to 149
11	7½	11½	18¾	9½x9½	150 to 450

No.	Oil or 1 Light Electric Only			Oil and 1 Light Electric Add Per Pair	Oil and 2 Light Electric Add Per Pair	Mogul 3 Wire Socket Add Per Pair
	Galvanized Per Pair	Polished Brass Per Pair	Polished Copper Per Pair			
9	\$26.00	\$36.00	\$46.00	\$3.00	On Application	\$6.50
10	28.00	38.00	48.00	3.00	On Application	6.50
11	38.00	50.00	60.00	4.00	\$5.00	6.50

For detailed information on mogul 3 wire socket see Fig. 1082.

Masthead, Range and Towing Lights

225 DEGREES—20 POINTS OF COMPASS—CLEAR LENS
WITH FOUR CAST METAL LUGS FOR MOUNTING



Fig. 982

No.	Size of Lens		Height Less Ring Inches	Width Centers of Lugs Inches	Size Base Inches	For Size Vessel Feet
	Height Inches	Circum. Inches				
1	5¾	11½	14	8¾	7x7	65 to 90
2	6¾	11½	15	8¾	7x7	91 to 149
3	7	17	18¾	10½	9x9½	150 to 450

No.	Oil or 1 Light Electric Only			Oil and 1 Light Electric Add Each	Oil and 2 Light Electric Add Each	Mogul 3 Wire Socket Add Each
	Galvanized Each	Polished Brass Each	Polished Copper Each			
1	\$19.00	\$23.00	\$28.50	\$1.50	On Application	\$3.25
2	20.00	24.00	29.50	1.50	On Application	3.25
3	25.00	30.00	36.00	2.00	\$2.50	3.25

WITH RED, GREEN OR BLUE LENS ADD \$5.00 EACH.

For detailed information on mogul 3 wire socket see Fig. 1082.

Stern, Towing and Overtaken Lights

135 DEGREES—12 POINTS OF COMPASS—CLEAR LENS
WITH FOUR CAST METAL LUGS FOR MOUNTING



Fig. 985

No.	Size of Lens		Height Less Ring Inches	Width Centers of Lugs Inches	Size Base Inches	For Size Vessel Feet
	Height Inches	Circum. Inches				
4	5⅝	7	14	8⅝	7x7	65 to 90
5	6⅝	7	15	8¾	7x7	91 to 149
6	7⅝	9½	18¾	10½	9x9½	150 to 450

No.	Oil or 1 Light Electric Only			Oil and 1 Light Electric Add Each	Oil and 2 Light Electric Add Each	Mogul 3 Wire Socket Add Each
	Galvanized Each	Polished Brass Each	Polished Copper Each			
4	\$19.00	\$23.00	\$28.50	\$1.50	On Application	\$3.25
5	20.00	24.00	29.50	1.50	On Application	3.25
6	25.00	30.00	36.00	2.00	\$2.50	3.25

WITH 45 DEGREE RED LENS FOR SELF PROPELLED SUCTION DREDGES
ADD \$5.00 EACH.

For detailed information on mogul 3 wire socket see Fig. 1082.

Above items desired CHROMIUM PLATED, add 40% to Brass or Copper Prices.



LIGHTS FOR VESSELS OVER 65 FEET LONG

TURRET TOP STYLE



Fig. 23

Anchor Lights

360 DEGREES—CLEAR LENS
WITH FOUR LASHING EYES AND WIRE GUARDS AROUND LENS

No.	Size of Lens		Height Less Ring Inches	Diam. of Base Inches	For Size Vessel Feet
	Height Inches	Diam. Inches			
22	5 3/8	5 3/8	14 1/2	7 1/2	65 to 90
22 1/2	6 3/8	5 3/8	16	7 1/2	91 to 149
23	7	7 1/2	18 3/4	9 1/2	150 to 450

No.	Oil or 1 Light Electric Only			Oil and 1 Light Electric Add Each	Oil and 2 Light Electric Add Each	Mogul 3 Wire Socket Add Each
	Galvanized Each	Polished Brass Each	Polished Copper Each			
22	\$14.00	\$21.00	\$25.00	\$1.50	On Application	\$3.25
22 1/2	16.00	23.00	27.00	1.50	On Application	3.25
23	20.00	29.00	34.00	2.00	\$2.50	3.25

WITH RED, GREEN OR BLUE LENSES

22	\$17.00	\$24.00	\$28.00	\$1.50	On Application	\$3.25
22 1/2	19.50	26.50	30.50	1.50	On Application	3.25
23	25.00	34.00	39.00	2.00	\$2.50	3.25

For information on mogul 3 wire socket see Fig. 1082.



Fig. 129

Not Under Command Lights

360 DEGREES—RED LENS

WITH FOUR LASHING EYES AND WIRE GUARDS AROUND LENS

No.	Size of Lens		Height Less Ring Inches	Diam. of Base Inches	For Size Vessel Feet
	Height Inches	Diam. Inches			
22	5 3/8	5 3/8	14 1/2	7 1/2	65 to 90
22 1/2	6 3/8	5 3/8	16	7 1/2	91 to 149
23	7	7 1/2	18 3/4	9 1/2	150 and up

No.	Oil or 1 Light Electric Only			Oil and 1 Light Electric Add Each	Oil and 2 Light Electric Add Each	Mogul 3 Wire Socket Add Each
	Galvanized Each	Polished Brass Each	Polished Copper Each			
22	\$17.00	\$24.00	\$28.00	\$1.50	On Application	\$3.25
22 1/2	19.50	26.50	30.50	1.50	On Application	3.25
23	25.00	34.00	39.00	2.00	\$2.50	3.25

For Old Style 180 Degree Bow Lights, See Page 31.

New Regulation Mogul 3 Wire Sockets and Double Filament Bulbs

The U. S. Bureau of Marine Inspection and Navigation is at present drawing up new regulations which specify the use of a 3 wire mogul socket and double filament bulb on all 3 wire systems where two light electric shall be used. These rules are now in effect on lights for new vessels under construction and for replacements. The use of one bulb insures the proper focus of light at all times.

Base has watertight stuffing gland in bottom for wire.



Fig. 1082

Complete except bulb	Each	\$3.25
Complete with bulb	Each	8.00
Bulb Only, 50-50 watt	Each	4.80
Bulb Only, 100-100 watt	Each	5.00



**LIGHTS FOR VESSELS OVER 65 FEET LONG
AMERICAN IMPROVED STYLE**

Made of extra heavy metal. Galvanized lights are made of black steel and hot galvanized after they are formed. Brass and copper lights are in natural finish, highly polished. Furnished complete with hinged back door, sliding fount, burner, wick and chimney.

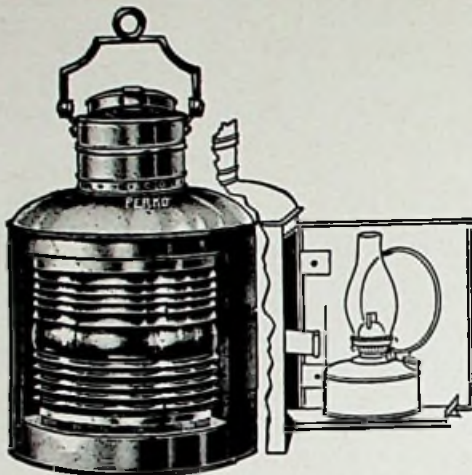


Fig. 24

Side Lights

112½ DEGREES—10 POINTS OF COMPASS
FURNISHED IN PAIRS, GREEN FOR STARBOARD
AND RED FOR PORT
WITH CHANNEL SHAPED SOCKET AND BRACKET
FOR MOUNTING

No.	Size of Lens		Height Less Handle Inches	Width Inches	For Size Vessel Feet
	Height Inches	Cir. Inches			
62	5¾	8½	13¾	6½ x 6¾	65 to 90
63	6¾	8¾	14¾	7¼ x 7¼	91 to 149
64	7½	11½	18	9½ x 9½	150 to 450

FOR OIL OR 1 LIGHT ELECTRIC ONLY

No.	Galvanized Per Pair	Polished Brass Per Pair	Polished Copper Per Pair
62	\$40.00	\$50.00	\$60.00
63	42.00	52.00	62.00
64	50.00	66.00	76.00

For oil and one light electric equipment, add \$5.00 per pair.
For oil and two light electric equipment, add \$6.00 per pair.
For mogul 3 wire socket, add \$12.00 per pair.

Masthead, Range and Towing Lights

225 DEGREES—20 POINTS OF COMPASS—CLEAR LENS
WITH FOUR CAST METAL LUGS FOR MOUNTING

No.	Size of Lens		Height Less Handle Inches	Size Base Inches	Width Centers of Lugs Inches	For Size Vessel Feet
	Height Inches	Circum. Inches				
1	5⅝	11½	13¾	7 x 7¼	8½	65 to 90
2	6⅝	11½	14¾	7⅝ x 7¼	8⅝	91 to 149
3	7	17	18	9½ x 9¼	10¾	150 to 450

FOR OIL OR 1 LIGHT ELECTRIC ONLY

No.	Galvanized Each	Polished Brass Each	Polished Copper Each
1	\$25.50	\$29.50	\$35.00
2	26.50	30.50	36.00
3	32.00	36.00	42.00

With red, green or blue lens, add \$5.00 each.
For oil and one light electric equipment, add \$2.50 each.
For oil and two light electric equipment, add \$3.00 each.
For mogul 3 wire socket, add \$6.00 each.

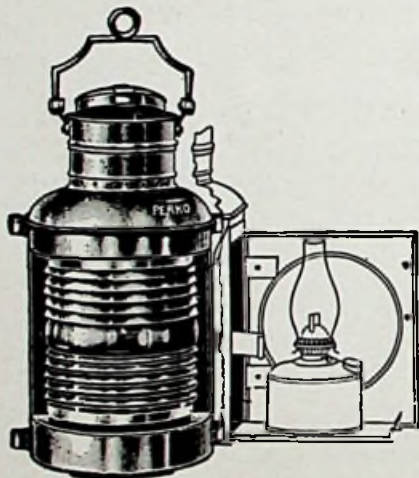


Fig. 981

Stern, Towing and Overtaken Lights

135 DEGREES—12 POINTS OF COMPASS—CLEAR LENS
WITH FOUR CAST METAL LUGS FOR MOUNTING

No.	Size of Lens		Height Less Handle Inches	Size Base Inches	Width Centers of Lugs Inches	For Size Vessel Feet
	Height Inches	Circum. Inches				
4	5⅝	7	13¾	7 x 7¼	8½	65 to 90
5	6⅝	7	14¾	7⅝ x 7¼	8⅝	91 to 149
6	7⅝	9½	18	9½ x 9¼	10¾	150 to 450

FOR OIL OR 1 LIGHT ELECTRIC ONLY

No.	Galvanized Each	Polished Brass Each	Polished Copper Each
4	\$25.50	\$29.50	\$35.00
5	26.50	30.50	36.00
6	32.00	36.00	42.00

With 45 degree red lens for self propelled suction dredges, add \$5.00 each.
For oil and one light electric equipment, add \$2.50 each.
For oil and two light electric equipment, add \$3.00 each.
For mogul 3 wire socket, add \$6.00 each.

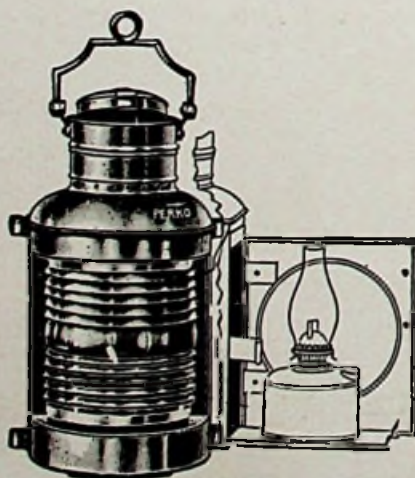


Fig. 984

LIGHTS FOR VESSELS OVER 65 FEET LONG

AMERICAN IMPROVED STYLE

Anchor Lights

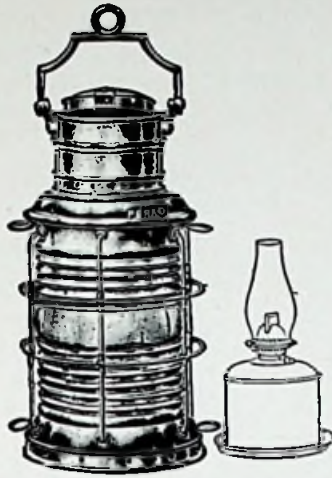


Fig. 26

360 DEGREES—CLEAR LENS
WITH FOUR LASHING EYES AND WIRE GUARDS AROUND LENS

No.	Height Inches	Diam. Inches	Height Less Handle Inches	Diam. of Base Inches	For Size Vessel Feet
84	5 3/8	5 3/8	14	7 3/8	65 to 90
85	6 5/8	5 3/8	15 1/2	7 3/8	91 to 149
86	7	7 1/2	18	9 1/2	150 to 450

OIL OR 1 LIGHT ELECTRIC ONLY

No.	Galvanized Each	Polished Brass Each	Polished Copper Each
84	\$16.00	\$23.00	\$27.00
85	18.00	25.00	29.00
86	24.00	33.00	38.00

WITH RED, GREEN OR BLUE LENSES

84	\$19.00	\$26.00	\$30.00
85	21.50	28.50	32.50
86	29.00	38.00	43.00

No. 84 and 85—Oil and one light electric equipment, add \$1.50 each.
No. 86—Oil and one light electric equipment, add \$2.00 each; oil and two light electric equipment, add \$2.50 each.
For mogul 3 wire socket, add \$3.25 each.

Not Under Command Lights

360 DEGREES—RED LENS
WITH FOUR LASHING EYES AND WIRE GUARDS AROUND LENS



Fig. 29

No.	Height Inches	Diam. Inches	Height Less Handle Inches	Diam. of Base Inches	For Size Vessel Feet
84	5 3/8	5 3/8	14	7 3/8	65 to 90
85	6 3/8	5 3/8	15 1/2	7 3/8	91 to 149
86	7	7 1/2	18	9 1/2	150 and up

OIL OR 1 LIGHT ELECTRIC ONLY

No.	Galvanized Each	Polished Brass Each	Polished Copper Each
84	\$19.00	\$26.00	\$30.00
85	21.50	28.50	32.50
86	29.00	38.00	43.00

No. 84 and 85—Oil and one light electric equipment, add \$1.50 each.
No. 86—Oil and one light electric equipment, add \$2.00 each; oil and two light electric equipment, add \$2.50 each.
For mogul 3 wire socket, add \$3.25 each.

For Old Style 180 Degree Bow Lights, See Page 31.

Mogul 3 Wire Socket and Bulb

FOR SIDE, MASTHEAD AND STERN LIGHTS

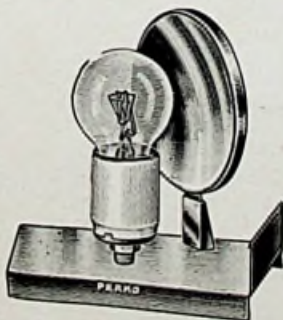


Fig. 1081

Sliding platform with mogul 3 wire socket, double filament bulb, reflector and watertight stuffing gland in bottom for wire.

	Each
Complete except bulb	\$ 6.00
Complete with bulb	11.00
Bulb only, 50-50 watt	4.80
Bulb only, 100-100 watt	5.00
Without reflector deduct	1.25

FOR ANCHOR AND NOT UNDER COMMAND LIGHTS



Fig. 1082

Fount base, swivel type with mogul 3 wire socket, double filament bulb, and watertight stuffing gland in bottom for wire.

	Each
Complete except bulb	\$3.25
Complete with bulb	8.00
Bulb only, 50-50 watt	4.80
Bulb only, 100-100 watt	5.00

For further information on Mogul 3 wire sockets see Page 25



LIGHTS FOR VESSELS OVER 65 FEET LONG
WATERPROOF—ELECTRIC ONLY—NEW REGULATIONS
WITH MOGUL 3 WIRE SOCKET AND DOUBLE FILAMENT BULB

These lights are constructed in accordance with new specifications on construction of electric navigation lights recently submitted to us by the U. S. Department of Commerce, Bureau of Marine Inspection and Navigation. These specifications are now in effect on lights for new vessels under construction and on replacements of lights on other vessels.

All have cast bronze threaded caps with rubber gasket for replacing of bulbs, also packing glands for entrance of electric cable. All are equipped and furnished with mogul 3 wire socket and double filament bulb.

Brackets and mounting lugs are arranged exactly the same as those on our oil lights to facilitate replacement when necessary.

Top opening in all lights below is 4 3/4 inches.

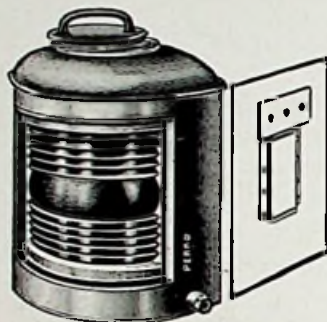


Fig. 1150

Side Lights

112 1/2 DEGREES—10 POINTS OF COMPASS
 FURNISHED IN PAIRS, GREEN FOR STARBOARD AND RED FOR PORT
 WITH CHANNEL SHAPED SOCKET AND BRACKET FOR MOUNTING

No.	Galvanized Per Pair	Polished Brass Per Pair	Polished Copper Per Pair	Size of Lens Inches	Height Less Handle Inches	Size Base Inches	For Size Vessel Feet
1	\$62.00	\$67.00	\$75.00	6 3/4 x 8 3/4	11	7 1/4 x 7 1/4	65 to 149
2	72.00	77.00	85.00	7 1/2 x 11 1/2	13 1/2	9 1/2 x 9 1/2	150 and up

With one light electric medium screw socket, deduct \$3.00 per pair.

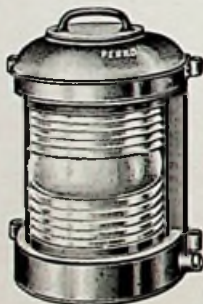


Fig. 1151

Masthead, Range and Towing Lights

225 DEGREES—20 POINTS OF COMPASS—CLEAR LENS
 WITH FOUR CAST METAL LUGS FOR MOUNTING

No.	Galvanized Each	Polished Brass Each	Polished Copper Each	Size of Lens Inches	Height Less Handle Inches	Size Base Inches	Center to Center of Lugs Inches	For Size Vessel Feet
1	\$37.50	\$40.00	\$44.00	6 3/8 x 11 1/2	11	7 7/8 x 7 3/4	8 3/8	65 to 149
2	42.50	45.00	49.00	7 x 17	13 1/2	9 x 10	10 7/8	150 and up

With red, green or blue lens, add \$5.00 each.

With one light electric medium screw socket, deduct \$1.50 each.



Fig. 1152

Stern, Towing and Overtaken Lights

135 DEGREES—12 POINTS OF COMPASS—CLEAR LENS
 WITH FOUR CAST METAL LUGS FOR MOUNTING

No.	Galvanized Each	Polished Brass Each	Polished Copper Each	Size of Lens Inches	Height Less Handle Inches	Size Base Inches	Center to Center of Lugs Inches	For Size Vessel Feet
1	\$37.50	\$40.00	\$44.00	6 3/8 x 7	11	7 x 7 1/2	8 3/8	65 to 149
2	42.50	45.00	49.00	7 3/8 x 9 1/2	13 1/2	9 x 10	11 1/8	150 and up

With red, green or blue lens, add \$5.00 each.

With 45 degree red lens for self propelled suction dredges, add \$5.00 each.

With one light electric medium screw socket, deduct \$1.50 each.



LIGHTS FOR VESSELS OVER 65 FEET LONG
WATERPROOF—ELECTRIC ONLY—NEW REGULATIONS
WITH MOGUL 3 WIRE SOCKET AND DOUBLE FILAMENT BULB



Fig. 1153

Anchor Lights

360 DEGREES—CLEAR LENS

WITH FOUR LASHING EYES AND WIRE GUARDS AROUND LENS

No.	Galvanized Each	Polished Brass Each	Polished Copper Each	Colored Lens Add Each	Size of Lens Inches	Height Less Handle Inches	Diam. Base Inches	For Size Vessel Feet
1	\$32.50	\$35.00	\$39.00	\$3.50	6 3/8 x 5 3/8	12 1/2	7 3/8	65 to 149
2	37.50	40.00	44.00	5.00	7 x 7 1/2	14 1/4	9 1/2	150 and up

With one light electric medium screw socket, deduct \$1.50 each.

Colored lenses are red, green or blue.



Fig. 1154

Not Under Command Lights

360 DEGREES—RED LENS

WITH FOUR LASHING EYES AND WIRE GUARDS AROUND LENS

No.	Galvanized Each	Polished Brass Each	Polished Copper Each	Size of Lens Inches	Height Less Handle Inches	Diam. Base Inches	For Size Vessel Feet
1	\$36.00	\$38.50	\$42.50	6 3/8 x 5 3/8	12 1/2	7 3/8	65 to 149
2	42.50	45.00	49.00	7 x 7 1/2	14 1/4	9 1/2	150 and up

With one light electric medium screw socket, deduct \$1.50 each.

Double Filament Bulb

MOGUL BASE FOR 3 WIRE SYSTEM

120 VOLTS

Eliminates the method of using two separate bulbs in two light electric installations. Lamps are always properly focused.

Should one filament burn out it will be indicated on the telltale panel, the other filament can be immediately switched into use.



Fig. 532

Watts	Each	Height Overall Inches	Diam. Inches
50-50	\$4.80	5	3 1/8
100-100	5.00	5	3 1/8

Mogul Socket

PORCELAIN—FOR 3 WIRE SYSTEM

This socket is for use with our double filament bulb Fig. 532. All the lights on Pages 28 and 29 are equipped with this socket installed on a special cast bronze base having a direct lead to the watertight stuffing gland in the outside body of light.



Fig. 533

Socket Only, \$1.50 Each



LIGHTS FOR VESSELS OVER 65 FEET LONG

FLAT TOP STYLE—ELECTRIC ONLY—NON-WATERPROOF

All constructed of heavy materials. All are the bottom opening type and furnished complete with swivel type one light electric fount as regular equipment.

Side Lights

112½ DEGREES—10 POINTS OF COMPASS



With channel socket and bracket for mounting.

No.	Size of Lens Inches	Height Less Handle Inches
109	5¾ x 8½	10½
110	6¾ x 8¾	11
111	7½ x 11½	13½

No.	Size Base Inches	For Size Vessel Feet
109	6½ x 6½	65 to 90
110	7¼ x 7¼	91 to 149
111	9½ x 9½	150 to 450

Fig. 30

No.	Galvanized Per Pair	Polished Brass Per Pair	Polished Copper Per Pair	Mogul 3 Wire Socket Add Per Pair
109	\$26.00	\$36.00	\$46.00	\$6.50
110	28.00	38.00	48.00	6.50
111	38.00	50.00	60.00	6.50

Anchor Lights

360 DEGREES—CLEAR LENS



With four lashing eyes and wire guards around lens.

No.	Size of Lens Inches	Height Less Handle Inches
122	5¾ x 5¾	11
122½	6¾ x 5¾	12
123	7 x 7½	14½

No.	Diam. Inches	For Size Vessel Feet
122	7½	65 to 90
122½	7½	91 to 149
123	9½	150 to 450

Fig. 32

No.	Galvanized Each	Polished Brass Each	Polished Copper Each	Colored Lens Add Each	Mogul 3 Wire Socket Add Each
122	\$14.00	\$21.00	\$25.00	\$3.00	\$3.25
122½	16.00	23.00	27.00	3.50	3.25
123	20.00	29.00	34.00	5.00	3.25

Masthead, Range and Towing Lights

225 DEGREES—20 POINTS OF COMPASS

With four cast metal lugs for mounting.



CLEAR LENS

No.	Size of Lens Inches	Width Centers of Lugs Inches	Height Less Handle Inches
1	5¾ x 11½	8¾	10½
2	6¾ x 11½	8¾	11
3	7 x 17	10½	13½

No.	Size Base Inches	For Size Vessel Feet
1	7x7	65 to 90
2	7x7	91 to 149
3	9x9½	150 to 450

Fig. 983

No.	Galvanized Each	Polished Brass Each	Polished Copper Each	Mogul 3 Wire Socket Add Each
1	\$19.00	\$23.00	\$28.50	\$3.25
2	20.00	24.00	29.50	3.25
3	25.00	30.00	36.00	3.25

Stern, Towing and Overtaken Lights

135 DEGREES—12 POINTS OF COMPASS

With four cast metal lugs for mounting.



CLEAR LENS

No.	Size of Lens Inches	Width Centers of Lugs Inches	Height Less Handle Inches
4	5¾ x 7	8¾	10½
5	6¾ x 7	8¾	11
6	7¾ x 9½	10½	13½

No.	Size Base Inches	For Size Vessel Feet
4	7x7	65 to 90
5	7x7	91 to 149
6	9x9½	150 to 450

Fig. 986

No.	Galvanized Each	Polished Brass Each	Polished Copper Each	Mogul 3 Wire Socket Add Each
4	\$19.00	\$23.00	\$28.50	\$3.25
5	20.00	24.00	29.50	3.25
6	25.00	30.00	36.00	3.25

Figs. 983 and 986 with red, green or blue lenses, add \$5.00 each.

Not Under Command Lights

360 DEGREES—RED LENS



With four lashing eyes and wire guards around lens.

No.	Size of Lens Inches	Height Less Handle Inches
122	5¾ x 5¾	11
122½	6¾ x 5¾	12
123	7 x 7½	14½

No.	Diam. Inches	For Size Vessel Feet
122	7½	65 to 90
122½	7½	91 to 149
123	9½	150 and up

Fig. 84

No.	Galvanized Each	Polished Brass Each	Polished Copper Each	Mogul 3 Wire Socket Add Each
122	\$17.00	\$24.00	\$28.00	\$3.25
122½	19.50	26.50	30.50	3.25
123	25.00	34.00	39.00	3.25

Mogul 3 Wire Socket and Bulb

FOR ALL LIGHTS ON THIS PAGE



Fig. 1082

Fount base, swivel type with mogul 3 wire socket, double filament bulb, and watertight stuffing gland in bottom for wire.

	Each
Complete except bulb	\$3.25
Complete with bulb	8.00
Bulb only—50-50 watt	4.80
Bulb only—100-100 watt	5.00

Lights Nos. 3, 6, 111, 123 can be furnished with old style two light electric equipment as Fig. 289—add \$.50 to above prices for each light.



OLD STYLE 180 DEGREE BOW LIGHTS

All made of extra heavy metal. Galvanized lights are made of black steel and hot galvanized after fabrication. Brass and copper lights are highly polished. All regularly furnished with four cast metal lugs for mounting. Figs. 22 and 31 can be obtained with back T bracket if desired.

Turret Top Style



Fig. 22

OIL ONLY, ELECTRIC ONLY OR OIL AND ELECTRIC

No.	Size of Lens		Extreme Height Inches	Height of Frame Inches	Size Base Inches	Weight Each Lbs.	For Size Vessel Feet
	Height Inches	Circum. Inches					
14	5 1/2	9 1/2	16 1/2	10 1/2	7 x 7	8	65 to 90
15	6 5/8	9 1/2	17	11	7 1/2 x 7	9	91 to 149
16	7 3/8	12 1/2	21 1/4	13 3/4	9 x 9 1/2	14	150 to 450

PRICE EACH—CLEAR LENS

No.	Galvanized	Brass	Copper
	14	\$13.00	\$18.00	$23.00
15	14.00	19.00	24.00
16	19.00	25.00	30.00

WITH RED, GREEN OR BLUE LENSES

14	\$16.00	\$21.00	\$26.00
15	17.50	22.50	27.50
16	24.00	30.00	35.00

FOR COMBINATION OIL AND ELECTRIC EQUIPMENT

No. 14 and 15—For oil and one light electric equipment, add \$1.50 each to above prices.
 No. 16—For oil and one light electric equipment, add \$2.00 each. Oil and two light electric equipment, add \$2.50 each to above prices.
 All with mogul 3 wire socket, add \$3.25 each.

American Improved Style

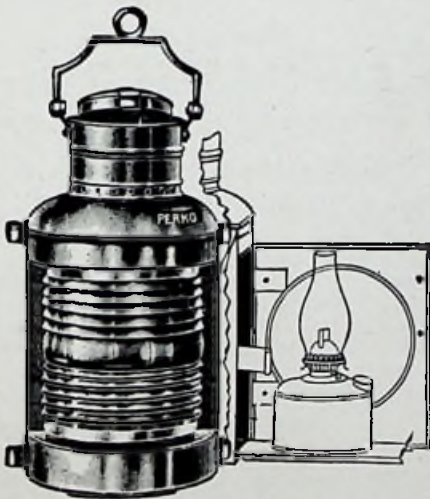


Fig. 25

OIL ONLY, ELECTRIC ONLY OR OIL AND ELECTRIC

No.	Size of Lens		Extreme Height Inches	Height of Frame Inches	Width Inches	Weight Each Lbs.	For Size Vessel Feet
	Height Inches	Circum. Inches					
76	5 1/2	9 1/2	14	11	7x7	10	65 to 90
77	6 5/8	9 1/2	15	11 3/4	7x7	11	91 to 149
78	7 3/8	12 1/2	18	13 1/2	9x9 1/2	17	150 to 450

PRICE EACH—CLEAR LENS

No.	Galvanized Iron	Polished Brass	Polished Copper
	76	\$20.00	\$25.00	$30.00
77	21.00	26.00	31.00
78	25.00	33.00	38.00

WITH RED, GREEN OR BLUE LENSES

76	\$23.00	\$28.00	\$33.00
77	24.50	29.50	34.50
78	30.00	38.00	43.00

FOR COMBINATION OIL AND ELECTRIC EQUIPMENT

For oil and one light electric equipment, add \$2.50 each to above prices.
 For oil and two light electric equipment, add \$3.00 each to above prices.
 With mogul 3 wire socket, add \$6.00 each.

Flat Top Style

1 LIGHT ELECTRIC ONLY



Fig. 31

No.	Size of Lens		Height less Handle Inches	Extreme Height Inches	Size Base Inches	Net Weight Each Lbs.	For Size Vessel Feet
	Height Inches	Circum. Inches					
114	5 1/2 x 9 1/2	9 1/2	11	13 1/2	7 x 7	6	65 to 90
115	6 5/8 x 9 1/2	9 1/2	11 3/4	14 1/4	7 1/2 x 7	6 1/2	91 to 149
116	7 x 12 1/2	12 1/2	13 1/2	16	9 x 9 1/2	10 1/2	150 to 450

Clear Lens

No.	Galvanized Each	Polished Brass Each	Polished Copper Each
	114	\$13.00	\$18.00	$23.00
115	14.00	19.00	24.00
116	19.00	25.00	30.00

Red, Green or Blue Lens

No.	Galvanized Each	Polished Brass Each	Polished Copper Each
	114	\$16.00	\$21.00	$26.00
115	17.50	22.50	27.50
116	24.00	30.00	35.00

No. 116 can be furnished with 2 light electric equipment, add \$.50 each.
 All with mogul 3 wire socket, add \$3.25 each.



LIGHTS FOR VESSELS OVER 450 FEET LONG

AMERICAN IMPROVED STYLE

Made of extra heavy gauge metal for use on the larger ocean service vessels. Heavy cast bronze trimmings, body is riveted and soldered, heavy wire guards soldered and reinforced. Furnished complete with back door, sliding fount, burner, wick, chimney and reflector.

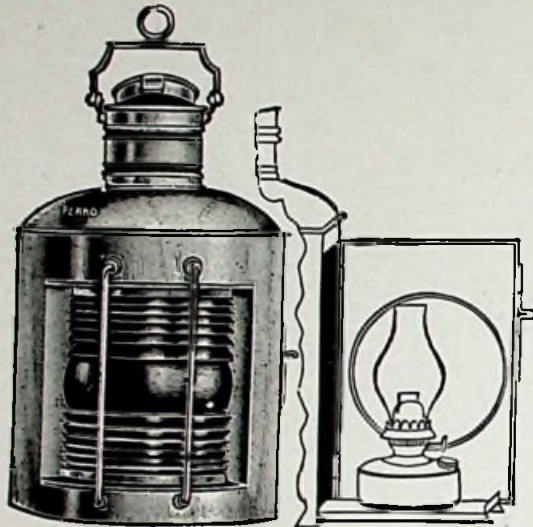


Fig. 27

8-Inch Face Side Lights

112½ DEGREES—10 POINTS OF COMPASS
FURNISHED IN PAIRS, GREEN FOR STARBOARD AND
RED FOR PORT

WITH CHANNEL SHAPED SOCKET AND BRACKET
FOR MOUNTING

Extreme Height Less Handle, 20¼ inches
Height of Frame, 15½ inches
Width, 9½ inches x 9¾ inches
Size of Lens, 8¾ inches x 9¾ inches
Weight, Per Pair, 36 pounds

	Polished Brass Per Pair	Polished Copper Per Pair
Oil or one light electric only	\$72.00	\$80.00
Oil and one light electric	77.00	85.00
Oil and two light electric	78.00	86.00
With mogul 3 wire socket	84.00	92.00

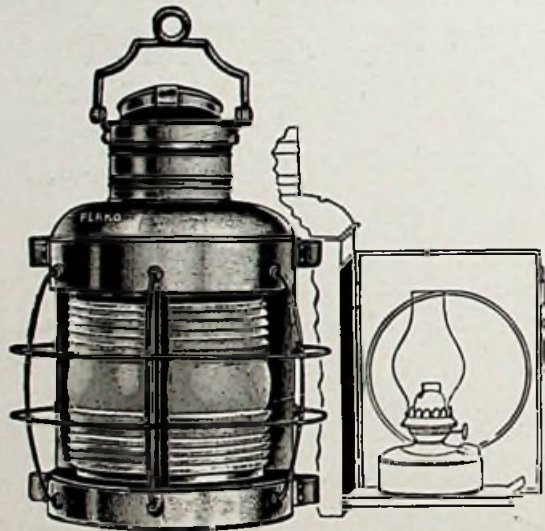


Fig. 28

8-Inch Double Face Masthead, Range and Towing Lights

225 DEGREES—20 POINTS OF COMPASS—CLEAR LENSES

WITH FOUR CAST METAL LUGS FOR MOUNTING

Extreme Height Less Handle, 20 inches
Height of Frame, 14¼ inches
Width, 12 inches x 9¾ inches
Width, Centers of Lugs, 13¾ inches
Size of Lens, 8¾ inches x 20 inches
Net Weight, Each, 19 pounds

	Polished Brass Each	Polished Copper Each
Oil or one light electric only	\$66.00	\$78.00
Oil and one light electric	68.50	80.50
Oil and two light electric	69.00	81.00
With mogul 3 wire socket	72.00	84.00
With red or green lenses, add \$6.00 each.		

135 Degree Stern, Towing and Overtaken Lights

Use Fig. 984, Light No. 6, Page 26

360 Degree Anchor Lights

Use Fig. 26, Light No. 86, Page 27

360 Degree Not Under Command Lights

Use Fig. 29, Light No. 86, Page 27



LIGHTS FOR VARIOUS TYPES OF CRAFT—INLAND RULES

TABLE I

Note: Ocean-going vessels lighted according to the International Rules are not required to change their lights when navigating waters tributary to the High Seas.

	Bow (Foremast or Forward)	Side	Range	Remarks or Additional Lights
1	MOTOR BOATS Class 1— less than 26'	Combination red and green each color showing 10 pts.	White 32 pt. ¹	¹ Placed higher than combination
2	Class 2— 26' to 40'	Red—10 pt. Green—10 pt. 16 sq. in. lens 18 in. screens	White—32 pt.	All lenses fluted or fresnel
3	Class 3— 40' to 65'	Red—10 pt. Green—10 pt. 25 sq. in. lens 24 in. screens	White—32 pt.	All lenses fluted or fresnel
4	If propelled by sail and machinery or under sail alone	Same as classes 1, 2, and 3	None	White light or flare shown aft to overtaking vessel
5	Sailing vessel or vessel in tow (except barges, canal boats, scows, etc.)	Red—10 pt. Green—10 pt.	None	White light or flare shown aft to overtaking vessel
6	Steam and motor vessels over 65' in length (except those vessels falling in classifications noted below)	Red—10 pt. Green—10 pt. Vis. 2 mi. 36 in. screens	White—32 pt. ²	² At least 15 feet higher than foremast light
7	Double-ended ³ ferry boat	Red—10 pt. Green—10 pt. Vis. 2 mi. 36 in. screens	White—32 pt. ⁴	³ If not of double-ended type, carries same lights as inland steamer ⁴ On both pilot houses at same height. Special light amidships designates line
8	Steam pilot vessel on station ⁵ on pilotage duty and underway ⁶	Red—10 pt. Green—10 pt.	None	White 32 pt. at masthead 8' above red 32 pt., each vis. 2 mi. Shows flares at intervals of not more than 15 min. ⁵ If not on station, carries same lights as other steam vessels ⁶ On station at anchor, side lights are extinguished
9	Fishing vessel underway engaged in commercial fishing ⁷	Red—10 pt. Green—10 pt.	None	Red 32 pt. 6 to 12' above white 32 pt. not more than 10' apart horizontally. White vis. 3 mi.; red 2 mi. ⁷ If underway, but not fishing, carries usual lights of her class, except vessel under 10 gross tons may show combination red and green lantern to other vessels, in lieu of fixed side lights
10	Inland ⁸ tug without tow ⁹	Red—10 pt. Green—10 pt.	White 32 pt. ¹⁰	⁸ Lighted same as ordinary inland steam vessel ⁹ At least 15' higher than foremast light ¹⁰ For lights of ocean-going tug on inland waters, see International Rules, Table II
11	Inland tug with tow alongside	Red—10 pt. Green—10 pt. Note A	None	Two white 32 pt., vertically arranged, at least 3' apart. ¹¹ If side light is obstructed by vessel towed, light is transferred to outside of tow.
12	Inland ¹² tug with tow astern	Red—10 pt. Green—10 pt.	None	Three white 32 pt. lights, vertically arranged, at least 3' apart ¹² For lights of ocean-going tug on inland waters, see International Rules, Table II
13	Rowboat (under oars or sail)	None	None	White light shown on approach of another vessel.
14	Vessels working on a wreck	None	White 32 pt. stern light ¹³ (each outside vessel)	Two red 32 pt. in vertical line, 3 to 6' apart, at least 15' above decks ¹³ White lights at least 6' above decks



11 and 24



2



6



4



7

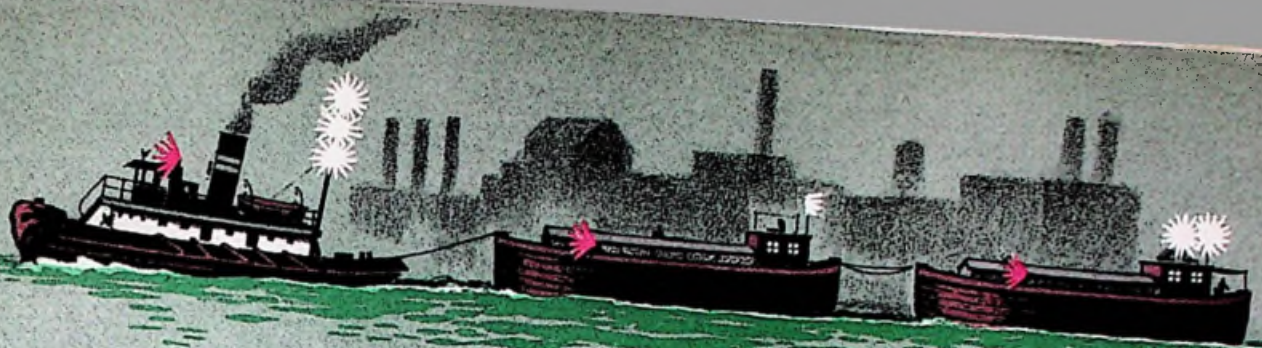


5



12 and 21

LESTER FAGANS



12 and 22

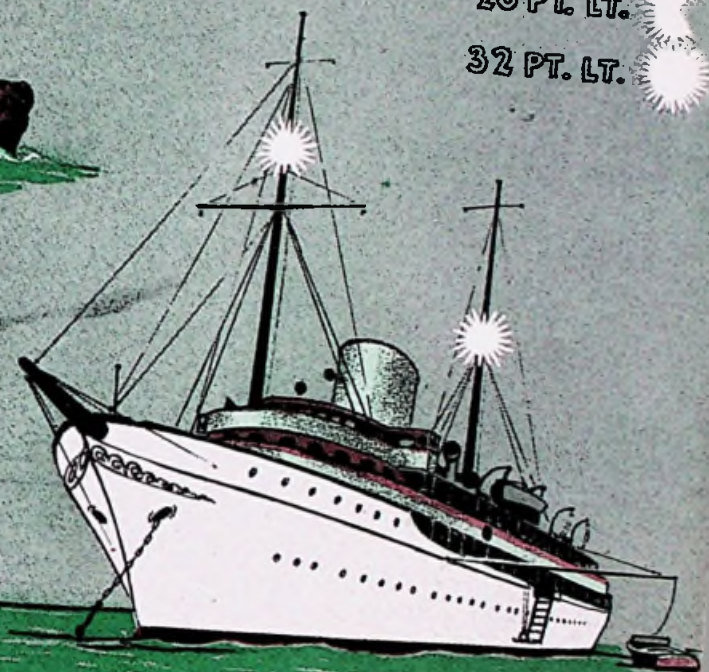
10 PT. LT.
20 PT. LT.
32 PT. LT.



11 and 24



19



20



12 and 23



12 and 25





LIGHTS FOR VARIOUS TYPES OF CRAFT—INLAND RULES

TABLE I (Continued)

	Bow (Foremast or Forward)	Side	Range	Remarks or Additional Lights
15 Dredge (held in position by moorings or spuds)	None	None	None	White 32 pt. each corner at least 6' above deck Two red 32 pt. in vertical line 3 to 6' apart, at least 15' above deck Scows moored alongside show white 32 pt. on each outboard corner, at least 6' above deck
16 Dredge (self-propelling suction type, underway, with suction on bottom)	White 20 pt.	Red—10 pt. Green—10 pt.	White 32 pt.	Two red 20 pt. under the white 20 pt. foremast light, 3 to 6' apart Upper red light 4 to 6' below white light At stern two red 4 pt. showing aft, in vertical line 4 to 6' apart
17 Vessel towing wreck	None	Red—10 pt. Green—10 pt.	None	Four vertical 32 pt. towing lights, 3 to 6' apart. Upper and lower white; two middle lights red
18 Naval patrol vessel ¹⁷	None	Red—10 pt. Green—10 pt.	None	Three 32 pt. in vertical line. Upper and lower white; middle one red ¹⁷ No mention of special lights for naval vessels is made in Inland or International Rules
19 At anchor—vessel under 150' in length	None	None	None	One white 32 pt. forward, vis. 1 mi. not more than 20' above hull
20 At anchor—vessel 150' in length or over	None	None	None	One white 32 pt. forward 20 to 40' above hull. One white 32 pt. aft, at least 15' lower than forward light. Vis. 1 mi.

LIGHTS FOR BARGES, CANAL BOATS AND SCOWS IN TOW ON INLAND WATERS

TABLE IA

Except Great Lakes, east to Montreal—Red River of the North—Rivers emptying into Gulf of Mexico—Hudson River (Troy to Sandy Hook)—East River and Long Island Sound—Narragansett Bay—Lake Champlain—and other tributaries. See Table IB.

	Bow	Side	Stern	Remarks or Additional Lights
21 One barge or canal boat towed astern of tug	None	Green—10 pt. Red—10 pt. Vis. 2 mi.	Two white 32 pt. athwartship horizontal. At least 5' apart and at least 4' above deckhouse	None
22 More than one barge or canal boat towed astern in tandem	None	Green—10 pt. Red—10 pt. Vis. 2 mi.	¹⁸ One white—12 pt. Vis. 2 mi.	¹⁸ Except last vessel of tow which carries instead, two 32 pt. white athwartship horizontal at least 5' apart and at least 4' above deckhouse
23 More than one barge or canal boat towed astern abreast (one tier) ¹⁹	None	Green—10 pt. Red—10 pt. Vis. 2 mi. (carried at outer sides of bows of outside boats)	¹⁹ One white—32 pt. on each outside boat	¹⁹ If more than one tier, white stern lights are placed on outside boats of last tier only
24 Barges or canal boats towed alongside of tug	None	Colored side lights carried on outer side of outside barge if side lights of towing vessel are obstructed by barge	None	None
25 Scows towed singly or tandem	White 32 pt.	None	White 32 pt.	Lights to be carried at least 8' above surface of water. Vis. 5 mi.
26 Scows massed in tiers, two or more abreast	White 32 pt. on outer side of all outside scows	None	White 32 pt. on outer side of outside scows in last tier only	Lights to be carried at least 8' above surface of water. Vis. 5 mi.



LIGHTS FOR VARIOUS TYPES OF CRAFT—INTERNATIONAL RULES

TABLE II

*Note.—See Table III for proposed changes in requirements marked *.

	Bow (Foremast or Forward)	Side	Range	Remarks or Additional Lights
27	Steam or motor vessels of less than 40 gross tons ¹	White—20pt. at least 9' above gunwale. Vis. 2 mi.*	Red—10 pt. Green—10 pt. Vis. 1 mi. or combination red and green, each color showing 10 pts. At least 3' below foremast light	None 12 pt. white showing aft,* or shows light to approaching vessels ¹ Optional to carry instead of lights indicated those regularly prescribed for larger steam vessels
28	Vessels under oars or sails under 20 gross tons	None	Combination red and green, each color showing 10 pts. shown to approaching vessels	None Shows white light or flare to overtaking vessel
29	Rowboats, under oars or sails	None	None	None Shows white light to approaching vessels
30	Sailing vessel or vessel in tow	None	Red—10 pt. Green—10 pt. Vis. 2 mi. 36 in. screens	None *Shows white light or flare to overtaking vessels
31	Steam vessels (ocean liners, seagoing yachts, etc.)	White 20 pt. 20 to 40' above hull. Vis. 5 mi.	Red—10 pt. Green—10 pt. Vis. 2 mi. 36 in. screens.	White 20 pt. at least 15' higher than foremast light vis. 5 mi. This is optional.* If carried, vertical distance between white lights must be less than the horizontal
32	Pilot vessels	"	"	"
33	Open fishing boats engaged in fishing	None	None	None *32 pt. white If tackle extends over 150' from boat, show two white 32 pt.
34	Fishing vessels using drift nets or line fishing	None	None	None Two 32 pt. white 6 to 15' apart vertically; 5 to 10' apart horizontally
35	Steam trawler or dredger	Tri-colored lantern showing white ahead 4 pts., red from 2 pts. on port bow to 2 pts. abaft beam and green from 2 pts. on starboard bow to 2 pts. abaft beam	None	None White 32 pt. 6 to 12' below tricolored foremast light
36	Vessels at anchor ¹ (including fishing vessels)	None	None	None ¹ Same as prescribed under Inland Rules*
37	Vessel aground in or near fairway	None	None	None In addition to anchor lights, shows two red vertical 32 pt., indicating not under control
38	*Vessel not under control	None	None, unless under way with way on, when side lights are carried.	None Two red 32 pt. in vertical line at least 6' apart. Vis. 2 mi. 20 to 40' above the hull*
39	*Cable-laying vessel (steam)	Three 32-pt. in vertical line at least 6' apart. Upper and lower red; middle white. Vis. 2 mi. 20 to 40' above hull*	None, unless under way with way on, when side lights are carried.	None None
40	Ocean-going tug without tow	White 20 pt. 20 to 40' above hull, vis. 5 mi.	Red—10 pt. Green—10 pt. Vis. 2 mi. 36 in. screens	White 20 pt. optional* White 12 pt. showing astern. Vis. 1 mi. Optional to show flare or white light to overtaking vessel
41	Ocean-going tug with one vessel in tow	Two white 20 pt. in vertical line not less than 6' apart	Red—10 pt. Green—10 pt. Vis. 2 mi. 36 in. screens	None *Small white light aft for tow to steer by, not visible forward of the beam
42	Ocean-going tug with more than one vessel in tow if tow exceeds 600' in length	Three white 20 pt. in vertical line at least 6' apart. Third light may be not less than 14' above hull*	Red—10 pt. Green—10 pt. Vis. 2 mi. 36 in. screens	None *Small white light aft for tow to steer by, not visible forward of the beam

27



37



30 and 41



35



38



31

CHANGES IN INTERNATIONAL REGULATIONS FOR PREVENTING COLLISIONS AT SEA

TABLE III

The following changes in the International Rules were proposed by the International Conference for the Safety of Life at Sea, held in London in 1929. While it is expected that these amendments will be approved by all of the contracting governments, and despite the fact that a Presidential Proclamation was issued at Washington fixing November 7, 1936, as the date on which the amendments would go into effect in the United States, the Department of State has advised that they can not be effective until legislative action has been taken by each of the countries involved.

Regulation Affected	Existing Law (July, 1937) See Table II	Proposed Change
Preliminary definition	A steam vessel includes any vessel propelled by machinery Defines length of a vessel in Art. 11 as the length appearing in her certificate of registration	Sentence added: "The term 'under steam' shall mean under any mechanical power." Definition unchanged but included in preliminary definitions instead of Art. 11.
Art. 1. Display of lights and those other than prescribed by rules	The rules concerning lights shall be complied with in all weathers from sunset to sunrise, and during such time no other lights which may be mistaken for the prescribed lights ³⁰ shall be exhibited	³⁰ Add here "or impair their visibility."
Art. 2 (e). After range light for steam vessels	Optional	Made compulsory for vessels 150 feet or more in length—optional with vessels under 150 feet.
Art. 2. Display of lights by naval vessels of special construction	No provision made as to how naval vessels of special construction, such as submarines, shall display lights when impossible to comply with regular laws for vessels of their class	Provision added that "In naval vessels of special construction in which it is not possible to comply fully with the provisions of this article as to the position of lights or their range of visibility, those provisions shall be followed as closely as circumstances will permit."
Art. 3. Position of towing lights on towing vessels	Each of the white towing lights shall be carried in the same position as the 20-point white foremast light, excepting the third light for tows over 600 feet which may be carried at a height of not less than 14 feet above the hull	Would require one of the towing lights to be carried in the same position as the 20-point white foremast light and the lowest light shall be carried at a height of not less than 14 feet above the hull. (Number and kind of towing lights remain the same)
Art. 3. Steering lights on vessels towing and being towed	Towing vessel may carry small white light abaft funnel or aftermast for towed vessel to steer by	Vessel towing and vessels towed, except last vessel of the tow, may carry in lieu of the 12-point white stern light, small white light abaft funnel or aftermast for tow to steer by.
Art. 4 (a) and (b). Minimum height of distinguishing lights for vessels not under command and cable-laying vessels	Two red vertical lights of vessel not under command and three (red, white, red) vertical lights of cable-laying vessel to be carried at same height as white foremast light	Two red vertical lights of vessel not under command and three (red, white, red) vertical lights of cable-laying vessel must be arranged so that bottom light is at least 14 feet above hull.
Art. 4 (a). Designation of vessel not under control	Specifies distinguishing lights for "a vessel which from any accident is not under command"	Words "from any accident" deleted. Lights remain unchanged.
Art. 4 (b). Designation of cable-laying vessel	Specifies distinguishing lights for "a vessel employed in laying or in picking up a telegraph cable"	Lights unchanged but words "submarine cable" substituted for "telegraph cable."
Art. 7 (a). Visibility of white foremast light for steamers of less than 40 tons	Visibility 2 miles	Visibility increased to 3 miles.
Art. 8. Visibility of distinguishing lights for pilot vessels	Visibility 2 miles	Visibility increased to 3 miles.
Art. 8. Interval between displays of flares on pilot vessels	Flare shown at intervals not exceeding 15 minutes	Flare shown at intervals not exceeding 10 minutes.
Art. 9 (a). Visibility of lights for open fishing vessels	Not specified	Visibility 2 miles.
Art. 9 (g). Visibility of anchor light for fishing vessel over 150 feet	Visibility one mile	Visibility increased to 2 miles.
Art. 9 (k). Day mark for fishing vessels	Fishing vessels underway in daylight with nets or lines or trawls out display basket or other efficient signal to approaching vessel	Such vessels must display basket regardless of approach of other vessels.
Art. 10. Lights for overtaken vessel	Optional whether she shows a white light or flare-up to overtaking vessel or carries fixed 12-point stern light with visibility of one mile	Must carry fixed 12-point white stern light. Minimum visibility 2 miles. Small boats in bad weather have option of showing light at approach of other vessels.
Art. 11. Visibility of anchor lights	Minimum visibility one mile	Visibility increased to 2 miles.
Art. 11. Day mark for vessels at anchor in or near a fairway	Not specified	One black ball (two feet in diameter) displayed forward.
Art. 11. Day mark for vessel aground in or near a fairway	Not specified	Three black balls (two feet in diameter) arranged vertically.



CHANGES IN INTERNATIONAL REGULATIONS FOR PREVENTING COLLISIONS AT SEA

TABLE III

Regulation Affected	Existing Law (July, 1937) See Table II	Proposed Change
Art. 12. Signal to attract attention	If necessary in order to attract attention, in addition to required lights, vessels may show flare-up or use detonating signal that may not be mistaken for distress signal	Would permit, in addition, use of any other efficient sound signal that cannot be mistaken for prescribed distress or fog signal.
Art. 14. Day signal for steam vessel under sail only	One black ball (same as new regulations would prescribe for vessel at anchor)	Not specified.
Art. 14. Day signal for vessel under sail and power	Not specified	One black cone point upwards, two feet in diameter at base, displayed forward.
Art. 15 (d). Fog signal for vessel over 350 feet at anchor	All vessels ring bell for five seconds at one-minute intervals, regardless of length	Bell sounded forward every minute and in addition, in the after part of the vessel, at similar intervals, a gong or other instrument which cannot be confused with the bell.
Art. 15 (e). Fog signals for vessel being towed	Permits one long and two short blasts of whistle, same as towing vessel	Requires one long and three short blasts at two-minute intervals, to be given immediately after the signal made by towing vessel. Not required if impossible to keep the tow manned. If more than one vessel in tow, last vessel gives the signal.
Art. 15 (f). Fog signal for vessel aground in or near fairway	Not prescribed. Signal usually given is bell at one minute intervals, same as for vessel at anchor	Rings bell every minute, but, in addition, gives three separate and distinct strokes on the bell immediately preceding and following each of the one-minute signals.
Art. 31. Distress signals	2. The international code signal of distress indicated by NC	Words "indicated by NC" deleted.
	3. The distant signal, a square flag and ball	"Distance" substituted for "distant."
	Not mentioned	Authorizes, for either day or night use, the international distress signal made by radio-telegraphy or radio-telephony or by any other distance signaling method.
	Not mentioned	Prohibits use of any distress signal or signals that might be confused with distress signals, except for the purpose of indicating that vessel is in distress.

LIGHTS FOR BARGES, CANAL BOATS, SCOWS, ETC., IN TOW

TABLE IB

On Hudson River (Troy to Sandy Hook)—East River, Long Island Sound, Narragansett Bay, Lake Champlain—and other tributaries

	Bow (carried 10-30' Aft Stem. Vis. 2 mi.)	Side	Stern	Remarks or Additional Lights
Towed astern singly	White—32 pt.	None	White—32 pt. Vis. 2 mi.	None
In tandem close up	White—32 pt. First or hawser boat only	None	White—32 pt. on each boat. Vis. 2 mi.	None
In tandem with intermediate hawser	White—32 pt. Each boat	None	White—32 pt. Vis. 2 mi.	"Except last boat which carries instead 2 white 32 pt. athwartship horizontal at least 5' apart and at least 4' above deckhouse
Two or more abreast in one tier, astern	White 32 pt. on outside boats only	None	White 32 pt. on each boat. Vis. 2 mi.	None
Two or more abreast in more than one tier astern	White 32 pt. on outside boats of hawser or head tier only	None	White 32 pt. on each boat. Vis. 2 mi.	None
Towed alongside	None	None	None	White 32 pt. at each outboard corner of the tow
Dump scows in tandem (operating between Hudson or East River and the high seas)	None	Red—10 pt. Green—10 pt. at least 8' above deckhouse. Vis. 2 mi.	White 12 pt.	None
Seagoing barges	None	Red—10 pt. Green—10 pt.	White 12 pt. steering light	"Except last vessel which carries instead two white 32 pt. athwartship horizontal at least 5' apart, and at least 4' above deckhouse



LIGHTS FOR VESSELS OVER 450 FEET LONG

FLAT TOP STYLE—ELECTRIC ONLY—NON-WATERPROOF

Made of extra heavy gauge metal, for use on the larger ocean service vessels. Heavy cast bronze trimmings, body is riveted and soldered, heavy wire guards soldered and reinforced. Furnished complete with back doors, sliding base with electric socket and reflector.

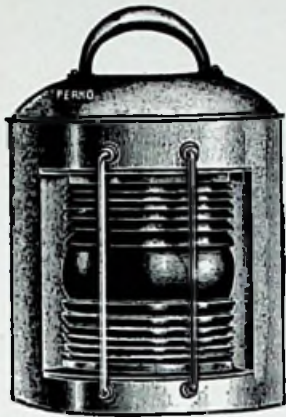


Fig. 33

8-Inch Face Side Lights

112½ DEGREES—10 POINTS OF COMPASS
FURNISHED IN PAIRS, GREEN FOR STARBOARD AND RED FOR PORT
WITH CHANNEL SHAPED SOCKET AND BRACKET FOR MOUNTING

Height Less Handle, 16 inches
Extreme Height, 18½ inches
Size of Base, 9½x9¾ inches
Size of Lens, 8¾x9¾ inches
Weight Per Pair, 30 pounds

	Polished Brass Per Pair	Polished Copper Per Pair
With one light electric socket	\$72.00	\$80.00
With two light electric socket	73.00	81.00
With mogul 3 wire socket	84.00	92.00



Fig. 34

8-Inch Double Face Masthead, Range and Towing Lights

225 DEGREES—20 POINTS OF COMPASS—CLEAR LENSES
WITH FOUR CAST METAL LUGS FOR MOUNTING

Height Less Handle, 15½ inches
Extreme Height, 18 inches
Size of Base, 9¾x12 inches
Size of Lens, 8¾x20 inches
Center to Center of Lugs, 13¾ inches
Weight, Each, 18 pounds

	Polished Brass Each	Polished Copper Each
With one light electric socket	\$66.00	\$78.00
With two light electric socket	66.50	78.50
With mogul 3 wire socket	72.00	84.00
With red or green lenses, add \$6.00 each.		

135 Degree Stern, Towing and Overtaken Lights

Use Fig. 986, Light No. 6, Page 30

360 Degree Anchor Lights

Use Fig. 32, Light No. 123, Page 30

360 Degree Not Under Command Lights

Use Fig. 84, Light No. 123, Page 30



Norwegian Regulation Running Lights

GUARANTEED TO PASS NORWEGIAN REGULATIONS ON RUNNING LIGHTS

Standard running lights of heavy construction for deep water vessels of Norwegian registry. Standard equipment consists of clear fresnel lens with colored glass shades on side lights, large oil fount, 14 ligne cosmos burner and chimney, back door on side, masthead and stern lights, hinged top on anchor lights.

TO BURN OIL OR ELECTRIC



Fig. 36



Fig. 37



Fig. 38



Fig. 39

Fig.		Size of Lens		Extreme Height Inches	Height of Frame Inches	Width Inches	Net Weight Lbs.	Unit	Price	
		Height Inches	Clr. Inches						Galv.	Copper
36	Side Lights	7	12 3/4	21 1/2	14	9 1/2 x 12	37	Pair	\$65.00	\$115.00
37	Masthead Lights	7 1/2	21	21 1/2	14	11 x 11 1/4	27	Each	50.00	65.00
38	Stern Lights	7 1/2	10 3/4	21 1/2	14	10 1/4 x 9 1/4	17	Each	45.00	60.00
39	Anchor Lights	7 1/2	10 diam.	21 1/2	14	10 1/2 diam.	22	Each	45.00	60.00

COMBINATION OIL AND ELECTRIC EQUIPMENT

For combination oil and electric, add \$3.00 to above prices.
Extra colored shades with brass frame for side lights, price, each, \$3.50.

English Regulation Running Lights

GUARANTEED TO PASS INSPECTION OF THE BRITISH BOARD OF TRADE

Standard running lights of heavy construction for deep water vessels of British registry and according to specifications of the British Board of Trade. Standard equipment consists of high grade clear fresnel lens with colored glass shade in back of lens on side lights, English cone burner and chimney, as shown on page 46, heavy nickel plated reflector, T shaped bracket. Top of light opens on cast bronze hinge.

TO BURN OIL OR ELECTRIC



Fig. 40



Fig. 41



Fig. 48



Fig. 42

Fig.		Size of Lens		Extreme Height Inches	Height of Frame Inches	Width Inches	Net Weight Lbs.	Unit	Price	
		Height Inches	Clr. Inches						Galv.	Copper
40	Side Lights	7	12 3/4	20 3/4	14 1/4	9 1/2 x 11 3/4	32	Pair	\$65.00	\$115.00
41	Masthead Lights	7 1/2	21	22	15 1/2	11 1/4 x 11 1/4	30	Each	50.00	65.00
48	Stern Lights	7 1/2	10 3/4	21 1/2	14	10 1/4 x 9 1/4	20	Each	45.00	60.00
42	Anchor Lights	7 1/2	10 diam.	20 1/2	14	10 1/2 diam.	24	Each	45.00	60.00

COMBINATION OIL AND ELECTRIC EQUIPMENT

For combination oil and electric, add \$5.00 to above prices.
Extra colored shades for side lights—Price, each, \$3.00.
Electric socket is standard Edison (medium screw base) or double contact English bayonet type.

DAY SIGNALS

All made of heavy, 8-ounce duck, double stitched, brass trimmings, folding ring on top and bottom, brass grommets, heavy galvanized rod through center, tinned wire ribs, all fold as illustrated.



Fig. 169



Fig. 170



Fig. 171



Ball Folded



Fig. 172



Fig. 173



Frustrum Folded



Fig. 175



Fig. 176

Fig. No.		Diam. Inches	Height Inches	Weight Lbs.	Price Each
169	5 Black ball signal	24	24	2 1/2	\$ 6.00
170	3 Red ball signal	24	24	2 1/2	9.00
171	4 Black and white ball signal	24	24	2 1/2	10.50
172	1 Black and white frustrum	24	48	5	25.00
173	2 Red frustrum	24	48	5	25.00
175	6 Clear towing light, galvanized	7 1/2	17	9	16.80
176	7 Red towing light, galvanized	7 1/2	17	9	20.40

RULES IN EFFECT ON DAY SIGNALS

The following signals we guarantee to cover law in confirmation with pilot rules of November 10, 1936. All of our Day Shapes are made of highest grade material and can be folded up when not in use and stowed away in a very small space.

RULE NO. 1—For vessels having submerged objects in tow, shall display in daytime one No. 1 shape and one No. 2 shape, and in the night, in addition to regulation lights, two Red No. 7 and two White No. 6 Towing Lights.

RULE NO. 2—For all style vessels fastened alongside of wrecks, or moored over a wreck, two of our No. 2 shapes are required during the day, and at night two of our No. 6 White and two of our No. 7 Red Towing Lights.

RULE NO. 3—Dredges in stationary positions require two of our No. 3 Red Balls during the day, and at night several of our No. 6 White Towing Lights and two of our No. 7 Red Towing Lights.

RULE NO. 4—For Self-Propelling Suction Dredges under way with their suctions in the bottom, require during the day two of our No. 5 Black Balls, and during the night, in addition to regulation lights, two Red Mast Head Lights and two special Four Point Red Lights.

RULE NO. 5—For vessels which are moored or engaged in laying pipe on submarine construction during the day, one No. 4 Black and White Ball and one No. 3 Red Ball, and during the night three of our No. 7 Red Towing Lights.

RULE NO. 6—Vessels of more than 300 gross tons propelled by machinery when moored or anchored in a fairway or channel shall display one No. 5 shape.

OTHER USES AND REGULATIONS FOR DAY SIGNALS

ARTICLE 4-A INTERNATIONAL RULES—A vessel which from any accident is not under command shall carry by day two No. 5 shapes.

ARTICLE 4-B INTERNATIONAL RULES—A vessel employed in laying or in picking up telegraph cable shall carry by day two No. 3 Red shapes and one No. 1 shape all White in color.

ARTICLE 14 INTERNATIONAL RULES—A steam vessel proceeding under sail only but having her funnel up shall carry by day one No. 5 shape.



Ferry Boat Side Lights

FOR DOUBLE END BOATS

OIL ONLY, ELECTRIC ONLY OR OIL AND ELECTRIC

Made from heavy sheet metal, cast bronze handle. (Galvanized lamps are made from black steel and hot galvanized after all formed up.) Brass and copper lamps formed from half hard or cold rolled. Two fresnel lenses (red and green), with inside partition dividing colors. Separate founts in each compartment, oil or electric. Has two back doors. Four lugs for fastening lamp. Made in two sizes.

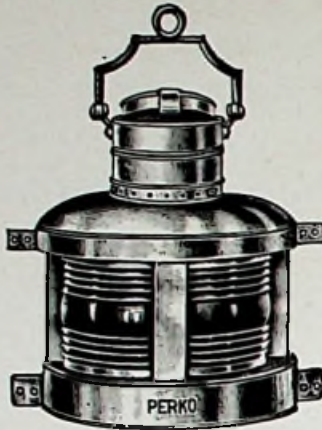


Fig. 62

Size of Lenses Inches	Extreme Height Inches	Size of Base Inches	Extreme Width Inches	Net Wgt. Each Lbs.	Extreme Height Flat Top Elec. Inches	Price Each		
						Galv.	Brass	Copper
6 3/4 x 9	19	14 1/2 x 10	17 1/2	21	13	\$65.00	\$110.00	\$130.00
7 1/2 x 11 1/2	21 1/4	17 1/4 x 11 1/2	20 3/8	27	15 1/2	84.00	130.00	150.00

Can also be had with flat top—electric only, same price as above

For combination Oil and Electric, add \$3.00 to above prices.

Pilot House Lights—For Ferry Boats

HEXAGON SHAPE

Made from 32 ounce copper (cold rolled). Spun ball top, shaped body joined together with braces inside and well soldered. Glass is 1/8 inch thick, rubber packing all around, then slid into a copper frame, which is held together by screws and wing nuts. Front hinge door, two light electric fixture on the inside. Made according to specifications.



Fig. 61

Size Nos.	Height Overall Inches	Size of Lenses Inches	Diam. of Base Inches	Net Weight Lbs.	Price Each	
					Brass	Copper
1	38	8 1/2 x 15	15	55	\$250.00	\$275.00
2	53 1/4	8 1/2 x 20	15	80	275.00	300.00

(Price does not include gilding)

Pilot House Light—For Small Size Ferry Boats

ROUND BODY WITH HEXAGON SHAPED PANELS

Spun from 32 ounce, cold rolled copper. Front hinge door, two light electric, 1/8 inch thick glasses. Rubber packing around glass held in place by screws and wing nuts.



Fig. 79

Height Overall Inches	Size of Glass Inches	Diam. of Base Inches	Net Weight Lbs.	Price Each Polished Copper
24	3 3/8 x 10	8	10 1/2	\$80.00

Anchor Staff or Pole Light

BRASS OR COPPER—ELECTRIC ONLY

With bail handle on top and bottom, medium screw base sockets, special fount held in place by pins and chain. Stuffing gland on bottom for wire outlet. Black nickel finish on brass or copper. Clear fresnel lens.



Fig. 16

Height Overall including Bails Inches	Size of Lens Inches	Height Overall less Bails Inches	Diam. Base Inches	Net Weight Each Lbs.	Price Each	
					Brass	Copper
13 1/2	4 1/4 x 4 1/4	8 3/4	5 1/2	2 1/2	\$12.00	\$15.00

With colored lens (red, green or blue), add \$2.00 to above prices.

Fisherman's Side Light

GLOUCESTER TYPE



Fig. 346

A tubular lantern which slides in through open top of light is included in the equipment, furnished in pairs, for Port and Starboard sides.

Extreme Height Inches	Diam. Bottom Inches	Size of Lens Height Inches	Size of Lens Cir. Inches	Weight Per Pair Lbs.	Galv. Per Pair
16	10	6 3/4	9	23	\$36.00
For combination oil and electric equipment					\$39.00
Gloucester Bow Lights, Each					\$20.00
Gloucester Anchor Lights, Each					24.00

Steel Buoy Light

30 DAY LIGHT—BATTERY OPERATED
RIVETED BUOY—LEAD BALLASTED



Fig. 988

The uses to which this buoy light can be put are numerous; as a marker light indicating moorings, channels, private anchorages, docks, sand bars, rocks, dredging operations, danger zones, etc. Also as a mooring buoy by use of a pick-up buoy connected to the swivel.

The body of the light is heavy gauge steel, set into the top of a heavy riveted steel buoy, and held fast by hinged bolts with wing nuts.

The top of the light containing the bulb, lens, socket, watertight toggle switch, etc., is easily removed for renewal of batteries and is fastened to the body by hinged bolts and wing nuts. Absolutely watertight.

Lens is screw type fresnel.

Four regular 1 1/2 volt dry cell batteries and a 1000 hour heavy duty bulb furnishes light for 30 consecutive days without attention.

Buoy contains lead ballast in lower end insuring upright position under all ordinary conditions.

Buoy will support 50 feet of 3/4 inch chain.

Bumper is 1 1/2 inch heavy rubber hose.

Without Lens Guard Each	With Lens Guard Each	Extreme Height Inches	Extreme Diam. Inches	Size Lens Inches	Weight Complete Pounds
\$75.00	\$80.00	58	24	5x3 1/2	100

With rubber bumper add \$5.00 each.

With red, green or blue lens add \$1.00 each.

Price does not include batteries. Furnished complete with special flasher mechanism, neon type bulb, battery, etc., giving four months of light without attention if desired. Add \$26.00 each.

Tri-Color Trawler Light

FOR STEAM TRAWLERS



Fig. 407
Oil Burning



Fig. 408
Electric Burning

Equipped with three fresnel lenses, red, white and green, of regulation size. Electric lamp is equipped with Edison base standard sockets (medium screw base), one or two light.

No.	Galv. Each	Polished Brass Each	Polished Copper Each	Extreme Height Fig. 407	Extreme Height Fig. 408	Height Lens Inches
1	\$30.00	\$40.00	\$45.00	15	11	6 3/4
2	34.00	44.00	49.00	17 1/2	13 1/4	7 3/8

Fresnel Lenses Only—Red, Green and Clear

No. 1 — \$5.50 Each

No. 2 — \$7.50 Each



Fig. 59

Regulation Pier Lights

180 DEGREE RUBY FRESNEL LENS

OIL ONLY, ELECTRIC ONLY OR OIL AND ELECTRIC

Made in accordance with specifications of the U. S. Department of Commerce regulations for lighting of bridges and piers, of heavy gauge sheet metal, 180 degree ruby fresnel lens, oil or electric equipment, brackets for mounting, made with back door and sliding fount, as shown on Fig. No. 24, page 26, or with swivel fount, Fig. No. 282, going through bottom. Medium screw sockets in electric equipment.

Extreme height, 21 inches
 Meas. of base, 9 inches x 10 inches
 Width of back, overall, 14 1/2 inches
 Net weight, each, 13 pounds
 Size of lens, 7 inches x 12 1/2 inches

	OIL OR ELECTRIC		
	Galvanized Each	Brass Each	Copper Each
With back door	\$32.00	\$38.00	\$44.00
With swivel fount	28.00	35.00	40.00

Can also be had with flat top—electric only, same price as above.
 For combination Oil and Electric, add \$2.00 to above prices.
 With green or clear lens if desired at above prices.

Mid Channel Span Light

360 DEGREE GREEN FRESNEL LENS

OIL ONLY, ELECTRIC ONLY OR OIL AND ELECTRIC

Made in accordance with regulations for lighting of bridges. Heavy gauge sheet metal with top ventilator, for oil or electric, or flat top for electric only. Swivel fount, Fig. No. 282, with No. 2 hinge burner and chimney in oil type, medium screw sockets in electric type. 360 degree fresnel lens.

Extreme height, 17 inches
 Diameter of base, 9 1/2 inches

Size of lens, 7 inches x 8 inches
 Net weight, each, 18 pounds

	Galvanized Each	Brass Each	Copper Each
With hinged top, for oil or electric	\$29.00	\$38.00	\$43.00
With hinge top, combination oil and electric	30.50	39.50	44.50
With flat top, for electric only as Fig. 32	25.00	34.00	39.00

With Ruby, Blue or Clear Lens if desired at above prices.



Fig. 80

Regulation Draw Bridge Light

OIL ONLY, ELECTRIC ONLY OR OIL AND ELECTRIC

Made of heavy sheet metal, in accordance with regulations. Square frame, in which a 360 degree clear fresnel lens is set. Glass panels in frame on all sides, two red and two green, set in opposite sides to each other. Large size swivel fount, for oil lighting, which goes through bottom of light. Medium screw sockets used as standard electrical equipment.

Height overall, 18 inches
 Size of square, 11 1/4 inches
 Net weight, each, 18 pounds

Size of lens, 7 inches x 8 inches
 Size of glass panels overall 9 1/2 inches x 10 1/2 inches
 Size of glass panels exposed 8 1/4 inches x 8 1/4 inches

	Galvanized Each	Brass Each	Copper Each
	\$40.00	\$60.00	\$80.00

Extra glass panels, red and green, price each, \$2.00.
 For combination Oil and Electric, add \$2.50 to above prices.

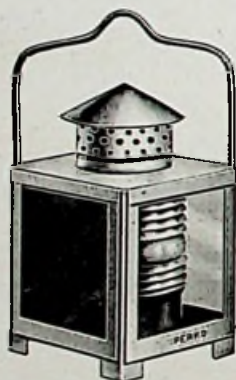


Fig. 63

Lift Bridge Lights

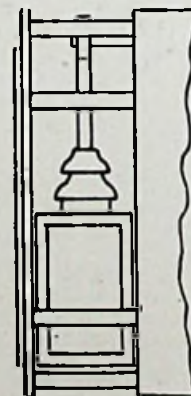
OIL OR ELECTRIC

COMPLETE AS ILLUSTRATED

Built to conform with Department of Commerce regulations on lift bridge lighting. Heavily made, well constructed.

Extreme height, 23 inches
 Extreme width, 30 inches

Oil or electric, galvanized Each \$150.00



Side View

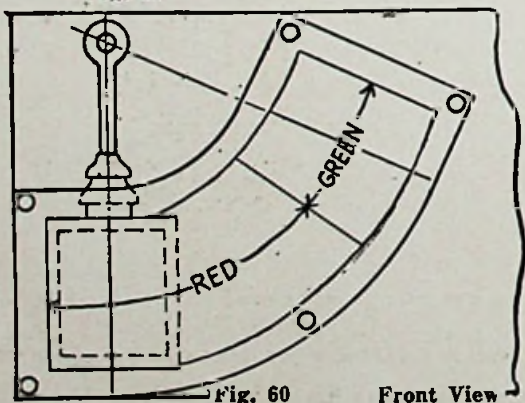


Fig. 60

Front View



CAST BRONZE BRIDGE AND PIER LIGHTS

Made in accordance with specification of U. S. Department of Commerce regulations for lighting of bridges and piers. Electric only with threaded cap for replacement of bulbs—waterproof. Medium screw sockets.

Pier Light

180 DEGREE RED LENS



Fig. 1005

Height, less handle 9 3/8 in.
 Width, centers of holes 9 3/8 in.
 Height, centers of holes 5 3/8 in.
 Width base 8 1/4 in.
 Depth base 7 1/2 in.
 Opening in top 5 in.
 Height lens 7 3/8 in.
 Circum. lens at bull's eye 12 1/2 in.
 Weight 19 1/2 lbs.

Each \$34.00
 Black nickel finish
 Furnished with green lens when desired at same price.

Mid-Channel Light

360 DEGREE GREEN LENS



Fig. 1006

Height, less handle 9 1/2 in.
 Diameter body 8 in.
 Width, ends of guides 11 1/8 in.
 Size slot in guides 3/8 x 1 in.
 Opening in top 5 in.
 Height lens 7 in.
 Diameter lens 8 in.
 Weight 22 lbs.

Each \$36.00
 Black nickel finish

Draw Bridge Light

RED AND GREEN PANEL GLASSES
 360 DEGREE CLEAR LENS

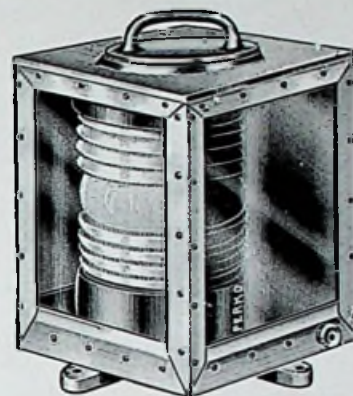


Fig. 1007

Height, less handle 11 1/2 in.
 Width of body 10 3/8 in.
 Depth of body 10 3/8 in.
 Width centers of holes 11 1/2 in.
 Height and width panels in clear 8 3/8 in.
 Opening in top 5 in.
 Height fresnel lens 7 in.
 Diameter fresnel lens 8 in.
 Weight 51 lbs.

Each \$50.00
 Black nickel finish
 Extra panel glasses 2.00

Pier Light

ON PEDESTAL
 180 DEGREE RED LENS



Fig. 125

Height overall 19 in.
 Diameter pedestal, pipe size 1 in.
 Diameter base 5 in.
 Other sizes, see Fig. 1005

Each \$40.00
 Black nickel finish

Obstruction Light

ON PEDESTAL
 360 DEGREE RED LENS



Fig. 126

Height overall 19 in.
 Diameter pedestal, pipe size 1 in.
 Diameter base 5 in.
 Other sizes, see Fig. 1006

Each \$42.00
 Black nickel finish

Lift Bridge Lights

180 DEGREE RED AND GREEN LENSES



Fig. 127

Height overall 21 1/2 in.
 Other sizes, see Fig. 1005

Each \$70.00
 Black nickel finish

Shorter pedestals furnished if desired, price as above. Longer pedestals than standard, add \$.30 per inch.

Globe—Distress or Signal Light

TURRET TOP
OIL OR ELECTRIC

Constructed of high grade, heavy materials. Colored globes are solid color—not painted. Heavy wire guards protect globe.



Fig. 44

WITH CLEAR GLOBE

Trade Size Inches	Diam. Globe Inches	Height Overall Inches	Net Weight Each Lbs.	Price Each		
				Galvanized	Brass	Copper
6	6	11	4	\$ 7.00	\$10.00	\$12.00
8	8	14½	6	8.00	12.00	14.00
10	10	22	12	15.00	20.00	23.00

WITH RUBY, GREEN, BLUE OR FROSTED GLOBES

Trade Size Inches	Galvanized	Brass	Copper
6	\$ 9.00	\$12.00	\$14.00
8	10.00	14.00	16.00
10	17.00	22.00	25.00

For combination Oil and Electric—6 and 8 inch sizes, add \$1.00.
For combination Oil and Electric—10 inch sizes, add \$1.50.

Navy or Life Boat Lantern

OIL ONLY

Heavily constructed, burns kerosene oil. Equipped with No. 1 brass burner, Fig. 246, and wick. Solid brass spring fount, Fig. 286. Clear globe, Fig. 262. Heavy guards and hinged bottom. This type of lantern approved for use on life boats.



Fig. 49

Height of Lantern Inches	Diam. of Base Inches	Size of Globe Inches	Net Weight Each Lbs.
11	5½	4 x 6½	3

	Galvanized Each	Pol. Brass Each
With Clear Globe	\$4.00	\$7.00
With Ruby, Green or Blue Globe	5.50	8.50
With Electric Fount, Fig. 292, add	.50	.50

Superior Bulkhead Lantern

With Outside Sliding Glasses

Heavy gage metal. Guards riveted to frame and reinforced with solder. Glasses easily removed by sliding through top opening in frame. Large size brass oil fount, hinge burner, lip chimney and large nickel plated reflector.



Fig. 46

Front Inches	Size Body		Height Overall Inches	Galvanized Each	Brass Each
	Inches	Side Inches			
7x11	5¾	x 11	14	\$10.00	\$15.00
8x12	6½	x 12	15½	12.00	17.00
9x13	7¾	x 13	16	14.00	19.00

With Electric Founts in Place of Oil Founts Price Same as Oil.

Engineer's Hand Lantern

OIL ONLY

A handy, small size hand lantern. Globe is well guarded. Equipped with solid brass spring fount, No. 0 brass burner, Fig. 246, and clear globe, Fig. 263.



Fig. 50

Height of Lantern Inches	Diam. of Base Inches	Size of Globe Inches	Net Weight Each Lbs.
9½	4½	2½ x 4¼	1

	Galvanized Each	Pol. Brass Each
With Clear Globe	\$3.00	\$5.00
With Ruby, Green or Blue Globe	4.30	6.30
Spring Founts Only—All Brass		.67

Anchor Light Bracket

FOR RIGGING—CAST BRONZE



Fig. 356

A cast bronze arrangement whereby the weight of the anchor light furnishes sufficient leverage to hold and stay in any part of the rigging it is desired. Furnished complete with snap hook and two lanyard eyes for hoist and release.

Each	Length Inches	Weight Ounces
\$1.75	5	9

Above items desired CHROMIUM PLATED, add 40% to Brass or Copper Prices

Philadelphia Cabin Lamp

DOUBLE SWING—WEIGHTED BASE
ALL BRASS



Fig. 137

With gimbel arrangement, cast bronze wall plate and removable fount. No. 2 burner and chimney.

No.	Polished Brass Each	Chrome Plated Each	Height Inches	Extension Inches	Capacity Fount Pints	Wall Plate Inches
2	\$8.00	\$10.00	14	8 1/2	1 1/2	4 3/8 x 2

Maine Cabin Lamp

STIFF BRACKET—NON SWING
ALL BRASS



Fig. 136

With cast bronze bracket riveted to body, removable fount. No. 2 burner and chimney.

No.	Polished Brass Each	Chrome Plated Each	Height Inches	Extension Inches	Capacity Fount Pints	Wall Plate Inches
2	\$6.00	\$8.00	12	8	1 1/2	3 x 1 7/8

Smoke Bell and Arm

SPUN BRASS BELL—CAST BRASS ARM



Fig. 128

No.	Polished Brass Each	Chromium Plated Each	Diam. Bell Inches	Extension to Center Inches	Weight Ounces
Midget	\$1.10	\$1.75	4	3 1/2	3 1/2
1	1.10	1.75	4	3 7/8	4
2	1.10	1.75	4	4 1/8	4
3	1.10	1.75	6 1/4	5 3/4	6 1/2
4	1.10	1.75	6 1/4	6 1/8	7

No. 3 size is for the old No. 1 Detroit Cabin Lamp.

No. 4 size is for the old No. 2 Detroit Cabin Lamp and Figs. 136, 137.

Newport Cabin Lamp

DOUBLE SWING—WEIGHTED BASE
ALL BRASS



Fig. 141

The ideas in construction of this lamp were suggested by Sparkman & Stevens, famous yacht designers.

This lamp is of very sturdy construction, refined appearance and minimum practical extension from wall. Furnished with burner, wick and chimney. Diameter of wall plate 2 3/4 inches.

No.	Polished Brass Each	Chrome Plated Each	Height Inches	Extension Inches	Capacity Fount Pints	Burner Number
Midget	\$5.00	\$7.00	9	5	1/2	1
1	5.00	7.00	12 1/8	5 1/2	1	1
2	6.00	8.00	12 1/2	6	1 1/4	2

Universal Wall Lamp

HEAVY TIN PLATE



Fig. 312

Constructed of heavy tin plate, black Japanned fount, polished tin reflector, handle for carrying. Furnished complete with No. 2 burner, Fig. No. 248, wick, and No. 2 sun chimney, Fig. No. 268. Hole in reflector for hanging on wall.

Each Complete	Height of Back Inches	Diam. of Fount Inches	Weight Each Lbs.
\$2.00	9	5	1 1/2



“Perko” Brass Swivel Founts

FOR DE-LITE RUNNING LIGHTS
CLASSES 1, 2 AND 3

Oil Fount



Fig. 582

For class 1 combination, class 2 and 3 side and bow lights. Body is stamped in one solid piece, no seam for leaks to develop. Brass rivets on side to lock fount in lamp. No springs to break off.

Net weight, each, 4 ounces

Diameter of fount, 2 3/4 inches

PRICE PER DOZEN

Oil fount only, Fig. 582	\$ 8.00
Oil fount and burner, complete	9.90
Electric fount (medium screw base), Fig. 588	12.00

Edison Electric Fount



Fig. 588

Brass Spring Founts

FOR OLD STYLE RUNNING LIGHTS
CLASSES 1, 2 AND 3

Oil and Electric Fount



Fig. 733

Oil Fount



Fig. 286

Oil and Electric Fount

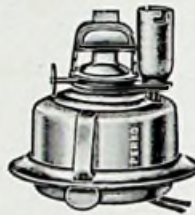


Fig. 736

Ediswan Fount Double Contact

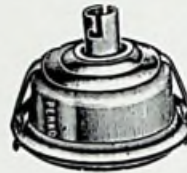


Fig. 291

Edison Fount Medium Screw Base

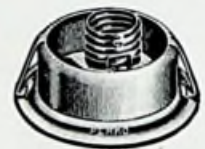


Fig. 292

Fig. 733 for Fig. 1 Combination Lights, the balance illustrated are for Classes 2 and 3 Side and Bow Lights, Fig. 06 Anchor Lights, 8 inch Globe Lights and Navy Lanterns.

	Diameter Overall Inches	Diam. Opening in Light Inches	Net Weight Per Dozen Lbs.	Price Per Dozen
Fig. 286—Oil founts	3 3/4	3 3/8	1 1/2	\$ 8.00
Fig. 291—Ediswan founts	3 3/4	3 3/8	2	12.00
Fig. 292—Edison founts	3 3/4	3 3/8	2	12.00
Fig. 290—Candelabra founts	3 3/4	3 3/8	2	12.00
Fig. 736—Oil and Electric founts	3 3/4	3 3/8	4 1/2	18.00
Fig. 733—Oil and Electric founts	3 1/2	3 5/8	3 3/4	18.00
Fig. 733—For Oil only	3 1/2	3 3/4	3	8.00

Brass Swivel Founts

FOR CLASS 1 STERN LIGHT AND 6 INCH GLOBE LIGHTS

Oil and Electric Fount



Fig. 735

Oil Fount



Fig. 287

Ediswan Fount Double Contact



Fig. 293

Edison Fount Medium Screw Base



Fig. 274

	Diameter Overall Inches	Diam. Opening in Light Inches	Net Weight Per Dozen Lbs.	Price Per Dozen
Fig. 287—Oil fount	4 1/2	4	4	\$ 8.00
Fig. 293—Ediswan fount	4 1/2	4	4	12.00
Fig. 274—Edison fount	4 1/2	4	4	12.00
Fig. 735—Oil and Electric fount	4 1/2	4	4 1/2	18.00

Brass Swivel Founts

FOR TURRET TOP LIGHTS LARGER THAN CLASS 3

Oil Fount



Fig. 282

One Light Electric Fount
Medium Screw Base



Fig. 288

Two Light Electric Fount
Medium Screw Base



Fig. 289

Made of heavy gauge brass, with brass bar passing through sides and across bottom to hold fount in lamp and act as turning handle.

Nos.	For Side Light Nos.	For Bow Light Nos.	For Anchor Light Nos.	Diam. Opening in Light Inches	Diam. Base of Fount Inches	Burner Size Nos.	Fig. 282		Fig. 288		Fig. 289	
							Brass Each	Copper Each	Brass Each	Copper Each	Brass Each	Copper Each
2	9 & 10	14 & 15	22, 22½ & 85	3¾	4¾	2	\$1.00	\$1.50	\$1.50	\$2.00	.....	.....
3	11	16	23 & 86	4¾	5¾	2	1.50	2.00	2.00	2.50	\$2.50	\$3.00

Brass Spring Founts

FOR TURRET TOP LIGHTS LARGER THAN CLASS 3

Oil Fount

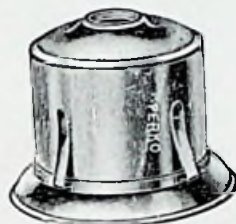


Fig. 283

Made of heavy gauge brass with brass spring clips to hold fount in lamp. Furnished for oil only, or one light and two light electric burning. Two light electric fount, Fig. No. 301.

Fig. 301 not illustrated, same as Fig. 300. but with two light electric sockets.

One Light Electric Fount
Medium Screw Base



Fig. 300

Nos.	For Side Light Nos.	For Bow Light Nos.	For Anchor Light Nos.	Diam. Opening in Light Inches	Diam. Base of Fount Inches	Burner Size Nos.	Fig. 283		Fig. 300		Fig. 301	
							Brass Each	Copper Each	Brass Each	Copper Each	Brass Each	Copper Each
5	9 & 10	14 & 15	22, 22½ & 85	3¾	4¾	2	\$1.00	\$1.50	\$1.50	\$2.00	.....	.....
6	11	16	23 & 86	4¾	5¾	2	1.50	2.00	2.00	2.50	\$2.50	\$3.00

Sliding Founts for Back Door Lights

Oil Fount



Fig. 284

One Light Electric Fount
Medium Screw Base



Fig. 281

Two Light Electric Fount
Medium Screw Base

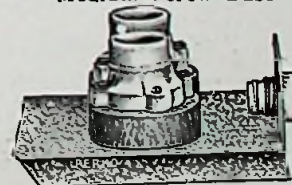


Fig. 285

Fig. 284—Oil Only fount
Fig. 281—1 Light Electric fount
Fig. 285—2 Light Electric fount

PRICE EACH	
Brass	Copper
\$2.50	\$2.75
2.50	2.75
3.00	3.25

NOTE—WHEN ORDERING SLIDING FOUNTS, PLEASE SPECIFY WHETHER FOR SIDE OR BOW LIGHTS AND GIVE FIGURE NUMBER AND SIZE. IF POSSIBLE, GIVE EXACT SIZE OF SLIDING PLATFORM.



Engineer's Lantern Globes

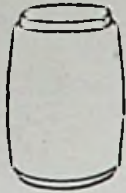


Fig. 263

Standard equipment in our engineer's lantern, Fig. No. 50.
 Diameter of top 2 3/8 in.
 Diameter of bottom 2 5/8 in.
 Height overall 4 1/4 in.
 Net weight, per dozen 6 lbs.

PER DOZEN			
Clear	Ruby	Green	Blue
\$3.00	\$8.00	\$8.00	\$8.00

Colored globes are solid colors, not painted.

Globe Light Globes



Fig. 264

Standard equipment in our globe lights, Fig. No. 44.
 Colored globes are red, green and blue, solid colors not painted. Frosted globes can also be furnished.

Size	Diameter		Height Overall Inches	Clear Each	Frosted or Colored Each
	Top	Bottom			
6	3 1/8	3 1/8	6 1/8	\$1.50	\$3.50
8	4	4	7 1/2	2.50	4.00
10	5 3/8	5 3/8	10 1/8	4.00	6.00

Navy Lantern Globes



Fig. 262

This globe is standard equipment in Navy lantern, Fig. No. 49.

Diameter of top 2 1/2 inches
 Diameter of bottom 4 inches
 Height overall 6 1/2 inches
 Net weight, per dozen 9 pounds

PER DOZEN			
Clear	Ruby	Green	Blue
\$5.00	\$18.00	\$18.00	\$18.00

Colored globes are solid colors, not painted.

Double Contact Socket FOR DE-LITE RUNNING LIGHTS



Fig. 276

BASE THREADED 1/8" I. P. S.

Standard electrical equipment in De-lite running lights, classes 1, 2 and 3.

Price, each \$.36

Socket Holder

FOR DE-LITE RUNNING LIGHTS

BRASS



Fig. 277

Standard equipment for supporting electric socket, Fig. No. 276. Complete with screws for installing.

Price, each \$.50

Electric Converter

ALL BRASS



Fig. 458

For illustration

For converting old style oil lamps into oil and electric lamps. Just remove burner from fount, place collar around threaded portion of burner and replace assembly in oil fount. Consists of double contact bayonet socket, collar and hollow nut.

Per Set, Complete \$.75

For illustration of complete conversion see Fig. 736.



Fig. 130

Color Shield

FOR COMBINATION LIGHTS
 DIVIDES RED AND GREEN LENSES

Used on class 1 combination lights, Fig. No. 01, 010, etc.

Made of heavy gauge brass or galvanized iron.

Galvanized Each	Polished Brass Each
\$.50	\$.75

T Brackets

FOR LARGE SIZE RUNNING LIGHTS



Fig. 135

Made of cast iron, hot galvanized. Standard equipment on large size running lights. Height overall, 7 1/2 inches, width overall, 5 3/8 inches, width bracket, 2 1/2 inches.

Galvanized Cast Iron, Each \$1.00

Brackets

FOR MOUNTING RUNNING LIGHTS
 MADE OF HEAVY GALV. IRON OR BRASS

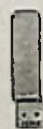


Fig. 131

No. 1—For classes 1, 2 and 3 lights.
 No. 2—For intermediate size lights.

No.	Width Inches	Height Inches	Galvanized Each	Brass Each
1	1 1/2	4 1/4	\$.30	\$.50
2	2	6 3/8	.50	



Mazda Lighting Bulbs



Fig. 337

Bulb No.	Diam. Inches	Length Overall Inches
G-6	3/4	1 1/4
S-8	1	2
S-10	1 1/4	2 1/4
S-11	1 3/8	2 3/8



Fig. 340

Bulb No.	Diam. Inches	Length Overall Inches
A-17	2 1/8	3 3/8
A-19	2 3/8	3 1/4
A-21	2 5/8	4 1/4

Volts	Candle Power	No.	Base	Price Each Clear
6-8	3	G-6	D. C.	\$.16
6-8	6	G-6	D. C.	.18
6-8	15	S-8	D. C.	.28
6-8	21	PR-11	D. C.	.30
6-8	32	PR-11	D. C.	.50
6-8	50	S-11	D. C.	.80
12-16	3	G-6	D. C.	.28
12-16	6	G-6	D. C.	.35
12-16	15	S-8	D. C.	.36
12-16	21	S-10	D. C.	.50
12-16	32	PR-11	D. C.	.70
12-16	50	PR-11	D. C.	1.00
32	3	G-6	D. C.	.75
32	6	G-8	D. C.	.80
32	15	S-8	D. C.	1.00
32	21	S-10	D. C.	1.20
32	32	PR-11	D. C.	1.40
32	50	PR-11	D. C.	1.80

Volts	Watts	No.	Base	Clear Each	Frosted Each	Natural Blue Each
6	15	A-17	Medium	\$.75	\$.60	\$1.50
6	25	A-19	Medium		.60	
6	50	A-21	Medium		.80	
12	15	A-17	Medium	.75	.60	1.50
12	25	A-19	Medium		.60	
12	50	A-21	Medium		.80	
32	15	A-17	Medium	.75	.50	1.50
32	25	A-19	Medium		.50	
32	50	A-21	Medium		.60	

New Double Filament Bulb

MOGUL BASE FOR THREE WIRE SYSTEM

120 VOLTS

Eliminates the method of using two separate bulbs in two light electric installations. Lamps are always properly focused.

Should one filament burn out it will be indicated on the telltale panel, the other filament can be immediately switched into use.

FOR DOME AND BERTH LIGHTS



Fig. 8

Bulb No.	Diam. Inches	Length Overall Inches	Price Each Clear	
S-11	1 3/8	2 3/8		
Volts	No.	C. P. or Watts	Base	Price Each Clear
6-8	S-11	21	Medium	\$1.00
12-16	S-11	21	Medium	1.10
32	S-11	15	Medium	1.80
120	S-11	15	Medium	1.50
120	S-6	6 Candelabra		.50



Fig. 532

Watts	Each	Height Overall Inches	Diam. Inches
50-50	\$4.80	5	3 1/8
100-100	5.00	5	3 1/8

Mazda Searchlight Bulbs

Volts	Watts	Candle Power	No.	Base	Diam.	Length Overall	Price Each
6-8		32	PR-11	D. C.	1 1/4	2 1/4	\$.50
6-8		50	PR-11	D. C.	1 3/8	2 3/8	.80
6-8		100	G-16 1/2	D. C.	2 1/4	3	2.50
6-8		18 amp.	P-25	Medium	3 1/8	4 3/4	5.00
12-16		32	PR-11	D. C.	1 1/4	2 1/4	.70
12-16		50	PR-11	D. C.	1 3/8	2 3/8	1.00
12-16		100	G-16 1/2	D. C.	2 1/4	3	2.50
12-16		18 amp.	P-25	Medium	3 1/8	4 3/4	6.00
32		32	PR-11	D. C.	1 1/4	2 1/4	1.40
32		50	PR-11	D. C.	1 3/8	2 3/8	1.80
32	3.5 amp.	100	G-16 1/2	D. C.	2 1/4	3	3.50
32		8 amp.	P-25	Medium	3 1/8	4 3/4	6.00
120	250		G-30	Medium	3 3/4	5 1/8	4.00
120	400		G-30	Medium	3 3/4	5 1/8	6.00
120	500		G-40	Medium	5	7 1/4	9.00
120	500		T-20	Medium	2 1/2	5 1/4	7.00



Marcy Hinge Burner
ALL BRASS—HEAVY PATTERN



Fig. 242

Standard equipment on all cabin lamps, American improved running lights, bulk-head lamps, etc.

No.	Diam. Thread Inch	Wick Inch	Per Doz.
1	3/8	3/8	\$6.00
2	1/4	3/8	6.00

Dual Burners

ALL BRASS—DOUBLE WICK



Fig. 241

No.	Diam. Thread Inch	Wick Inch	Per Doz.
1	3/8	3/8	\$10.50
2	1/4	3/8	14.50

Eagle Burner

ALL BRASS—HEAVY PATTERN



Fig. 248

Standard equipment on wall lamp, Fig. No. 312.

No.	Diam. Thread Inch	Wick Inch	Per Doz.
2	1/4	3/8	\$3.50

Cosmos or Ligne Burner

ALL BRASS—HEAVY PATTERN

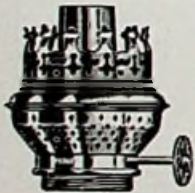


Fig. 240

Standard equipment on Norwegian running lights.

Nos. Lignes	Width Wick Inches	Per Doz.
10	2	\$10.80
14	2 3/4	12.00

Long Time Burner
HEAVY BRASS

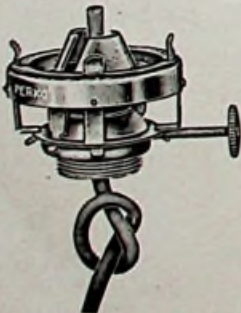


Fig. 245

Standard equipment on 10-day anchor light, Fig. No. 596.

Burners only	Per Doz.
Wicks only	\$9.00
	1.50

Marcy Lip or Dual Chimney



Fig. 267

No.	Per Dozen	Height Inches	Diam. Bottom Inches
1	\$3.50	4	1 3/8
1	4.00	4 1/2	1 3/8
1	4.00	5	1 3/8
1	3.50	6	1 3/8
2	5.00	4	2 1/8
2	5.00	4 1/2	2 1/8
2	5.00	5	2 1/8
2	4.50	6	2 1/8

Specify height of chimney when ordering.

No. 1, 4 and 6 inch, also No. 2, 6 inch are standard sizes.

All other sizes are special but carried in stock for immediate shipment.

Eagle Chimney
PLAIN TOP

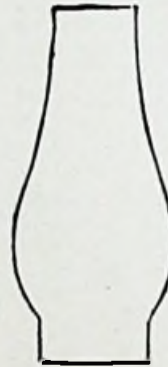


Fig. 268

Standard equipment on wall lamp. Fig. 312.

Sizes	2 or B
Diameter of bottom	2 1/8"
Diameter of top	1 3/8"
Height overall	7 1/2"
Net weight; per doz., lbs.	2

2 or B	Per Dozen
	\$4.50

Cosmos or Ligne Chimneys

Standard equipment on Norwegian running lights.



Fig. 270

	Height Overall Inches	Diam. Bottom Inches	Price Per Dozen
10 ligne	9 1/2	1 1/2	\$4.00
14 ligne	9 1/2	2	5.00

Long Time Chimney



Fig. 272

Standard equipment on ten-day anchor light, Fig. 596.

Diam. Bottom Inches	Height Inches	Per Dozen
1 1/2	1 1/8	\$6.00

Mirror Reflectors



Fig. 427

PARABOLIC
High grade parabolic mirrors designed for long distance projection of concentrated beam of light.

Standard equipment in "PERKO" Searchlights, Figs. 480, 297, 529.

	Each
8 inch diameter	\$18.00
10 inch diameter	20.00
12 inch diameter	25.00
14 inch diameter	34.00

Brass Burner



Fig. 246

No.	Diam. Thread Inch	Wick Inch	Per Doz.
0	$\frac{7}{8}$	$\frac{1}{2}$	\$1.70
1	$\frac{7}{8}$	$\frac{5}{8}$	1.90
2	$1\frac{1}{4}$	$\frac{7}{8}$	2.90

Metal Reflectors



Fig. 428

Made of heavy gauge brass, heavily plated and designed for projecting a powerful beam of light. Standard equipment in our "BEAM" Searchlights, also Figs. 548.

	Each
4 $\frac{1}{2}$ inch diameter	\$2.00
6 $\frac{1}{2}$ inch diameter	3.75
7 $\frac{1}{2}$ inch diameter	4.25
10 inch diameter	7.50

Wicks



Fig. 302

	Per Dozen
Flat Wicks, No. 0, $\frac{1}{2}$ inch wide	\$.30
Flat Wicks, No. 1, $\frac{5}{8}$ inch wide	.35
Flat Wicks, No. 2, $\frac{7}{8}$ inch wide	.45
Cosmos Wicks—10 ligne	1.30
Cosmos Wicks—14 ligne	1.40
Wicks for long time burner	1.50

Convex Front Lens

FOR SEARCHLIGHTS



Fig. 429

Standard equipment in our "BEAM" Searchlights and Streamline Searchlight, Fig. 548.

	Each
4 $\frac{1}{2}$ inch diameter	\$.80
6 inch diameter	1.00
7 $\frac{1}{2}$ inch diameter	1.00
10 inch diameter	2.75

Side Light Screens

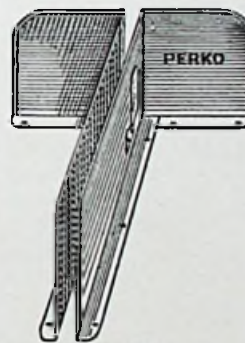


Fig. 316

Made of heavy sheet iron, well reinforced, painted red and green. Collapsible when not in use.

Class	Length Inches	Per Pair
2	18	\$2.50
3	24	3.00

Holophane Shade



Fig. 255

With threaded brass ferrule spun around top opening. Fits cabin fixtures, Fig. Nos. 83 and 553.

Outside diameter	4 in.
Height overall	1 $\frac{1}{2}$ in.
Diameter of top opening	$\frac{1}{2}$ in.
Net weight, each	3 ozs.

With Ferrule Each	Without Ferrule Each
\$1.40	\$.90

Holophane Ball Globe

2 $\frac{1}{2}$ INCH DIAMETER FOR FIXTURES AND POLE LIGHTS—CLEAR



Fig. 254

With threaded brass ferrule spun over opening. Fits cabin fixtures, Fig. Nos. 81 and 554.

Outside diameter	2 $\frac{1}{2}$ in.
Height overall	3 in.
Diameter of opening	1 $\frac{1}{4}$ in.
Net weight, each	5 ozs.

With Ferrule Each	Without Ferrule Each
\$1.50	\$1.00

Fresnel Ball Globes

1 3/8 INCH DIAMETER

With threaded brass ferrule, spun on globe, as illustrated. For pole lights, Fig. Nos. 600, 601, 602, 603, 846.



Fig. 604

Outside diameter 1 3/8 in.
Height overall 1 1/2 in.
Diameter of opening 1 1/8 in.
Net weight, each 1 oz.

Clear, Each \$.55

2 1/2 INCH DIAMETER

With threaded base, as illustrated, for pole lights, Fig. Nos. 470, 491, 498, 506, 422.



Fig. 250

Outside diameter 2 1/2 in.
Height overall 2 3/8 in.
Diameter of opening 1 1/2 in.
Diameter of thread 2 in.
Net weight, each 6 ozs.

Clear Each	Ruby Each	Green Each	Blue Each
\$.75	\$1.00	\$1.00	\$1.00

3 INCH DIAMETER

With threaded base, as illustrated, for pole lights, Fig. Nos. 508, 422, 470, 498, 506.



Fig. 251

Outside diameter 3 in.
Height overall 3 in.
Diameter of opening 1 1/2 in.
Diameter of thread 2 in.
Net weight, each 7 oz.

Clear Each	Ruby Each	Green Each	Blue Each
\$.75	\$1.00	\$1.00	\$1.00

3 INCH DIAMETER

With threaded base and rubber gasket. For mast lights, Figs. 103, 104, 105.



Fig. 249

Outside diameter 3 in.
Height overall 3 3/8 in.
Diameter of opening 2 1/4 in.
Diameter of thread 2 3/4 in.
Net weight, each 10 ozs.

Clear Each	Ruby Each	Green Each	Blue Each
\$.90	\$1.25	\$1.25	\$1.25

4 1/4 INCH DIAMETER

With threaded base, as illustrated, for mast lights, Fig. Nos. 564, 565.



Fig. 252

Outside diameter 4 1/4 in.
Height overall 3 3/8 in.
Diameter of opening 2 7/8 in.
Diameter of thread 3 in.
Net weight, each 10 ozs.

Clear Each	Ruby Each	Green Each	Blue Each
\$1.00	\$1.50	\$1.50	\$1.50

3 1/2 INCH DIAMETER

With threaded base for mast and stern lights, Figs. 112, 113, 309.



Fig. 106

Outside diameter 3 1/2 in.
Height overall 5 in.
Diameter of opening 2 1/2 in.
Diameter of thread 3 3/8 in.
Net weight, each 1 1/4 lbs.

Clear Each	Ruby Each	Green Each	Blue Each
\$1.20	\$2.30	\$2.30	\$2.30

Special Mast Light Globe

2 3/4 INCH DIAMETER

With threaded base as illustrated for mast lights Figs. 488 and 489.



Fig. 77

Outside Diameter 2 3/4 in.
Height Overall 5 1/2 in.
Diameter of Opening 1 1/8 in.
Diameter of Thread 2 3/8 in.
Net Weight Each 11 oz.

Clear Each	Ruby Each	Green Each	Blue Each
\$.80	\$2.00	\$2.00	\$2.00

Holophane or Frosted Dome Glasses

SHALLOW



Fig. 257

For Dome Lights Figs. 294 and 555.

Trade Size Inches	Each	Diam. Overall Inches	Depth Inches
3	\$.60	2 7/8	3/8
4	.70	4	5/8
5	.90	5	1 1/2
6	1.40	6	1 3/8

DEEP



Fig. 258

For Dome Lights Fig. 454.

Outside Diam. Inches	Each	Depth Inches
4	\$.70	1 3/4
6	2.80	2 3/4

Frosted Dome Glasses

SHALLOW



Fig. 132

For Dome Lights Figs. 296, 460, 753, 754.

Trade Size Inches	Each	Diam. Overall Inches	Depth Inches
3	\$.60	2 7/8	5/8
4	.70	4	5/8
5	.90	5	1 1/2
6	1.40	6	1 3/8
8	1.80	7 3/4	7/8

Ribbed Opal Dome Glasses



Fig. 133

For Dome Lights, Fig. 385

Outside Diam. Inches	Each	Extreme Depth Inches
4 1/4	\$1.20	1 1/8
5 3/8	1.85	1 3/8

Fresnel Lenses

FOR SIDE AND COMBINATION LIGHTS
112½ DEGREES

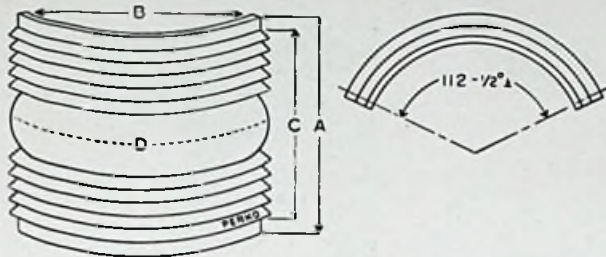


Fig. 259

For	A In.	B In.	C In.	D In.	Clear Each	Red or Green Each
O. B. Comb.	2 ⁹ / ₁₆	1 ³ / ₄	2 ¹ / ₈	3		\$.55
Cl. 1 Comb.	3 ³ / ₁₆	2 ⁹ / ₁₆	3	3 ⁵ / ₈	\$1.00	.80
Cl. 2 Side	4 ¹ / ₄	3 ³ / ₁₆	3 ¹¹ / ₁₆	4 ⁷ / ₈	1.50	1.10
Cl. 3 Side	5 ³ / ₁₆	3 ¹¹ / ₁₆	4 ¹ / ₂	5 ⁹ / ₁₆	2.00	1.35
No. 8 Side	5 ¹ / ₂	4 ¹ / ₁₆	4 ¹³ / ₁₆	5 ⁷ / ₈		2.70
No. 9 Side	5 ⁵ / ₈	5 ⁵ / ₈	4 ¹ / ₁₆	8 ¹ / ₁₆		3.70
No. 10 Side	6 ³ / ₄	6	6	8 ³ / ₄		4.20
No. 11 Side	7 ¹ / ₂	8 ³ / ₁₆	6 ¹³ / ₁₆	11 ¹ / ₁₆		8.00
8 in. Face	8 ³ / ₄	7 ¹ / ₂	8 ³ / ₁₆	9 ⁵ / ₈	7.00	8.00
Eng. or Nor.	7	9	6	12 ³ / ₈	8.00	

FOR ANCHOR LIGHTS—360 DEGREES

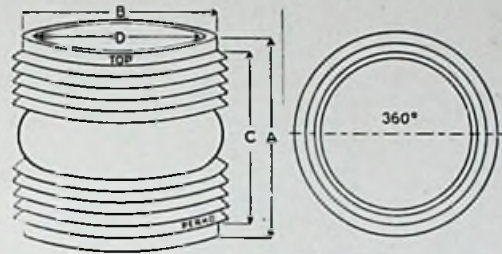


Fig. 261

For	A In.	B In.	C In.	D In.	Clear Each	Colored Each
Cl. 1 Stern	3 ⁷ / ₁₆	3 ³ / ₁₆	2 ⁷ / ₈	2 ³ / ₄	\$.75	\$1.10
Cl. 2 and 3	4 ¹ / ₄	4	3 ⁹ / ₁₆	3 ⁹ / ₁₆	1.10	1.65
No. 22 Anchor	5 ⁷ / ₁₆	5 ¹ / ₄	4 ¹³ / ₁₆	4 ¹¹ / ₁₆	3.00	5.50
No. 22½ Anchor	6 ³ / ₄	5 ¹ / ₄	6	4 ³ / ₄	4.00	7.00
No. 23 Anchor	7 ¹ / ₁₆	7 ⁷ / ₁₆	6 ¹ / ₁₆	6 ⁷ / ₈	5.60	10.50
Eng. or Nor.	7 ¹ / ₂	9 ³ / ₁₆	6 ³ / ₄	8 ⁹ / ₁₆	15.00	

FOR MASTHEAD LIGHTS—225 DEGREES

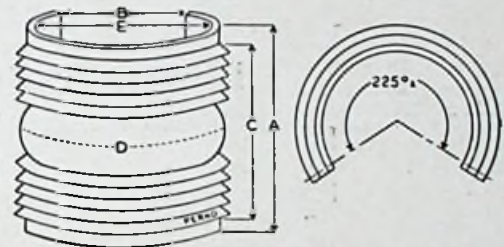


Fig. 256

For	A In.	B In.	C In.	D In.	E In.	Clear Each	Red or Green Each
No. 1 Masthead	5 ¹ / ₂	4 ³ / ₈	4 ¹³ / ₁₆	11 ¹¹ / ₁₆	4 ³ / ₄	\$5.00	\$7.00
No. 2 Masthead	6 ³ / ₈	4 ³ / ₈	5 ⁷ / ₈	11 ¹¹ / ₁₆	4 ³ / ₄	6.00	8.25
No. 3 Masthead	7 ¹ / ₁₆	6 ¹ / ₈	6 ¹ / ₁₆	16 ⁵ / ₁₆	6 ⁷ / ₈	8.00	13.50
Eng. or Nor.	7 ¹ / ₂	7 ⁵ / ₈	6 ³ / ₄	19 ⁵ / ₁₆	8 ¹ / ₄	15.00	

FOR BOW LIGHTS—180 DEGREES

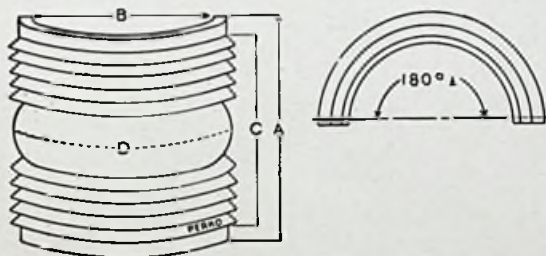


Fig. 260

For	A In.	B In.	C In.	D In.	Clear Each	Colored Each
Cl. 1 Bow	3 ⁷ / ₁₆	2 ⁹ / ₁₆	2 ¹³ / ₁₆	5 ³ / ₈	\$1.10	\$1.75
Cl. 2 Bow	4 ⁹ / ₁₆	3 ¹ / ₄	3 ⁵ / ₈	6 ³ / ₈	1.10	1.75
Cl. 3 Bow	5 ³ / ₁₆	3 ⁷ / ₈	4 ⁹ / ₁₆	7 ¹³ / ₁₆	1.35	2.25
No. 14 Bow	5 ⁵ / ₈	4 ³ / ₄	4 ⁷ / ₈	9 ¹ / ₁₆	4.00	5.00
No. 15 Bow	6 ¹¹ / ₁₆	4 ³ / ₄	5 ¹³ / ₁₆	9 ⁷ / ₁₆	5.00	6.00
No. 16 Bow	7 ³ / ₈	6 ⁷ / ₈	6 ³ / ₈	12 ⁵ / ₈	6.00	8.00

FOR STERN LIGHTS—135 DEGREES

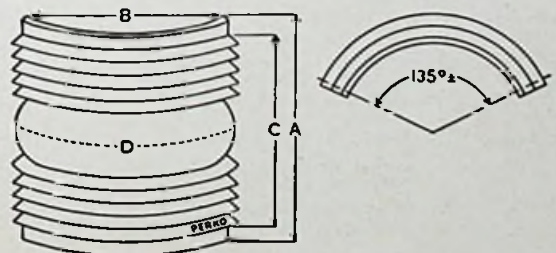


Fig. 269

For	A In.	B In.	C In.	D In.	Clear Each	Red or Green Each
No. 4 Stern	5 ¹ / ₂	4 ³ / ₈	4 ⁷ / ₈	6 ¹³ / ₁₆	\$5.00	\$6.00
No. 5 Stern	6 ¹ / ₂	4 ³ / ₈	5 ⁵ / ₈	6 ¹³ / ₁₆	6.00	7.00
No. 6 Stern	7 ³ / ₈	6 ¹ / ₁₆	6 ³ / ₈	9 ¹ / ₄	8.00	10.00
Eng. or Nor.	7 ¹ / ₂	7 ³ / ₈	6 ⁵ / ₈	10 ⁹ / ₁₆	10.00	

DIMENSIONS SUBJECT TO GOVERNMENT STANDARD TOLERANCES—PLUS OR MINUS



Emergency Self Lighting Water Light

FOR ATTACHMENT TO RING BUOYS



Fig. 843

To be hung on boat rail by top ring and attached to ring buoy by bottom ring and line. Lights automatically and immediately on striking the water, gives a 250 candle power white light and burns for 45 minutes. Approved by U. S. Board of Supervising Inspectors.

Size Overall Inches 5x8	Weight Pounds 3	Price Each \$5.00
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Distress Outfits

FOR MOTOR BOATS AND SAIL BOATS
MOISTURE PROOF SIGNALS AND CONTAINERS
10 RED FLARE SIGNALS



Fig. 514

Many boat owners do not realize the importance of having distress signals on board ready for instant use until an emergency arises, then it is often too late.

This outfit should be on every boat and the extreme low price puts it within reach of every ones pocketbook.

This outfit consists of ten 2 minute moisture proof red flares packed in a moisture proof container.
Per Outfit Complete \$1.50

Distress Outfits

IMPROVED COPPER CASE



Fig. 844

Consists of twelve red signals, each capable of burning two minutes with an intense brilliancy, clearly discernable for over five miles at sea.

Case made of 18 oz. cold rolled copper, cast brass cover and rubber gasket, (cut thread), absolutely water tight. Approved by U. S. Board of Supervising Inspectors.

Price per outfit, complete	\$7.50
Flares Only—Per Dozen	4.20
Cans Only—10½ inches high—Price Each.....	5.00

Height does not include cover, but price does.

Bread Breakers

GALVANIZED



Fig. 155

Heavy galvanized sheet iron, double seamed edges, well soldered, cast bronze cover and ring, thick rubber gasket, water-tight, two folding handles. Every breaker fully tested before leaving factory.

Diameter cover, 5 inches.

Capacity Lbs.	Each	Size Inches	Weight Lbs.
25	\$5.50	12x12x18	13
40	6.00	15x15x21	15
50	6.50	15x15x24	18
60	7.00	15x15x30	19
80	8.00	24x24x24	32
100	8.50	24x24x30	40

Axe Brackets

Made of heavy gauge brass or black iron. Large enough to take axe blade up to 6 inches wide.

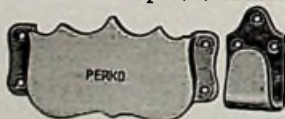


Fig. 325

Japanned Steel Polished Brass	Blade Brackets Only Per Dozen	\$3.60	Hooks Only Per Dozen	\$1.20
		6.00		2.00



Fig. 72

Bread Breaker Caps

NEW STYLE
CAST BRONZE

Complete with rubber gasket and ring for fitting to tank, cut threads.

Price Per Set	Extra Gaskets Each	Outside Diam. Cover Inches	Inside Diam. Opening Inches	Weight Each Pounds
\$2.50	\$.22	5¾	4¾	2

Boat Bailers

GALVANIZED



Fig. 180

Made of black steel, hot galvanized after completed, handle riveted to body.
Diameter, 8 1/4 inches.
Weight, per doz., 12 lbs.

Price each \$.90

Automatic Boat Drain

CAST BRONZE—PLAIN

For use in life boats. Made of heavy cast bronze, with sponge rubber ball valve. Cast bronze cover with chain attached, threaded 1 1/8 inches, No. 14 thread.



Fig. 213

Complete Each	Caps Only With Chain Each	Balls Only Per Dozen	Diam. Opening Inches	Diam. Flange Inches
\$2.50	\$.85	\$1.50	1 1/4	3 3/8

Sea Anchors and Cans

APPROVED BY THE STEAMBOAT INSPECTION SERVICE

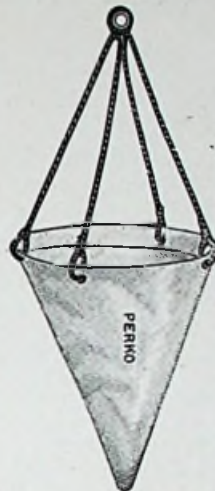


Fig. 517



Fig. 179

Sea anchor, Fig. 517, is made of good quality heavy weight canvas.

Can or oil container made of heavy galvanized sheet iron, complete with attaching ring, two brass pet cocks and filling cap.

Diameter of Anchor Inches	Capacity of Can Quarts	Anchor with Can Complete Each	Anchor Only Each	Can Only Each
24	4	\$5.40	\$3.60	\$1.80
30	4	7.80	6.00	1.80

Ditty Bags

COMPLETE



Fig. 85

A waterproof canvas bag containing sailmaker's palm, needles, sail twine, marline, marline spike, and wax.

Complete, Each \$3.25

One box matches sewed in waterproof canvas, add \$.50.

Water Breakers

ROUND OAK



Fig. 1001

A water breaker containing at least one quart of water for each person must be carried in every lifeboat.

Capacity Gallons	With Galvanized Hoops Each
5	\$2.90
10	3.90
15	4.40
20	5.25

Emergency Light

WITH RUBBER SUCTION HOLDER



Fig. 798

Small and compact, easily stored but always ready for use in emergencies, used as a trouble light when working around motor or inside of hull, can also be used as emergency riding light when necessary, furnished with 10 ft. wire, bulb and battery clips, ready for instant use.

Price Each \$1.50

Trouble Light

NICKEL PLATED BRASS BODY—WOOD HANDLE

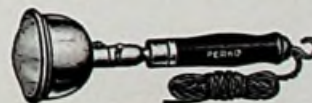


Fig. 389

Has 3 inch diameter magnifying lens and double contact socket—furnished complete with switch, 21 C. P. bulb 6 volt, 10 ft. wire and plug.

Length overall, 10 inches, Each \$3.00



Watertight Receptacles and Plugs
CAST BRONZE—DIPPED FINISH

All insulated with best quality bakelite, all furnished with watertight cap.

For all voltages from 6 to 125
FLUSH TYPE WITHOUT BOX



Fig. 968

To meet the requirements for yachts where size and space is limited.

Complete Each	Plug Only Each	Diam. Plate Inches	Depth Box Inches
\$3.50	\$1.50	2 1/4	3/4

FLUSH TYPE WITH BOX

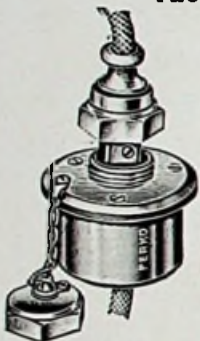


Fig. 969

Furnished with watertight box, bottom inlet.

Diam. Plate Inches	Diam. Box Inches	Depth Box Inches	Complete Each	Plug Only Each
2 1/4	1 1/2	1 1/8	\$4.25	\$1.50

HEAVY DUTY FLUSH TYPE

For the larger yachts from 40 feet up in length.

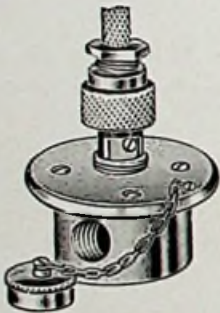


Fig. 970

SIDE INLET

Diam. Plate Inches	Diam. Box Inches	Depth Box Inches	Complete Each	2 Wire Plug Each	3 Wire Plug Each	3 Wire Interior Extra
3 1/2	2 1/2	1 1/2	\$5.75	\$1.75	\$4.00	\$2.00

HEAVY DUTY SURFACE TYPE

Also for larger yachts where a surface type is required.



Fig. 971

SIDE INLET

Diam. Box Inches	Depth Box Inches	Complete Each	2 Wire Plug Each	3 Wire Plug Each	3 Wire Interior Extra
2 3/4	1 3/4	\$5.25	\$1.75	\$4.00	\$2.00

Gang Type Receptacle and Plug
SURFACE TYPE



Fig. 972

Two wire type plugs, all insulation is best quality bakelite. Mounting lugs are integral part of box.

Length Inches	Width Inches	Depth Inches	Complete with Plugs, Each
3 1/4	2 1/4	1 3/8	\$8.00

Combination Switch and Receptacle
SURFACE TYPE

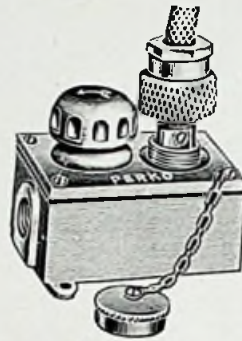


Fig. 973

Allows control of all lights on one circuit. Switch, receptacle and plug all in one unit. Mounting lugs are integral part of box.

Length Inches	Width Inches	Depth Inches	Price Complete
3 1/4	2 1/4	1 3/8	\$7.75

Watertight Snap Switch
FLUSH TYPE OR SURFACE TYPE

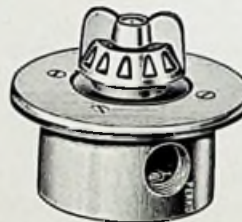


Fig. 974

An excellent watertight snap switch for all classes of yachts. Ratchet under knob to prevent turning in wrong direction.

	Diam. Plate Inches	Diam. Box Inches	Depth Box Inches	Flush Type	Surface Type
	3 1/2	2 1/2	1 1/2	5.50	4.75
Single Pole Switch				5.75	
Double Pole Switch					

Watertight Junction Box
SURFACE TYPE

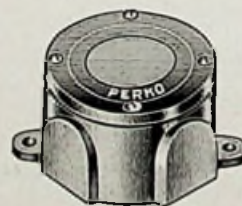


Fig. 975

Made of cast bronze, can be threaded for three circuits if necessary. Mounting lugs are integral part of box.

Diam. Box Inches	Depth Box Inches	Without interior, each	With block for one circuit, Each
2 3/4	1 3/4	\$1.75	2.25

Tapped for 2 or 3 circuits at small extra charge

Above items CHROMIUM PLATED, add 50% to Above Prices

Watertight Connection

DOUBLE CONTACT

DECK SOCKET. All brass, double contact, complete with threaded cap and chain as illustrated.

PLUG. All brass, double contact, threaded lock nut for fastening to deck socket, Fig. 423. Threaded cap with rubber gasket inside to prevent water running down cable.

Deck Socket

All Metal Plug



Fig. 423



Fig. 425

	Polished Brass	Nickel Plated	Chromium Plated
Socket Only	Each \$.90	Each \$1.10	Each \$1.30
Plug Only	.90	1.10	1.30

Watertight Connection

DOUBLE CONTACT



Fig. 477

Cast bronze socket with cap and chain, as illustrated. Hard rubber plug locked in place by bronze cap with rubber gasket to prevent water running down wire.

Polished Brass	Nickel Plated	Chromium Plated
Each \$1.50	Each \$1.75	Each \$2.00

Composition Interiors Only
Per Set, \$.70

Flush Deck Socket

WATERTIGHT

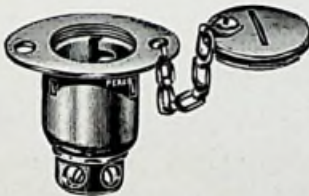


Fig. 357

A double contact socket with cover and rubber gasket, watertight, flush with deck.

Heavy brass body and cover.

Price Each \$.80

Plugs and Sockets

DOUBLE CONTACT



Fig. 399

Contact pins in socket, brass nickel plated socket, composition plug.

Size of flange, 1 1/8 x 1 1/2.
Price Complete \$.60

Mogul Socket

PORCELAIN—FOR 3 WIRE SYSTEM



Fig. 533

Used with our double filament bulb, Fig. 532.
Each \$1.50

Composition Connector

DOUBLE CONTACT



Fig. 749

Price Each \$.50

Brass Case Connector

DOUBLE CONTACT



Fig. 750

Metal caps and hard rubber body. Price, each \$.60
Metal clad throughout. Price, each \$.70

Bakelite Base Socket

SINGLE OR DOUBLE CONTACT



Fig. 472

Diameter base, 1 3/8 inches. Height, 1 inch.

No.		Each
20	Double Contact	\$.40
21	Single Contact	.40

Single End Socket

DOUBLE CONTACT

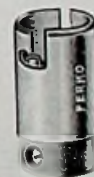


Fig. 747

Price Each \$.15

Electric Sockets

DOUBLE CONTACT

Brass, nickel plated casing and flange. Hard rubber insulation.

Single End Socket



Fig. 377

Double End Socket



Fig. 378

Size Flange
1 1/8" x 1 1/2"

Price Each

Fig. 377—Single end socket \$.25
Fig. 378—Double end socket30

Electric Adapters



Fig. 405

No. 670 Standard to D. C. Ediswan Base
680 Standard to S. C. Ediswan Base

No. 670 Each \$.50
68050

Double Contact Adapter

ALL BRASS

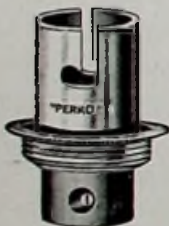


Fig. 355

For converting oil fount into electric fount. Punch a hole in bottom of fount and screw adapter in place of oil burner.

Price per dozen \$4.80

Double Contact Plugs

COMPOSITION OR ALL METAL



Composition

Fig. 746



All Metal

Fig. 383

With flush type contact screws, used with sockets Figs. 357, 472, 747, 748, 377, 378.

Fig. 746—Composition, each \$.15
Fig. 383—All Metal, each25

Lighting Switches

FOR ALL VOLTAGES FROM 6 TO 120

THE STANDARD

With cadmium plated frame and bakelite sliding button.

Extreme Length Inches	Extreme Width Inches	Width Frame Inches
1 1/4	3/4	1/2

Price Each \$.40

Can be furnished with nickel plated face plate 1"x1 1/8", same as fig. 718, price complete \$.75

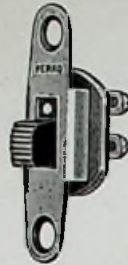


Fig. 717

THE DE-LUXE

With brass face plate in polished or plated finishes. Ideal for mounting on dash board or bulkhead.

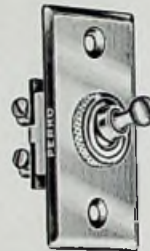


Fig. 718
Polished Brass Each \$.60

Length Face Plate Inches	Width Face Plate Inches
1 1/2	1

Nickel Plated Each \$.60	Black Enameled Each \$.60	Chromium Plated Each \$.70
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THE DE-LITE

A neat double switch very useful on cruisers, using one for running lights, the other for cabin fixtures.

With brass face plate in polished or plated finishes.

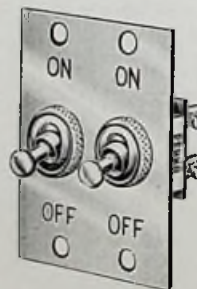


Fig. 719

Length Face Plate Inches	Width Face Plate Inches
2 1/2	1 3/4

Polished Brass Each \$1.25	Nickel Plated Each \$1.25	Black Enameled Each \$1.25	Chromium Plated Each \$1.40
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TOGGLE TYPE

FOR THRU THE DASH MOUNTING

It is only necessary to drill a 1/2" hole in dash for mounting.

Composed of bakelite and brass furnished complete with 2 lock nuts and 6 inch wire leads.

Price Each \$.50

Furnished with neck 1/4 or 1/2 inches long. Specify length of neck when ordering.



Fig. 745



HEAVY DUTY—PUSH AND PULL TYPE

With polished brass or nickel plated oblong plates and push buttons.

Will take more amperage and voltage than any similar switch on the market.

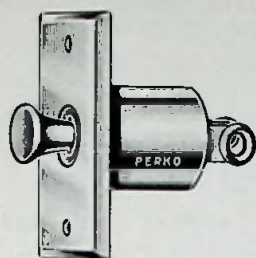


Fig. 740

	Each
1 point	\$0.40
2 point	0.80
3 point	1.20
4 point	1.60

Please specify finish of plate when ordering.

Brass Straps

A very handy and useful article, used extensively on all types of boats for fastening copper tubing, control wire casing, and electric cable to bulkheads, floors, etc.



Fig. 121



Fig. 1075

Inside Diam. Inches	Fig. 121 Per 100	Fig. 1075 Per 100	Inside Diam. Inches	Fig. 121 Per 100	Fig. 1075 Per 100
$\frac{1}{8}$	\$.80	\$1.00	$\frac{1}{8}$	\$1.20	\$1.50
$\frac{3}{16}$	.90	1.10	$\frac{1}{2}$	1.30	1.60
$\frac{1}{4}$	1.00	1.25	$\frac{5}{8}$	1.60	2.10
$\frac{5}{16}$	1.00	1.25	$\frac{3}{4}$	1.70	2.20
$\frac{3}{8}$	1.10	1.40			

Knife or Battery Switches

UPRIGHT TYPE



Fig. 70

No.	Size Base Inches
1	$2\frac{1}{8} \times 1\frac{1}{4}$
2	$3\frac{5}{8} \times 1\frac{3}{8}$

No.	Fibre Base Each	Porcelain Base Each
1 Single Pole, Single Throw	\$.35	\$.20
2 Single Pole, Double Throw .....	.45	.32

Brass Cable Straps

FLAT TYPE FOR LEAD COVERED CABLE BRASS



Fig. 1076

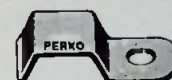


Fig. 1077

Inside Measurements Inches	Fig. 1076 Per 100	Fig. 1077 Per 100
$\frac{1}{8} \times \frac{7}{32}$	\$2.20	\$2.80

Knife or Battery Switches

SIDE TYPE



Fig. 74

No.	Size Base Inches
3	$2\frac{1}{8} \times 1\frac{1}{8}$
4	$2\frac{1}{4} \times 1\frac{1}{8}$

No.	Fibre Base Each
3 Single Pole, Single Throw	\$.30
4 Single Pole, Double Throw .....	.40

Cable Outlet
CAST BRONZE



Fig. 424

Waterproof cable outlet with threaded cap and rubber gasket to prevent water running down cable. This fitting makes a watertight outlet on the boat and prevents wear on cable insulation from chafing.

Polished Brass Each	Nickel Plated Each	Chromium Plated Each
\$.50	\$.70	\$1.00

Dashboard Lamp

BRASS—NICKEL PLATED WITH SWITCH

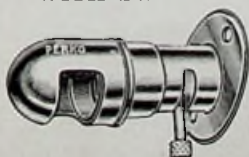


Fig. 184

A neat lamp for use on dashboards of runabouts, or any place where a small lamp of this type can be used. Ediswan double contact socket.

Each	Height Overall Inches	Size Base Inches	Weight Each Oz.
\$.90	$2\frac{3}{16}$	$1\frac{1}{8} \times 1\frac{1}{2}$	$1\frac{1}{2}$

Duplex Electric Cable

DOUBLE RUBBER COVERED

The cable we use in wiring all of our outside electric fittings such as pole lights, etc.

Stranded cable is protected by double rubber insulation, size is $\frac{3}{8} \times \frac{1}{8}$ inches.

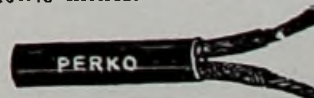


Fig. 497

100 foot coils	Per Coil
.....	5.50



ELECTRIC CABIN FIXTURES

WITH STANDARD SCREW SOCKETS
FOR 6-12-32 OR 110 VOLTS

Round Base Pattern

WITH PUSH BUTTON SWITCH—SPUN BRASS



Fig. 308

Diam. Base Inches	Drop less Lamp Inches	Projection less Lamp Inches	Weight Ounces
2½	2½	3	6
Polished Brass Each	Nickel Plated Each	Chromium Plated Each	
\$1.75	\$2.00	\$2.25	

Oval Base Pattern

WITH PUSH BUTTON SWITCH—CAST BRONZE

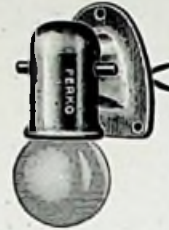


Fig. 516

Size Base Inches	Drop less Lamp Inches	Projection less Lamp Inches	Weight Ounces
2¾ x 2¾	2½	2½	8
Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	
\$2.50	\$2.75	\$3.00	

Square Base Pattern

WITH TOGGLE SWITCH—CAST BRONZE



Fig. 450

Size Base Inches	Drop less Lamp Inches	Projection less Lamp Inches	Weight Ounces
2x2	2	2½	12
With Switch	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
	\$2.50	\$2.75	\$3.00

Upright Pattern

WITH TOGGLE SWITCH—CAST BRONZE



Fig. 304

Size Plate Inches	Projection less Lamp Inches
4½ x 2¾	2½
Polished Bronze Each	Nickel Plated Each
\$3.50	\$4.00
Chromium Plated Each	Size Plate Inches
\$4.50	4½ x 2¾

Square Base Pattern

WITH PUSH BUTTON SWITCH—CAST BRONZE



Fig. 689

Size Base Inches	Drop Less Lamp Inches	Projection Less Lamp Inches	Weight Pounds
2x2	2½	2¾	¾
Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	
\$2.50	\$2.75	\$3.00	

Porcelain Cabin Fixture

WITH STANDARD SCREW SOCKET

NO SWITCH



Fig. 191

Drop Less lamp Inches	Projection Less lamp Inches	Price Each
1¾	1½	\$.60
Width Inches		
2¾		

PRICES ON THIS PAGE DO NOT INCLUDE BULBS. WHEN ORDERING BULBS, SPECIFY VOLTAGE AND CANDLEPOWER, FROSTED OR CLEAR.

Junior Fixtures

WITH DOUBLE CONTACT SOCKET
TURN SWITCH—CAST BRONZE



Fig. 605

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Size Base Inches	Drop less lamp Inches	Projection less lamp Inches
\$2.50	\$2.75	\$3.00	1 3/4 x 1 3/4	2	2

"Brightlite" Cabin Fixture

WROUGHT BRASS—ELECTRIC
FOR BULKHEAD OR CEILING



Fig. 578

Constructed entirely of brass, with frosted glass panels. Front of fixture containing the glass panels is hinged at one end and held securely closed by neat eye hook.

Interior is immediately accessible for changing of bulbs. No screws to remove and lose. All furnished with toggle switch.

No. 1. Furnished with one double contact socket. Will accommodate up to 50 C. P. bulb.

No. 2. Furnished with two double contact sockets and 3 way switch. Will accommodate up to two 50 C. P. bulbs.

No. 3. Furnished with one medium screw socket. Will accommodate up to 50 watt A-21 bulb.

No. 4. Furnished with two medium screw sockets and 3 way switch. Will accommodate up to two 50 watt A-21 bulbs.

Indirect Lighting Fixtures

CAST BRONZE
WITH STANDARD SCREW SOCKET



Fig. 847

A truly handsome fixture giving the modern indirect non glare lighting effect, can also be used in the reverse position as a berth light, takes up small space yet roomy enough to accommodate a 50 Watt bulb.

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Size Base Inches	Extends from Wall Inches
\$4.00	\$4.50	\$5.00	5x6	3

No.	Polished Brass Each	Nickel Plated Each	Chromium Plated Each	Length Inches	Width Inches	Depth Inches
1	\$2.75	\$3.25	\$3.50	5	3	1 3/4
2	4.00	4.50	5.00	5 1/2	3 1/8	2 3/8
3	4.50	5.00	5.50	7	3 1/8	3
4	5.75	6.50	7.25	7	4 1/4	3 1/4

Note that in our Nos. 3 and 4 fixtures, ordinary house lighting bulbs are used, nothing special or hard to obtain.

WITH DOUBLE CONTACT SOCKET
CAST BRONZE



Fig. 848

Same type as Fig. 847 above, but of a smaller size for small boats using low voltage double contact sockets, will accommodate up to a 50 candlepower RP-11 bulb.

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Size Base Inches	Extends from Wall Inches
\$3.50	\$4.00	\$4.50	4 1/2 x 4	2

Double Ceiling Fixture

CAST BRONZE—STANDARD SCREW SOCKETS
WITH TOGGLE SWITCH



Fig. 451

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Size Base Inches	Extension from Ceiling Inches
\$5.00	\$5.50	\$6.00	3 1/2 x 2	2 3/8

PRICES ON THIS PAGE DO NOT INCLUDE BULBS. WHEN ORDERING BULBS, SPECIFY VOLTAGE AND CANDLEPOWER. FROSTED OR CLEAR.

Holophane Cabin Fixture

WROUGHT BRASS—DOUBLE CONTACT SOCKET

For any voltage from 6 to 120. Complete with holophane glass globe and throw switch.



Fig. 81

Diameter base, 2½ inches
Drop, 4¾ inches
Extends from wall 4¾ inches
Diameter globe, 3 inches
Weight, 8 ounces

	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
With Throw Switch	\$2.50	\$3.00	\$3.50

Holophane Cabin Fixture

WROUGHT BRASS—DOUBLE CONTACT SOCKET

For any voltage from 6 to 120. Complete with holophane glass shade, and throw switch.



Fig. 83

Diameter base, 2½ inches
Drop, 4¾ inches
Extends from wall 4¾ inches
Weight, 8 ounces

	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
With Throw Switch	\$2.25	\$2.75	\$3.25

Holophane Cabin Fixtures

CAST BRONZE—DOUBLE CONTACT SOCKET

FIXTURE WITH OPEN SHADE

Complete with toggle switch. Wired for voltage from 6 to 120.



Fig. 553

Base, 1¾ x 1¾ inches
Drop, 3½ inches
Extends from wall 4¼ inches
Weight, 9 ounces

	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
	\$3.00	\$3.25	\$4.00



Fig. 554

FIXTURE WITH GLOBE

Base, 1¾ x 1¾ inches
Drop, 4½ inches
Extends from wall 3½ inches
Weight, 10 ounces

	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
	\$3.25	\$3.50	\$4.25

Dome Lights

CAST BRONZE

With improved toggle switch and nickel plated reflector. Globe held in place by threaded collar and protected from breakage by two rubber gaskets.

Nos. 1, 3 and 5 fitted with double contact socket.
Nos. 2, 4 and 6 fitted with standard screw socket.

WITH DEEP HOLOPHANE GLOBE



Fig. 454

No.	Diam. Base Inches	Depth Inches	Diam. Globe Inches	Weight Lbs.
1	5	3	4	2½
2	8	4¼	6	4½

No.	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
1	\$ 6.50	\$ 7.00	\$ 7.50
2	10.00	10.50	11.50

WITH SHALLOW HOLOPHANE GLOBE



Fig. 555

No.	Diam. Base Inches	Depth Inches	Diam. Globe Inches	Weight Lbs.
3	5	1¾	4	2¼
4	8	2¾	6	4¼

No.	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
3	\$ 6.50	\$ 7.00	\$ 7.50
4	10.00	10.50	11.50

WITH SHALLOW FROSTED GLOBE



Fig. 460

No.	Diam. Base Inches	Depth Inches	Diam. Globe Inches	Weight Lbs.
5	5	1¾	4	2
6	8	2¾	6	4

No.	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
5	\$ 6.50	\$ 7.00	\$ 7.50
6	10.00	10.50	11.50

Bulbs are not included with above fixtures. When ordering bulbs, specify voltage and candle power.

Dome Lights No. 2, 4, and 6 will accommodate a 50 watt A-19 bulb.

Dome Lights

WITH HOLOPHANE GLOBES
TOGGLE SWITCH—DOUBLE CONTACT SOCKET



Fig. 294

Wrought Brass with Nickel Plated Reflector.

Diam. Glass Inches	Polished Brass Each	Nickel Plated Each	Chromium Plated Each	Diam. Base Inches	Depth Overall Inches
3	\$2.60	\$2.85	\$3.60	4 1/4	1 3/4
4	3.10	3.35	4.10	5 1/2	1 7/8
5	3.60	3.85	4.60	6 5/8	2 3/4
6	4.60	4.85	5.60	7 1/2	2 3/4

Dome Lights

WITH FROSTED GLOBES
TOGGLE SWITCH—DOUBLE CONTACT SOCKET



Fig. 296

Diam. Glass Inches	Polished Brass Each	Nickel Plated Each	Chromium Plated Each	Diam. Base Inches	Depth Overall Inches
3	\$2.60	\$2.85	\$3.60	4 1/4	1 3/4
4	3.10	3.35	4.10	5 1/2	1 7/8
5	3.60	3.85	4.60	6 5/8	2 3/4
6	4.60	4.85	5.60	7 1/2	2 3/4

Dome Lights

WITH OPAL GLOBES—TOGGLE SWITCH
DOUBLE CONTACT OR STANDARD SCREW SOCKET



Fig. 385

With Double Contact Socket

No.	Polished Brass Each	Nickel Plated Each	Chromium Plated Each	Diam. Base Inches	Diam. Globe Inches	Depth Inches
7	\$3.25	\$3.50	\$4.25	6	4 1/4	2 1/4
8	4.25	4.50	5.25	7	5 1/2	2 3/4

With Standard Screw Socket

9	\$4.50	\$4.75	\$5.50	7	5 1/2	2 3/4
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Bulb with standard screw base for this light, see Fig. 8.

Dome Lights

WITH FROSTED GLOBES
TOGGLE SWITCH—STANDARD SCREW SOCKETS
Wrought brass without flange for installation in narrow places or with flange where desired.
Nickel plated reflectors wired ready for installing.
Will allow use of single 75 watt bulb or two 50 watt bulbs.

WITH FLANGE



Fig. 753

With Single Socket

Polished Brass Each	Nickel Plated Each	Chromium Plated Each	Diam. Base Inches	Diam. Glass Inches	Depth Overall Inches
\$ 9.00	\$ 9.50	\$10.25	9 5/8	8	3

With Two Sockets and 3 Way Switch

10.00	10.50	11.25	9 5/8	8	3
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WITHOUT FLANGE



Fig. 754

With Single Socket

Polished Brass Each	Nickel Plated Each	Chromium Plated Each	Diam. Base Inches	Diam. Glass Inches	Depth Overall Inches
\$7.50	\$8.00	\$8.75	7 1/2	8	3

With Two Sockets and 3 Way Switch

8.50	9.00	9.75	7 1/2	8	3
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Berth or Pullman Light

OPAL GLOBE
WITH DOUBLE CONTACT OR STANDARD SCREW SOCKET
TOGGLE SWITCH—CAST BRONZE



Fig. 416

Brush Bronze Finish Each	Nickel Plated Each	Chrom. Plated Each	Globe Only Each	Length Inches	Width Inches	Diam. Globe Inches
\$7.50	\$9.00	\$10.50	\$1.10	6	4	2 3/4

Bulb with standard screw base for this light, see Fig. 8.

PRICES ON THIS PAGE DO NOT INCLUDE BULBS. WHEN ORDERING BULBS SPECIFY VOLTAGE AND CANDLEPOWER.



The New "Perko" Marine Searchlights

LOW VOLTAGE—6-8, 12-16, 32, AND 110 VOLTS—HIGH POWER

BODIES—are constructed of heavy wrought brass; stands, yokes, and control mechanism are all cast bronze.
REFLECTORS—a glass mirror reflector, which projects a highly concentrated beam of light a greater distance than any other projector of its class.

FOCUSING DEVICE—of patented design, containing no wires to twist or break; very easy to control.

PILOT HOUSE CONTROLS—are of the wheel or lever type, both having their distinct advantages.

WIRING—enclosed in flexible metal hose, fully protected from weather.

SOCKETS AND BULBS—all sizes of searchlights are furnished with standard screw sockets. Bulbs furnished as standard equipment in various voltages are as follows—6-8 volts, 18 amps.; 12-16 volts, 18 amps.; 32 volts, 8 amps; 120 volts, 250 watt. Can also furnish 120 volts, 400 or 500 watt bulbs for small additional cost.

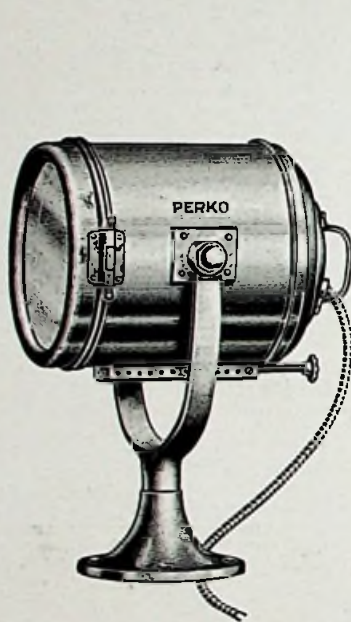


Fig. 480

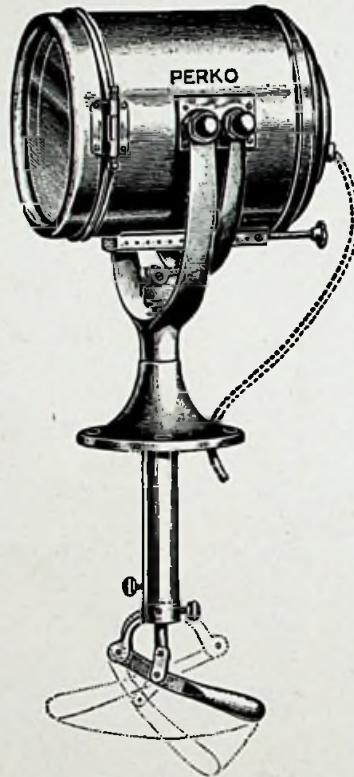


Fig. 297

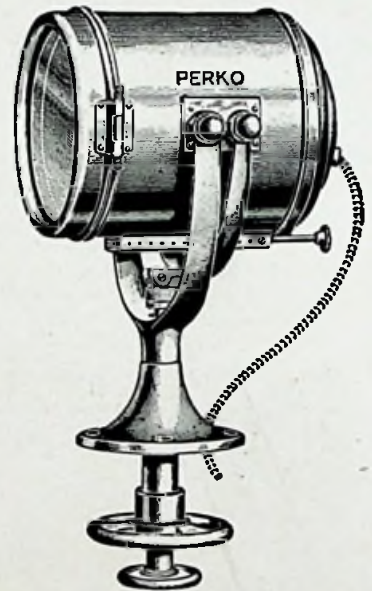


Fig. 529

Size Inches	Diameter Reflector Inches	Range	Beam Candle Power	Length of Body Inches	Clearance of Glass in Door Inches	Height Overall Cabin Control Inches	Height Overall Deck Type Inches	Net Weight Cabin Control	Diameter of Base Inches
8	8	up to ¾ mile	350,000	12¾	7¾	24	18	31 lbs.	6¾
10	10	up to 1 mile	590,000	14¾	9¾	28	22	36 lbs.	6¾
12	12	up to 1½ miles	700,000	17	11¾	30	24	48 lbs.	8½
14	14	up to 2 miles	850,000	19	13½	34	28	56 lbs.	8½

PRICE EACH

Size Inches	Fig. 480			Fig. 297			Fig. 529		
	Polished Brass	Nickel Plated	Chrom. Plated	Polished Brass	Nickel Plated	Chrom. Plated	Polished Brass	Nickel Plated	Chrom. Plated
8	\$ 70.00	\$ 76.70	\$ 82.50	\$ 85.00	\$ 91.70	\$ 97.50	\$ 90.00	\$ 96.70	\$102.50
10	85.00	92.50	99.50	100.00	107.50	114.50	105.00	112.50	119.50
12	100.00	108.50	116.75	120.00	128.50	136.75	125.00	133.50	141.75
14	125.00	135.00	145.00	150.00	160.00	170.00	155.00	165.00	175.00

NOTE—SPECIFY VOLTAGE AND SIZE WHEN ORDERING

"Perko" "Beam" Searchlights

The bodies of these searchlights are made of heavy brass. Control mechanism, stands and yokes are all cast bronze.

REFLECTORS—are heavily plated with chromium and highly polished. This plating gives a very high light efficiency and is more non-corrosive than most other plating processes in use on salt water.

FRONT LENS—is convex and mounted in brass frame, which is easily removed.

WIRING—is protected by flexible metal hose and waterproof insulation.

PILOT HOUSE CONTROL—is of the lever type, which is quick acting and easy to handle.

BULBS—are 6-8, 12-16 volt, double contact, 50 candlepower. For 6 or 12 volt 100 candlepower bulbs, add \$2.00 each. For 32 volt 50 candlepower bulbs, add \$1.00 each. For 32 volt 100 candlepower bulbs, add \$2.50 each.

THESE SEARCHLIGHTS WILL THROW A POWERFUL BEAM UP TO ½ MILE DISTANCE, DEPENDING ON WEATHER CONDITIONS.

Sunbeam

WITH PILOT HOUSE CONTROL

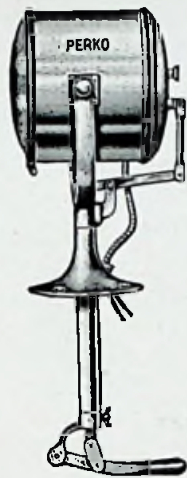


Fig. 306

Size Inches	Diam. Reflector Inches	Height Overall Inches	Diam. Base Inches
6	6 1/8	21	3 1/2
8	7 1/8	24	5 1/2
10	10	27	5 1/2
Size In.	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
*6	\$22.00	\$25.00	\$28.00
6	27.00	30.00	33.00
8	35.00	39.00	41.00
**8	45.00	49.00	51.00
10	62.00	67.00	70.00

* Indicates this searchlight with T handle control instead of lever control illustrated.

** This searchlight has mirror reflector showing a clearer beam with greater distance of projection, 100 C. P. bulb.

Sunbeam

DECK TYPE

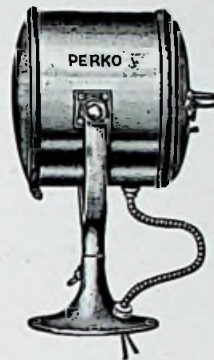


Fig. 305

Size Inches	Diam. Reflector Inches	Height Overall Inches	Diam. Base Inches
6	6 1/8	11	3 1/2
8	7 1/8	14	5 1/2
10	10	17	5 1/2
Size In.	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
6	\$20.00	\$23.00	\$25.50
8	25.00	28.00	32.00
**8	30.00	33.00	37.00
10	34.00	38.00	42.00

Brightbeam

WITH PILOT HOUSE CONTROL



Fig. 310

Size Inches	Diam. Reflector Inches	Height Overall Inches	Diam. Base Inches
8	7 1/8	23	3 3/4
Size In.	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
8	\$30.00	\$33.00	\$37.00

Superbeam

DECK TYPE



Fig. 307

Size Inches	Diam. Reflector Inches	Height Overall Inches	Diam. Base Inches
8	7 1/8	12 1/2	3 3/4
Size In.	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
8	\$16.00	\$18.00	\$20.00

Superbeam

HAND TYPE

Furnished as illustrated, with wire guard over lens and 10 feet of rubber covered cable.



Fig. 266

Size Inches	Diam. Reflector Inches	Extreme Length Inches
8	7 1/8	9
Pol. Brass Each	Nickel Plated Each	Chrom. Plated Each
\$14.00	\$15.50	\$17.00

Streamline Searchlight

FOR RUNABOUTS AND OUTBOARD MOTOR BOATS



Fig. 548

Diam. Body Inches	Height Overall Inches	Size Base Inches
4 3/4	7 1/2	2 1/2 x 5
Polished Brass Each	Nickel Plated Each	Chromium Plated Each
\$10.00	\$11.50	\$12.50

NOTE—SPECIFY VOLTAGE AND SIZE WHEN ORDERING



Star Oil Compasses

WITH DIAMOND POLISHED JEWEL BEARING
IN MAHOGANY BOX



Fig. 487

Has several exclusive features such as special alloy magnets that hold their magnetic charge indefinitely, hand treated non warping dial, a barometer type diaphragm for expansion and contraction and a hand polished pivot.

A guaranteed trouble and bubble proof compass.

Trade Size Inches	Exact Diam. Card Inches	Each	Size of Box Inches	Weight Complete Pounds
2	2 $\frac{1}{16}$	\$ 7.00	4 $\frac{5}{8}$	1 $\frac{3}{4}$
2 1/2	2 $\frac{3}{16}$	9.00	5 $\frac{3}{8}$	2 $\frac{1}{4}$
3	3 $\frac{1}{16}$	10.50	6 $\frac{1}{4}$	3 $\frac{1}{2}$
4	4	16.50	7 $\frac{1}{4}$	4 $\frac{1}{4}$
5	4 $\frac{3}{4}$	21.50	8 $\frac{1}{2}$	6 $\frac{1}{2}$

Star Underlighted Binnacle Compass WITH SPHERICAL DOME POLISHED BRASS



Has several exclusive patented features including dynamic card assembly with built in shock arrester that prevents shock and vibration from reaching the compass bearing, resulting in a steadier card and more effective operation in rough waters.

Diam. Card Inches	Without Compensator Each	With Compensator Each	Height Inches	Diam. Base Inches
5	\$ 90.00	\$110.00	7 $\frac{1}{2}$	7 $\frac{1}{2}$
6	100.00	120.00	8 $\frac{1}{2}$	8 $\frac{1}{2}$

Electric Compass Light

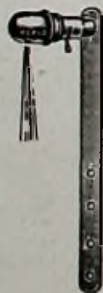


Fig. 707

To be mounted on compass box for illuminating compass at night, a shield is furnished over the bulb to eliminate glare, shield has small hole sufficient to illuminate proper portion of compass card.

Polished Brass Each	Nickel Plated Each	Chromium Plated Each	Height Overall Inches	Weight Ounces
\$1.75	\$2.00	\$2.25	8	5

"Star" Spirit Compasses

WITH CENTRAL BUOYANCY DIAL
REGULAR AND UNDERLIGHTED



Fig. 987

Furnished with flat card and four magnet dial. This type of compass is specified and used exclusively by the U. S. Navy. A very high grade instrument second to none in quality and dependability.

For use on large motor boats, yachts and ocean going vessels.

Trade Size Inches	Exact Diam. Card Inches	Regular Type Each	Underlighted Type Each	Mahogany Box Only Each
4	4	\$22.50	\$36.00	\$4.50
5	4 $\frac{3}{4}$	25.00	38.50	5.00
6	5 $\frac{1}{4}$	28.00	43.00	6.00
7	6 $\frac{3}{4}$	31.00		7.00
8	7 $\frac{1}{2}$	38.00		8.00
9	9	48.00		9.00

Prices Above Do Not Include Box

Binnacles

WROUGHT BRASS—TWO PIECE



Fig. 444

A well made but low priced binnacle, electric lighted, with metal shield over bulb to eliminate glare. A pin point of light illuminates proper portion of compass.

For Size Compass Inches	Height Overall Inches	Diameter Base Inches	Between Compass Supports Inches
3	6	5 $\frac{3}{8}$	4 $\frac{3}{4}$
4	7	6 $\frac{1}{2}$	5 $\frac{3}{4}$
5	8	7 $\frac{1}{2}$	6 $\frac{3}{4}$

For Size Compass Inches	Without Compass			With Compass Add Each
	Polished Brass Each	Nickel Plated Each	Chromium Plated Each	
3	\$10.00	\$11.00	\$12.00	\$ 9.50
4	12.00	13.20	14.50	15.00
5	14.00	15.50	17.00	20.00

Skylight Binnacle

CAST BRONZE—FOR 4 OR 5 INCH COMPASS

Body is one solid casting with cast bronze fittings. All parts screwed together. Broken glasses can easily be replaced. Hexagon skylight head, with six glasses, including two marked with sighting lines for getting bearings. Complete with night hood electric lamp.

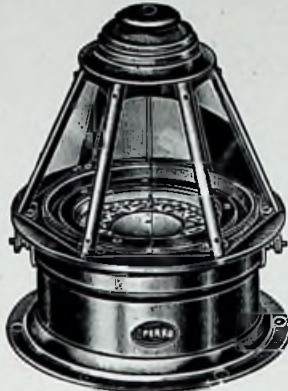


Fig. 530



Night Hood
White Inside

Height Overall Inches	Diameter Base Inches	Distance Between Compass Supports Inches	Weight Pounds
12	9 5/8	6 3/4	14 1/2
Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	
\$37.00	\$41.00	\$44.00	
8.00	Night Hood Only 9.50	11.00	

Cruiser Binnacle

WROUGHT BRASS—ONE PIECE

Spun from heavy gauge brass, white enamel finish inside. Equipped with or without liquid compass. An electric lamp for night running which illuminates the proper portion of the compass but will not disturb the helmsman's vision in any way.



Fig. 412

For Size Compass Inches	Height Overall Inches	Diam. Base Inches	Distance Between Compass Supports Inches	Weight Less Compass Lbs.
3	6 1/2	6 3/4	4 3/4	1
4	7 1/2	9	5 3/4	1 1/2
5	8 3/4	10	6 3/4	2 1/4
For Size Compass Inches	Without Compass			With Compass Add Each
	Polished Brass Each	Nickel Plated Each	Chromium Plated Each	
3	\$12.50	\$13.50	\$14.50	\$ 9.50
4	14.00	15.20	16.50	15.00
5	15.50	17.00	18.50	20.00

Skylight Binnacle

SPUN BRASS

Same as Fig. 530 above but spun from extra heavy brass throughout. Complete with night hood and electric lamp.

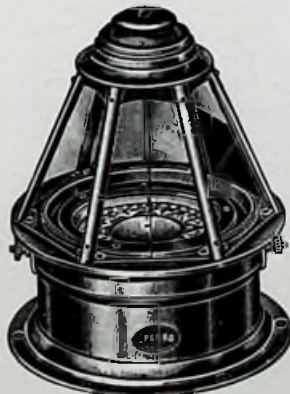


Fig. 534

No.	For Size Compass Inches	Height Overall Inches	Diameter Base Inches	Distance Between Compass Supports Inches
2	4 or 5	12	9 5/8	6 3/4
	Polished Brass Each	Nickel Plated Each	Chromium Plated Each	
	\$30.00	\$34.00	\$37.00	

Cruiser Binnacle

WROUGHT BRASS—TWO PIECE

When closed looks exactly like Fig. 412 above. Removable head allows easy access to compass. Furnished complete with electric fixture and lamp for illuminating compass at night. Head is held fast to base by bayonet catch which is invisible when closed.



Fig. 401

For Size Compass Inches	Height Overall Inches	Diam. Base Inches	Distance Between Compass Supports Inches	Weight Less Compass Pounds
3	6 1/2	6 3/4	4 3/4	1
4	7 1/2	9	5 3/4	1 1/2
5	8 3/4	10	6 3/4	2 1/4
For Size Compass Inches	Without Compass			With Compass Add Each
	Polished Brass Each	Nickel Plated Each	Chromium Plated Each	
3	\$14.50	\$15.50	\$16.50	\$ 9.50
4	16.00	17.20	18.50	15.00
5	17.50	19.00	20.50	20.00

PRICES ON FIGS. 530 AND 534 DO NOT INCLUDE COMPASS. FOR INFORMATION ON COMPASS REFER TO FIG. 487 AND FIG. 987.



Improved Course Protractor
 TRANSPARENT—INDICATES COURSE AND REVERSE COURSE

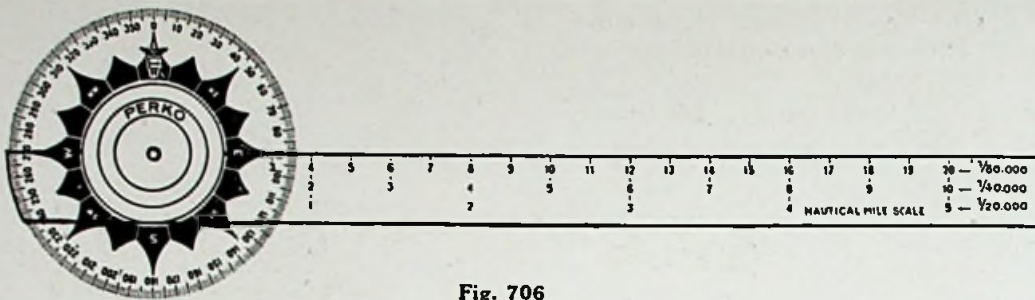


Fig. 706

We believe this to be the most practical course protractor on the market today. Note that the mileage shown on the protractor arm applies to the various mileage scales used on all U. S. C. & G. S. Coastal and Harbor Charts. Note that the arm is extended on the short end to the degree markings to indicate simultaneously the reverse course when desired.

A precision built instrument, accurate in detail and containing no unnecessary markings which usually obscure chart positions and detail.

Each
\$2.50

Extreme Length
Inches
23 1/4

Diam. Compass Card
Inches
6 3/4

Nickel Silver Dividers



Fig. 693

With adjustable and reversible steel needle points and straightening device.
 Length, 6 inches, each \$1.50

Parallel Rules
 NATURAL EBONY FINISH



Fig. 686

Furnished in natural ebony finish with nickel plated brass bars and finger grips.

Length Closed Inches	Price Each
12	\$2.65
15	3.25
18	3.70

Chart Cases

IMITATION LEATHER—BLACK FINISH



Fig. 395

Made of strong waterproof materials. 3 grommets for hanging, good quality celluloid, with zipper or button opening. Size 26 x 22 inches.
 With zipper opening, each \$4.00
 With button opening, each 3.50

Chart Cases



Fig. 372

Made of galvanized iron or sheet copper, water-tight cover, folding handle on side for carrying.

Diam. Inches	Length Inches	Galv. Each	Copper Each
3	36	\$3.60	\$7.00
4	36	4.50	8.00

Yacht Log Books

100 PAGES—NEAT PRINTING



Fig. 708

- No. 1 Binding: Imitation leather, pebble finish, star-board green color, gold letters, without gold border. Each \$2.50
 - No. 2 Binding: Imitation leather, pebble finish, pilot blue color, gold letters and gold border. Each \$4.00
 - No. 3 Binding: Genuine leather, natural light tan color, dark brown lettering and indented border. Each \$7.50
- For name of yacht on book, add \$1.50.



Mile-O-Meter

ELECTRIC INDICATING FLOW-METER SHOWING CONSUMPTION OF GASOLINE PER HOUR

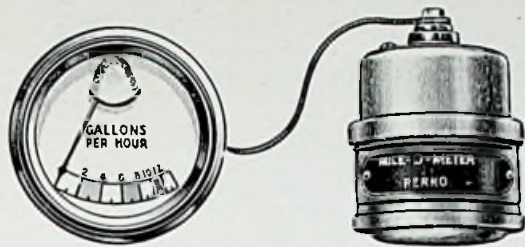


Fig. 694

The MILE-O-METER is a simple little device which is mounted directly onto the carburetor and connects into the fuel line. It meters the gasoline flowing through it and electrically indicates the flow or rate of consumption on the instrument panel in gallons per hour at any speed.

The MILE-O-METER is equally adapted to power boats, auxiliary engines on sail boats, and to automobile engines. It tells unfailingly the brand of gasoline and oil giving you the best mileage and the most economical speed at which to operate your engine. Instantly detects any let down in engine performance due to faulty ignition, carburetion, lubrication or mechanical wear. Attached in ten minutes—will outlast the engine. Requires less than 1/4 ampere to operate on any standard make of fuel pump.

A special feature of its design is an air chamber that absorbs the pulsations from the fuel pump, assuring a steady flow of gasoline through the carburetor and guaranteeing smooth engine performance.

The MILE-O-METER operates on a pressure differential system and is guaranteed to be accurate within 3%.

The fuel chamber is installed in the gasoline line between the fuel pump and the carburetor, the indicator dial alongside the R.P.M. indicator.

Gasoline line connections are 1/4 inch pipe thread, indicator dial size overall is 2 3/8 inches.

GALLONS PER HOUR CAPACITY

	7	12	18	21	24	28
Each	\$11.45	\$13.45	\$19.50	\$24.50	\$29.50	\$33.75



Fig. 433

Canvas Covers

FOR SEARCHLIGHTS

To fit Figs. 297, 480, 529.

Inches	Each
8	\$4.00
10	4.50
12	5.00
14	6.00

To fit Figs. 305, 306, 310.

Inches	Each
6	\$2.00
8	2.50
10	3.00

Yacht Speed Log

CAST BRASS CASE—BLACK FINISH
BRASS ROTATORS—LINEN LINE

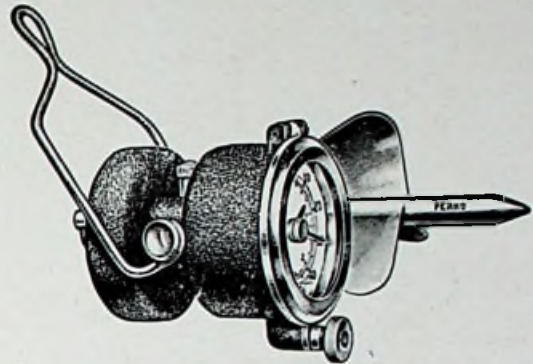


Fig. 695

Built to the highest standard of precision.

A watertight cast brass case finished in black crackle and polished brass, with a watertight hinged bezel for easy reset of hands to zero.

Dial is white, vertical reading from cockpit.

Numerals and Hands, black registers from 0 to 100 knots; red registers 0 to 5 knots subdivided to 1/4 mile. Will reset to 0.

Works, die cut gears, double ball bearings, governor wheel encased.

Rotators, brass, engineered for accuracy.

Line, best linen log line easily attached with bronze hook.

Packed in ample wood box containing log, rotator, line, hook, oil and spare glass, the regular equipment.

Complete	Spare	Spare	Diam.	Length
Each	Rotator	Line	Face	Overall
\$40.00	Each	Each	Inches	Inches
	\$5.00	\$2.50	2 1/2	7 1/2

Ash Tray and Glass Holder in Gimbals

ALL BRASS—CHROMIUM PLATED

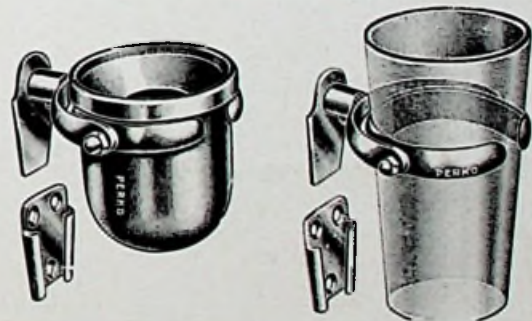


Fig. 698 Complete

Fig. 700 Glass Holder

What is more useful in various parts of a boat than several deep good looking ash trays in gimbals. When a long cooling drink is served, remove the ash tray insert the glass in the gimbal and the drink is safe regardless of heel or roll.

Made entirely of brass with bell type removable bracket. All chromium plated.

Complete	Glass Holder	Ash Tray	Size	Projection
Per Set	Only	Only	Bracket	Inches
\$3.00	Each	Each	Inches	Inches
	\$2.00	\$1.00	1 3/4 x 1 1/4	4

For lead weighted ash tray, add \$.50 each. Price does not include glass.



“PERKO” BRONZE GEAR TYPE PUMPS

NON CORROSIVE BRONZE THROUGHOUT WITH TOBIN BRONZE SHAFTS AND GEARS

The entire interior, including bearings, is tool machined, insuring perfect alignment and absolutely tight joints, blank bearing ends are solid (not soldered), all bearings are fully lubricated by brass grease cups. The drive shaft is in perfect alignment with the pump body. Pipe connections are Briggs standard pipe tap.

Single Lower Drive Shaft

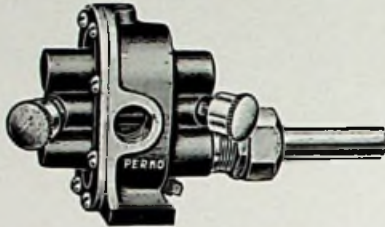


Fig. 684

Pump No.	With Spur Gears Each	With Herringbone Gears Each	Size Pipe Connection Inches	Size Drive Shaft Inches	Approximate Weight Each Pounds
2	\$10.00	\$12.00	1/4	1/2	3 3/4
3	11.50	14.25	3/8	5/8	5 1/2
4	12.50	15.50	1/2	3/4	6
7	15.00	18.75	3/4	5/8	9
9	16.50	20.00	1	3/4	9 1/2

Single Upper Drive Shaft

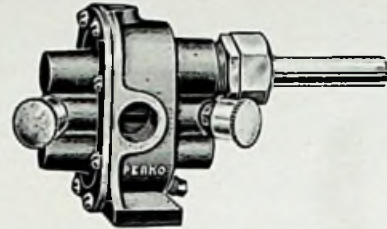


Fig. 682

Pump No.	With Spur Gears Each	With Herringbone Gears Each	Size Pipe Connection Inches	Size Drive Shaft Inches	Approximate Weight Each Pounds
2	\$10.00	\$12.00	1/4	1/2	3 3/4
3	11.50	14.25	3/8	5/8	5 1/2
4	12.50	15.50	1/2	3/4	6
7	15.00	18.75	3/4	5/8	9
9	16.50	20.00	1	3/4	9 1/2

PLEASE NOTE THAT WE ARE NOW SUPPLYING OUR GEAR TYPE PUMPS WITH HERRINGBONE GEARS WHEN DESIRED.



Pumps with herringbone gears are more quiet in operation than spur gear pumps. Are also more efficient in power consumption.

Herringbone gears operate in only one direction which must be specified, either clockwise or counter clockwise.

Double Lower Drive Shaft

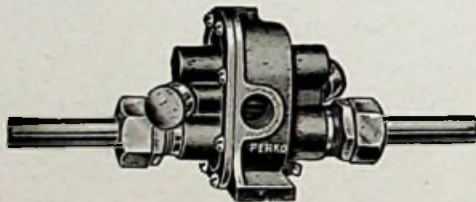


Fig. 685

Pump No.	With Spur Gears Each	With Herringbone Gears Each	Size Pipe Connection Inches	Size Drive Shaft Inches	Approximate Weight Each Pounds
2	\$11.50	\$13.75	1/4	1/2	4 1/2
3	12.50	15.50	3/8	5/8	6 1/4
4	13.75	17.00	1/2	3/4	6 3/4
7	16.50	20.00	3/4	5/8	9 1/2
9	17.50	21.50	1	3/4	9 3/4

Double Upper Drive Shaft

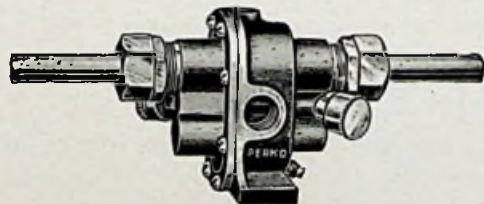
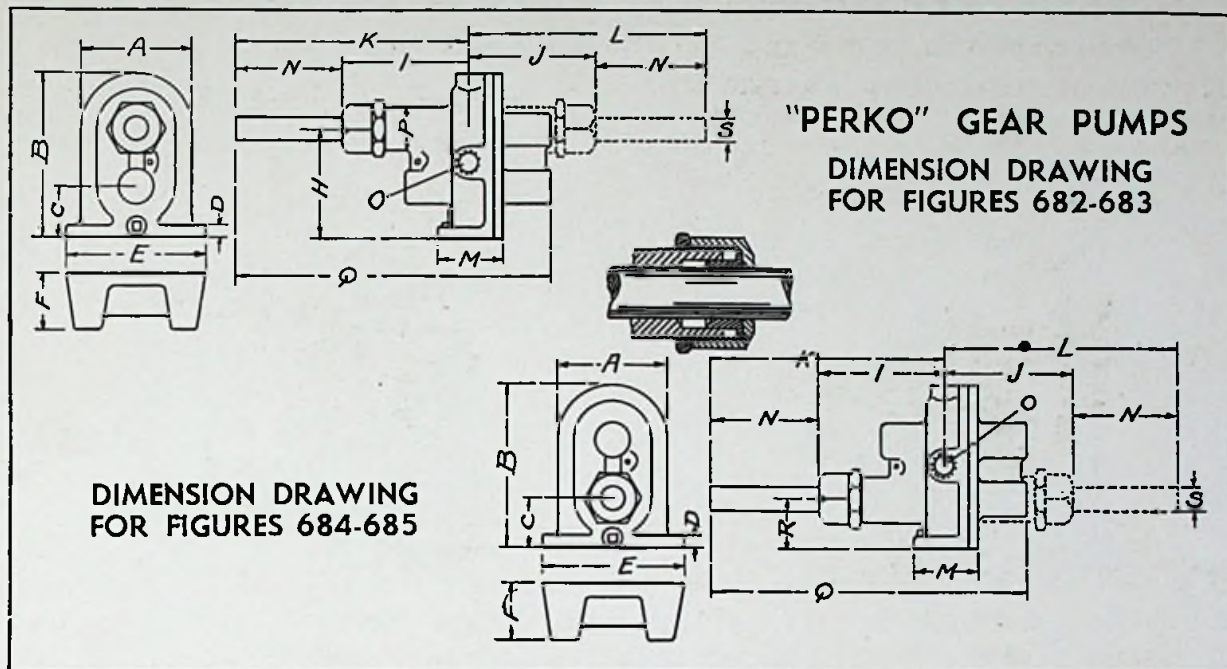


Fig. 683

Pump No.	With Spur Gears Each	With Herringbone Gears Each	Size Pipe Connection Inches	Size Drive Shaft Inches	Approximate Weight Each Pounds
2	\$11.50	\$13.75	1/4	1/2	4 1/2
3	12.50	15.50	3/8	5/8	6 1/4
4	13.75	17.00	1/2	3/4	6 3/4
7	16.50	20.00	3/4	5/8	9 1/2
9	17.50	21.50	1	3/4	9 3/4

For special lengths of shafts add .60c each, and then .55c for every six inches or fraction thereof beyond standard length.

NOTE—Don't fail to state figure number and pump number desired, also direction when herringbone gears are ordered.



DIMENSION TABLE FOR "PERKO" GEAR PUMPS

Pump No.	A	B	C	D	E	F	H	I*	J*	K*	L*	M	N	O†	P	Q	R	S
2	2 $\frac{3}{8}$	3 $\frac{1}{2}$	1 $\frac{3}{4}$	$\frac{3}{8}$	2 $\frac{7}{8}$	1 $\frac{3}{4}$	2 $\frac{3}{8}$	2 $\frac{3}{8}$	2 $\frac{3}{8}$	4 $\frac{5}{8}$	4 $\frac{5}{8}$	1 $\frac{3}{4}$	2 $\frac{3}{8}$	$\frac{1}{4}$	1	6 $\frac{3}{8}$	1 $\frac{1}{8}$	$\frac{1}{2}$
3	2 $\frac{3}{4}$	4	1 $\frac{7}{8}$	$\frac{1}{4}$	3 $\frac{1}{2}$	1 $\frac{3}{4}$	2 $\frac{3}{8}$	2 $\frac{7}{8}$	2 $\frac{7}{8}$	5 $\frac{3}{8}$	5 $\frac{3}{8}$	1 $\frac{3}{4}$	2 $\frac{1}{2}$	$\frac{3}{8}$	1 $\frac{1}{8}$	6 $\frac{5}{8}$	1 $\frac{1}{8}$	$\frac{3}{8}$
4	2 $\frac{3}{4}$	4	1 $\frac{7}{8}$	$\frac{1}{4}$	3 $\frac{5}{8}$	1 $\frac{3}{4}$	2 $\frac{3}{8}$	3 $\frac{1}{8}$	3 $\frac{1}{8}$	5 $\frac{9}{8}$	5 $\frac{9}{8}$	1 $\frac{3}{8}$	2 $\frac{1}{2}$	$\frac{1}{2}$	1 $\frac{1}{8}$	7 $\frac{5}{8}$	1 $\frac{1}{8}$	$\frac{3}{8}$
7	3 $\frac{1}{4}$	5 $\frac{3}{8}$	2 $\frac{3}{8}$	$\frac{1}{4}$	4	1 $\frac{1}{2}$	3 $\frac{3}{8}$	3 $\frac{1}{8}$	3 $\frac{1}{8}$	5 $\frac{9}{8}$	5 $\frac{9}{8}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$	$\frac{3}{4}$	1 $\frac{1}{8}$	7 $\frac{5}{8}$	1 $\frac{1}{8}$	$\frac{3}{8}$
9	3 $\frac{1}{4}$	5 $\frac{3}{8}$	2 $\frac{3}{8}$	$\frac{1}{4}$	4	1 $\frac{1}{8}$	3 $\frac{3}{8}$	3 $\frac{3}{8}$	3 $\frac{3}{8}$	5 $\frac{1}{2}$	5 $\frac{1}{2}$	1 $\frac{5}{8}$	2 $\frac{1}{2}$	1	1 $\frac{1}{8}$	7 $\frac{5}{8}$	1 $\frac{1}{8}$	$\frac{3}{8}$

Dimensions in inches—Standard Pumps. *From center line of gear. †Briggs standard pipe tap.

CAPACITY TABLE FOR "PERKO" GEAR PUMPS

1200 REVOLUTIONS PER MINUTE

Pump No.	P R E S S U R E									
	0 lb.		20 lb.		40 lb.		60 lb.		80 lb.	
	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
2	3.	$\frac{1}{8}$	2.62	$\frac{1}{8}$	2.25	$\frac{1}{4}$	1.8	$\frac{1}{4}$	1.45	$\frac{1}{8}$
3	5.	$\frac{1}{8}$	4.25	$\frac{1}{4}$	3.7	$\frac{1}{8}$	3.2	$\frac{1}{2}$	2.8	$\frac{3}{4}$
4	7.5	$\frac{1}{4}$	6.3	$\frac{1}{8}$	5.4	$\frac{1}{2}$	4.6	$\frac{3}{4}$	3.8	1
7	13.5	$\frac{1}{8}$	11.5	$\frac{1}{2}$	9.9	$\frac{3}{4}$	8.75	1	7.7	1 $\frac{1}{2}$
9	17.	$\frac{1}{2}$	15.5	$\frac{3}{4}$	14.1	1 $\frac{1}{4}$	12.7	1 $\frac{1}{4}$	11.2	1 $\frac{1}{2}$

1800 REVOLUTIONS PER MINUTE

Pump No.	P R E S S U R E									
	0 lb.		20 lb.		40 lb.		60 lb.		80 lb.	
	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
2	4.5	$\frac{1}{4}$	4.2	$\frac{1}{4}$	3.85	$\frac{1}{8}$	3.45	$\frac{1}{2}$	3.1	$\frac{1}{2}$
3	7.5	$\frac{1}{8}$	6.75	$\frac{1}{2}$	6.1	$\frac{3}{4}$	5.6	1	5.25	1
4	11.	$\frac{1}{2}$	10.	$\frac{3}{4}$	9.	$\frac{3}{4}$	8.2	1	7.3	1 $\frac{1}{2}$
7	16.*	* $\frac{1}{2}$	15.*	1*	13.3*	*1	12.*	1 $\frac{1}{2}$ *	10.8*	*1 $\frac{1}{2}$
9	20.*	* $\frac{3}{4}$	18.75*	1*	17.7*	*1 $\frac{1}{8}$	16.5*	2*	15.3*	*2

*At 1500 R.P.M.
Gallons per minute flow of clean water—63° F.—no pipe friction.
Motor recommended shown by H. P. indicated.
Head in feet = 2.3 x lbs. pressure.



"Perko" Wing Pumps

DOUBLE ACTION—ALL BRONZE
FOR MARINE, INDUSTRIAL AND DOMESTIC USE

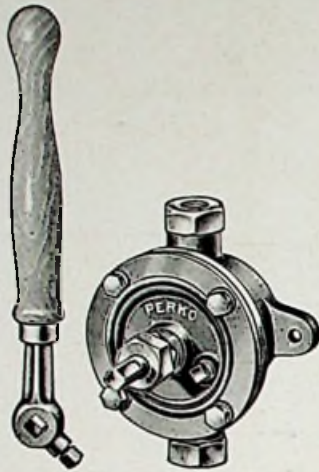


Fig. 681

Constructed entirely of cast bronze, principally for use as a marine bilge pump, but is used in large quantities in the industrial field for pumping oil and gasoline, hot liquids, juices, etc.

The interior consists of a cast bronze wing which oscillates on a bronze shaft connected to handle. The wing has lubricated square flax packing set in grooves which runs on interior of drum and as no metal parts rub together this pump will last for years without noticeable wear. Packing is very easily replaced.

EFFORTLESS OPERATION—HARDWOOD HANDLE

No.	Price Each	Size Pipe Connection Inches	Overall Diameter of Body Inches	Capacity Per Minute Gallons	Approx. Weight Each
0	\$16.50	1/2	5 1/8	5	11 1/2
1	18.50	3/4	5 3/4	7	14
2	21.50	1	6 3/8	9 3/4	19 1/2

Manufactured in U. S. A. by "Perko."

"Perko" Special Gear Pump

ALL BRONZE
WITH SPUR OR HERRINGBONE GEARS
FOR STAR MARINE MOTOR CONVERSIONS

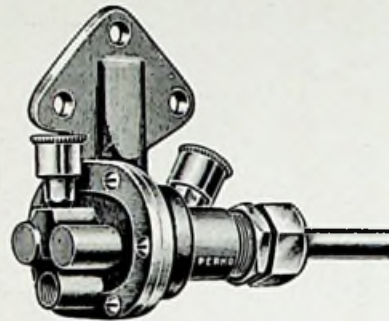


Fig. 804

This pump is designed primarily for Star and Gray motors, has a triangular bracket to fit the intake water manifold on the motor with water passage through the bracket.

Furnished complete with grease cups, tobin bronze gears and shafts, all bearings machined, all bearing ends are solid, not soldered.

With Spur Gears Each	With Herringbone Gears Each	Size Pipe Connection Inches	Diameter Drive Shaft Inches	Weight Pounds
\$11.00	\$13.75	3/8	1/2	4

"PERKO" BRONZE GEAR PUMP PARTS

Pump No.	Size Pipe Con'c'n	Cover Each	Screws Each	Spur Gear Each	Herringbone Gear Each	Body Each	Drive Shaft Each	Metal Pack Gland Each	Lock Nut Each	Pack Nut Each	Idle Gear Shaft Each
2	1/4"	\$1.75	\$.02	\$1.10	\$2.20	\$2.95	\$.85	\$.60	\$.33	\$.60	\$.55
3	3/8"	1.90	.02	1.25	2.85	3.00	.85	.70	.42	.65	.55
4	1/2"	2.30	.02	1.60	3.20	3.55	1.00	.70	.42	.65	.80
7	3/4"	2.65	.02	2.10	4.20	4.40	1.00	.70	.42	.65	.80
9	1"	3.55	.02	2.40	4.80	5.25	1.00	.70	.42	.65	.80

"Champion" Navy Bilge Pump BRASS CYLINDER—CAST BRONZE PARTS



Fig. 1016

Patent Pending



View of New Improved Plunger

Truly a champion among bilge pumps. The improvement is so great that we can truthfully claim this pump gives greater capacity with less effort than any other Navy type on the market today.

The plunger or "heart" of the pump is absolutely dependable at all times and can not get out of order. Made of machined brass with heavy square lubricated flax packing set in a groove. This packing is far superior in action and durability to leather washers which have never been fully satisfactory for salt water.

Furnished complete with brackets adjustable for starboard or port mounting.

CAPACITY—20 GALLONS PER MINUTE.

Tested at 55 strokes per minute showing 1½ quarts per stroke.

Each	Extreme Length Inches	Diameter Cylinder Inches	Inlet Pipe Thread Inches	Outlet Pipe Thread Inches	Diameter Plunger Rod Inches
\$8.50	24	2¾	1¼	1½	½

Bronze Navy Pump Strainers



Fig. 704

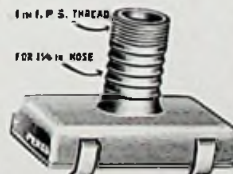


Fig. 705



Fig. 721



Fig. 722

Fig.	Price Each	Pipe Thread Inches	For Hose Inches	Length Inches	Width Inches	Weight Pounds
721	\$2.00	1¼	1¼	5	2¾	1½
722	2.00	1¼	1¼	4¾	2¾	1¾
704	2.00	1	1¼	7	2¾	2
705	2.00	1	1¼	4¾	2¾	1½

"Super" Navy Bilge Pump FOR HOSE OR PIPE

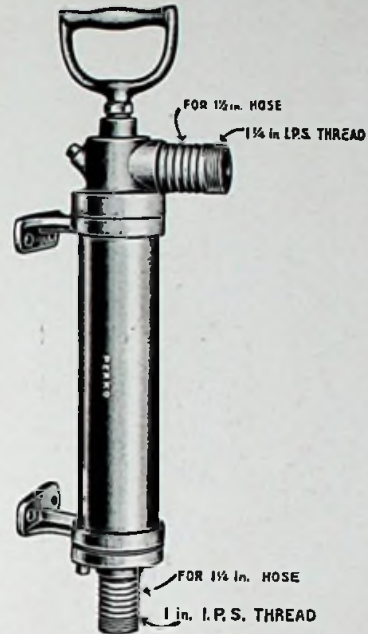


Fig. 701

This is our very popular "Champion" Pump improved by cast bronze integral fittings at inlet and outlet ends for connecting hose or pipe. Retaining of course our improved flax packed plunger and ½ inch plunger rod.

Each	Extreme Length Inches	Inlet Sizes		Outlet Sizes	
		Pipe Inches	Hose Inches	Pipe Inches	Hose Inches
\$8.50	27	1	1¼	1¼	1½

"Midget" Navy Bilge Pumps FOR HOSE OR PIPE

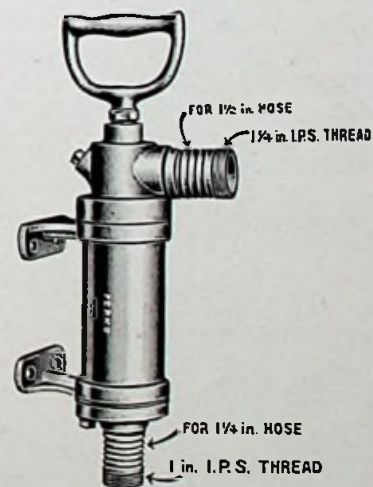


Fig. 702

Our regular pump reduced in length for boats requiring a large capacity pump to be installed where space is limited.

Each	Extreme Length Inches	Diam. Cylinder Inches	Inlet Sizes		Outlet Sizes	
			Pipe Inches	Hose Inches	Pipe Inches	Hose Inches
\$8.50	18¼	2¾	1	1¼	1¼	1½



Brass Bilge Pumps DOUBLE ACTION

Heavy brass seamless tubing, cast bronze fittings, treated leather packing, hollow brass ball checks, D shaped handle. Moulded rubber hose 5 feet long furnished with each pump.

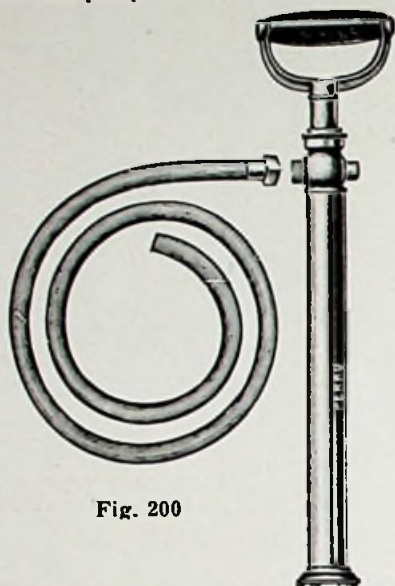


Fig. 200

Nos.	With Hose Each	Height Inches	Diam. Inches	Capacity Per Min. Gallons	Weight Pounds
1	\$3.60	17 5/8	1 1/8	6	2 1/4
2	4.40	20	1 1/2	12	3 1/4
3	4.70	29	1 1/8	8 1/2	3
4	5.50	29	1 1/2	16 1/2	4

Brass Bilge Pumps

WITH SUCTION HOSE AND STRAINER

Cast bronze foot rest and two 5 foot lengths of hose for suction and discharge.

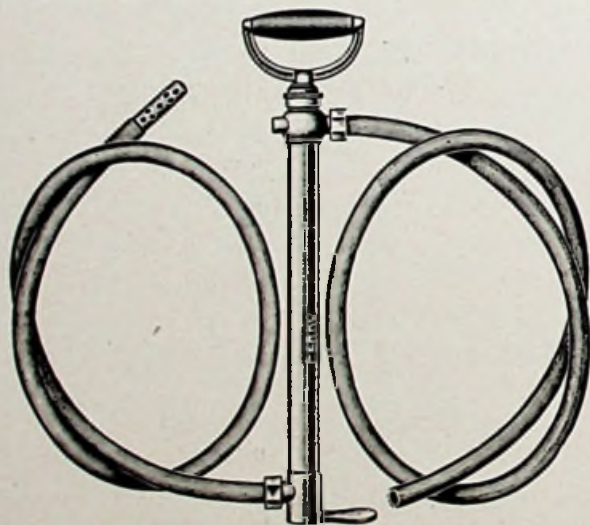


Fig. 202

Nos.	With Hose Each	Height Inches	Diam. Inches	Capacity Per Min. Gallons	Weight Pounds
5	\$5.75	18 5/8	1 1/8	6	3
6	6.60	21	1 1/2	12	4
7	7.15	30	1 1/8	8 1/2	3 1/4
8	8.25	30	1 1/2	16 1/2	5

Brass Bilge Pump

DOUBLE ACTION

WITH BULKHEAD BRACKETS

Complete with 2 five foot lengths of hose and suction strainer.

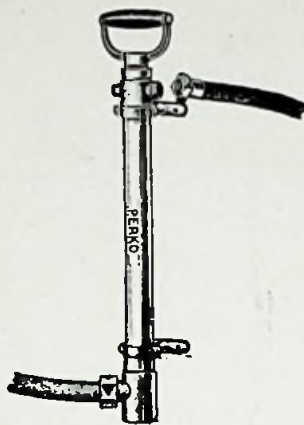


Fig. 524

Nos.	With Hose Each	Height Overall Inches	Diam. Pump Inches	Weight Pounds
11	\$7.50	21	1 1/2	9
12	8.75	31	1 1/2	10

Special Bilge Pump

SINGLE ACTION — ALL BRASS

Designed primarily for the small outboard motor boat or runabout.

Well constructed, of all brass, furnished complete with 5 feet of molded rubber hose.

CAPACITY—at ordinary stroke, 3 1/2 gallons per minute.

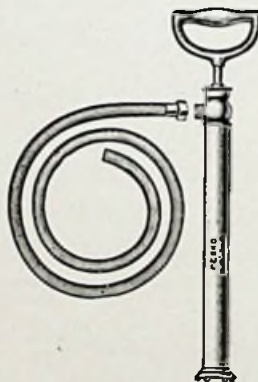


Fig. 723

Complete Each	Extra Hose Each	Diameter Inches	Extreme Length Inches	Weight Pounds
\$2.75	\$.60	1 1/8	17 5/8	2

Rubber Hose and Strainer

FOR FIG. 200 AND 202 BRASS BILGE PUMPS

Heavy moulded rubber hose, durable and lasting. 5/8 inch inside diameter.



Fig. 208 Fig. 209

Standard 5 ft. lengths Cast Bronze Strainer

Each
\$.60
.50

Other lengths of hose can be furnished. Price on application

ALL PUMPS ON THIS PAGE WITHOUT HOSE, DEDUCT \$.25 FOR EACH HOSE.

Trench or Bilge Pump

GALVANIZED

Made of heavy tubing, formed from black steel and hot galvanized afterwards, water-tight and rustproof seams. Galvanized iron valves with oak leather clapper, wood rod and handle, cone shaped oak leather plunger, as per Fig. 239, long lengths are well reinforced with galvanized steel bands around body.

ALSO KNOWN AS CONTRACTOR'S PUMP



Fig. 156

Diameter, inches	2	2½	3	3½	4
Price per foot	\$.60	\$.65	\$.70	\$.75	\$.80

Pumps shorter than 5 feet long charged as 5 foot.
Length measured overall.

Handy Bilge Pump

GALVANIZED

With iron rod and handle, improved oak leather disc plunger as Fig. 238, galvanized iron valve and top cap.

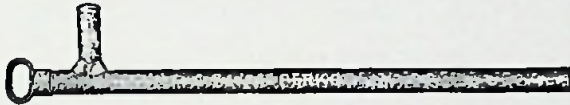


Fig. 158
PRICE EACH

Length Overall Feet	Diameter of Pump			
	1½ in.	2 in.	2½ in.	3 in.
2	\$1.90	\$2.00	....	....
2½	1.90	2.00	\$2.50	\$2.75
3	2.15	2.25	2.50	2.75
3½	2.30	2.40	2.70	3.10
4	2.60	2.70	3.00	3.50
4½	2.70	2.80	3.15	3.75
5	2.80	2.90	3.25	4.00
5½	3.00	3.10	3.50	4.30
6	3.15	3.25	3.75	4.60

Wizard Bilge Pump

WITH WOOD ROD AND LEATHER PLUNGER
Galvanized with Galvanized Valve



Fig. 344

PRICE EACH

Length Overall Feet	Diameter of Pump				
	2 in.	2½ in.	3 in.	3½ in.	4 in.
2	\$2.25	\$2.70	\$3.00	....	....
2½	2.35	2.70	3.00	....	....
3	2.50	2.90	3.00	\$3.30	....
3½	2.65	3.00	3.10	3.30	\$3.60
4	2.75	3.00	3.20	3.40	3.70
4½	2.85	3.10	3.30	3.50	3.80
5	2.95	3.20	3.40	3.65	3.90
6	3.40	3.80	4.00	4.40	4.70

Copper with Bronze Valve

Diameter Inches	Price Each
2	\$6.00
2½	6.50
3	7.00

Above prices on copper pumps apply to all lengths up to 5 foot inclusive. Longer lengths, price on application.

Heavy Duty Bilge Pumps

SPIRAL LOCK SEAMED BODY

24 B. & S. Gauge Steel, Hot Galvanized After Forming

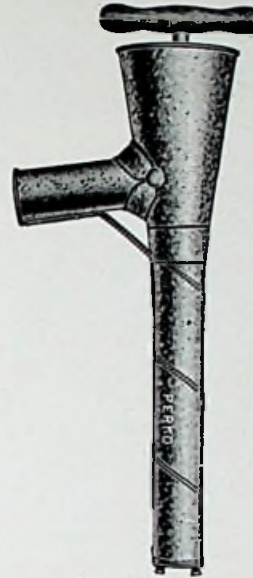


Fig. 724

SOLDERED JOINTS

Galvanized cast iron bottom valve with heavy leather clapper, galvanized steel support for spout rivited to spout and body.

Especially recommended for use by Public Utilities, Contractors and Industrials where pumps are put to very severe use.

Inside Diameter Body Inches	Price Per Foot
3	\$1.80
4	2.25

Length is measured overall. Pumps shorter than 5 feet charged as 5 feet long.

Crank Case Pump

DOUBLE ACTION—ALL BRASS

This has been sorely needed by motor boatmen, a quick acting, double action pump for draining the crank case, the long flexible metal spout can be inserted in filler opening of crank case which can be drained very rapidly with no trouble; a short length of rubber hose clamped to outlet of pump will allow draining overboard or into any handy carrier. A continuous flow of oil is maintained on both up and down strokes.

Capacity per minute—2 Gallons



Fig. 146

Length Pump Overall Inches	Length Inlet Spout Inches	Length Outlet Spout Inches	Diameter Pump Inches	Weight Pounds
17½	12½	1¾	1½	2½

Price Each—Complete, as illustrated \$3.75
 Price Each—Complete except Spout 3.00
 Price Each—Flexible Metal Spouts Only 1.90
 Moulded Rubber Hose to fit Outlet Spout, .20 per foot
 Rubber hose not furnished as standard equipment.

Crank Case Pump

SINGLE ACTION—ALL BRASS

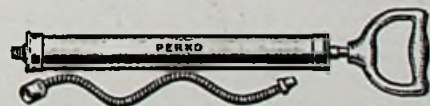


Fig. 388

Diam. Barrel Inches	Length Overall Inches	Length Overall Inches	Weight Each Pounds	Complete Each	Without Spout Each
1½	12	15½	2	\$2.75	\$2.25

Extra Spouts—Each \$1.10.



Basin or Galley Pumps

CAST BRONZE, POLISHED, NICKEL AND CHROMIUM PLATED

With a finished mahogany handle which when all the way down will not pinch the hand against the upright bar. Furnished with lock nut and two rubber washers.

These pumps have brass ball check in the plunger, and flapper valve at the bottom.

The handle is adjustable for operating from most convenient position.

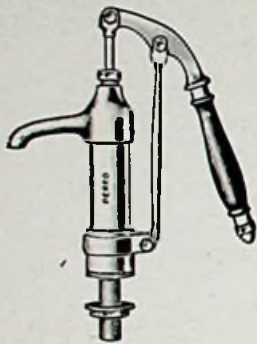


Fig. 473
With High Spout
Straight Base

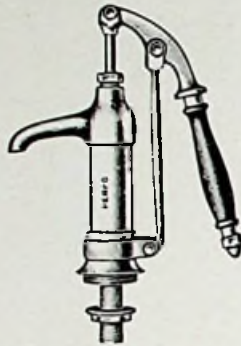


Fig. 478
With High Spout
Flange Base

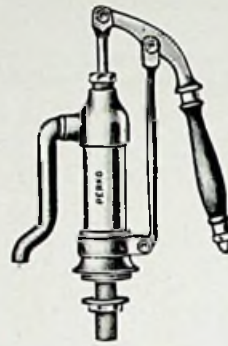


Fig. 474
With Low Spout
Flange Base

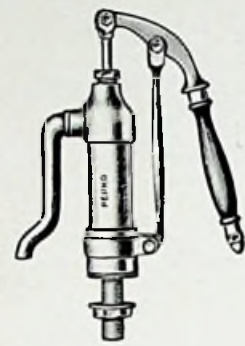


Fig. 479
With Low Spout
Straight Base

Fig.	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Diameter Barrel Inches	Length Barrel Inches	Length Neck Inches	Threaded For Pipe Inches	Spread Handle Up Inches	Weight Pounds
473-478	\$ 9.00	\$ 9.75	\$10.50	1 5/8	6	2 1/2	1/2	14	3 1/2
474-479	10.00	10.75	11.50	1 5/8	6	2 1/2	1/2	13	3 3/4

New Basin Pump

WITH METAL LEVER HANDLE

A well made good looking pump with brass ball checks in plunger and at the bottom or intake. Adjustable handle for operating from most convenient position.

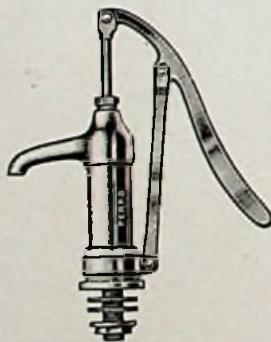


Fig. 467

Basin Pump

WITH STOP COCK

Same pump as those above with cast bronze stop cock. Furnished with straight or flange base, flange base furnished unless otherwise specified.

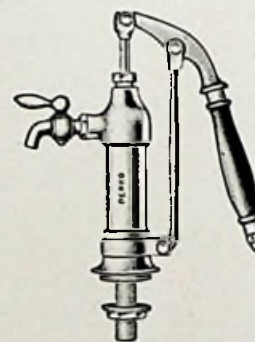


Fig. 525

Diam. Barrel Inches	Length Barrel Inches	Length Neck Inches	Threaded For Pipe Inches	Spread Handle Up Inches	Weight Pounds	Diam. Barrel Inches	Length Barrel Inches	Length Neck Inches	Threaded For Pipe Inches	Spread Handle Up Inches	Weight Pounds
1 5/8	6 1/2	2	1/2	13 1/2	4	1 5/8	6	2 1/2	1/2	14	4 1/2
Polished Bronze Each		Nickel Plated Each	Chromium Plated Each			Polished Bronze Each		Nickel Plated Each	Chromium Plated Each		
\$7.50		\$8.00	\$8.75			\$11.00		\$12.00	\$13.00		

Tail Pieces for above pumps for attaching hose or lead pipe see Figs. 67 and 68.

Marvel Basin Pumps ALL BRONZE

Designed for beauty as well as simplicity, just as attractive as the water fittings in the modern home. Furnished with brass ball checks in plunger and at bottom or intake.

Length of stroke is 5 1/4 inches.
Inlet is threaded for 3/8 inch pipe.
Capacity per minute, Low Speed Stroke—3 Gallons.

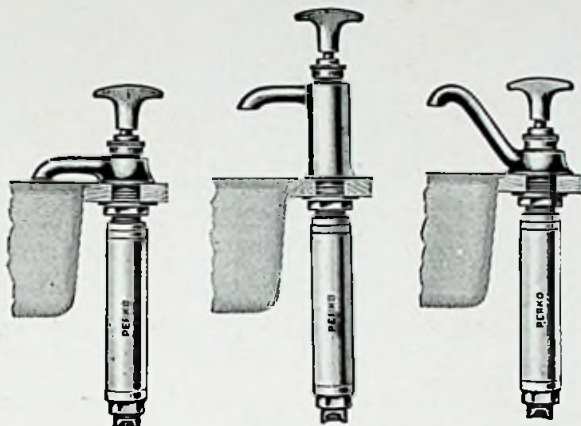


Fig. 144 Low Spout Fig. 145 High Spout Fig. 1040 Gooseneck Spout

Fig.	Diam. Barrel Inches	Length Overall Inches	Projection Spout Inches	Height Spout Inches	Weight Pounds
144	1 1/2	13 1/2	3	0	3
145	1 1/2	16 1/2	3	3	3 1/2
1040	1 1/2	14 1/2	4 1/2	3	3 1/2

Fig.	Exposed Parts Only		
	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
144	\$6.00	\$6.50	\$7.75
145	7.50	8.25	8.75
1040	7.00	7.50	9.50

Double Action Basin Pump ALL BRONZE

With double tubing and brass ball checks in plunger and bottom intake. Furnished with solid flange or clamp flange.

Capacity per minute, Low Speed Stroke—3 1/2 Gallons.



With Solid Flange
Fig. 373

With Clamp Flange
Fig. 374

Diam. Barrel Inches	Length Up To Spout Inches	Projection Spout Inches	Inlet Pipe Thread Inches	Diam. Flange Inches	Weight Pounds
1 1/8	13 1/2	4 1/4	3/8	2 1/2	2 3/4

Fig.	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
373	\$3.75	\$4.10	\$5.10
374	4.10	4.50	5.50

Cruiser Basin Pump ALL BRONZE

With brass ball checks in plunger and bottom intake. Threaded for 1/2 inch pipe, neck is 2 1/4 inches long, weight, 3 pounds.



Fig. 495

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Diam. Barrel Inches	Height to Spout Inches	Projection of Spout Inches
\$5.50	\$6.00	\$6.50	1 1/8	5	2 1/4

Double Action Galley Pump BRASS TUBING—CAST BRONZE FITTINGS

A large capacity pump ideal for galley use, complete with bulkhead brackets and tail pieces for attaching hose or lead pipe. Brass ball checks in plunger and intake. Threaded for 3/4 inch pipe.



Fig. 345

No.	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Diam. Barrel Inches	Length Overall Inches
9	\$5.50	\$6.50	\$ 9.00	1 1/2	21
10	7.00	8.00	10.50	1 1/2	31

Bulkhead Bracket

FOR BASIN PUMPS—CAST BRONZE

For mounting any of the basin pumps shown above on bulkhead. Removable clamp makes tight fit on body of pump.

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
\$1.50	\$1.80	\$2.50



Fig. 475

Super-Midget Electric Pump

ALL BRONZE CONSTRUCTION



Fig. 801

Ideal for pumping the bilge in small boats. Current consumption as low as boat radio—6 amps full load on 6 volts—other voltages lower. Can be furnished with attached automatic float switch at slight additional cost.

Capacity at 1 foot head 600 gallons per hour, at 6 foot head 220 gallons per hour.

6 Volt D.C. Each	12 Volt D.C. Each	32 Volt D.C. Each	110 Volt A.C. Each	115 Volt D.C. Each
\$12.00	\$13.00	\$14.00	\$15.00	\$15.00

With automatic float switch add \$5.00 each.

Motor Driven Gear Pump

WITH 12 OR 32 VOLT MOTOR
3/4 INCH PUMP—1/6 H.P. MOTOR

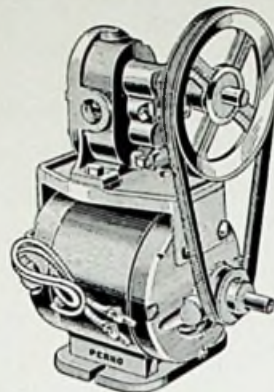


Fig. 576

Designed primarily for bilge pumping, fire fighting, washing down decks and top sides, for all general purposes.

Pump—All bronze gear type with 3/4 inch pipe connection.

Motor—A specially built drip-proof type treated to withstand dampness. Its normal current draw is about 7 amperes for 32 volt type and 18 amperes for 12 volt type.

Capacity—Motor drives pump at 580 R.P.M. through a V belt. Pumps about 350 gallons per hour at 0 lbs. pressure. Reasonable pressures can be obtained for intermittent service.

No.	Each	Voltage of Motor	Size of Base Inches	Height Overall Inches
1	\$80.00	12	5 3/4 x 4 3/4	14
2	75.00	32	5 3/4 x 4 3/4	14

DIAPHRAGM PUMPS

MADE TO CONNECT WITH IRON PIPE
BOTTOM INLET



Fig. 696

MADE TO CONNECT WITH SUCTION HOSE OR
IRON PIPE
SIDE INLET

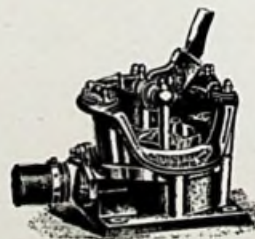


Fig. 697

★Size Pump No.	Each	Ht. In.	Lgth. of Stroke In.	Ca- pacity Per Stroke Gal.	Diam. of Suction In.	Wt. Complete Lbs.	Size In.
2	\$15.33	14	2 3/4	1/2	2 1/2	108	14 x 16
3	18.75	16	3	1	3	148	15 1/2 x 18
4	30.00	20	4	2	4	216	19 x 21

★Size Pump No.	Each	Length of Stroke Inches	Capacity Per Hour Gallons	Diam. of Suction Inches	Weight Complete Pounds
2	\$16.88	2 3/4	1800	2 1/2	126
3	20.25	3	3500	3	157
4	33.00	4	6000	4	230

In ordering Side Suction Pumps, always specify if hose or pipe thread is wanted. Hose thread is 7 1/2 threads to the inch; pipe thread is 8 threads to the inch.

* Order by this number and give figure number.

Rubber Diaphragms Only—No. 2, \$2.50 Each; No. 3, \$3.00 Each; No. 4, \$4.35 Each.

Parts for Brass Bilge Pumps

Flange and cup washers are leather, especially treated for use in salt water. Split washer is wrought brass. Ball is hollow and made of wrought brass.

No. 1 fits numbers 1, 3, 5 and 7 bilge pumps. } Page
 No. 2 fits numbers 2, 4, 6 and 8 bilge pumps. }

	Flange Washer { No. 1 Fig. 203 { No. 2	Each \$.20 .25
	Cup Washer { No. 1 Fig. 204 { No. 2	\$.20 .25
	Split Washer { No. 1 Fig. 205 { No. 2	\$.05 .07
	Hollow Ball { No. 1 Fig. 206 { No. 2	\$.30 .40
	Valve Fitting For Plunger { No. 1 Fig. 456 { No. 2	\$.50 .60
	Packing Nut { No. 1 Fig. 457 { No. 2	\$.60 .80

Bottom Valves

FOR BRASS BILGE PUMPS—CAST BRONZE



Fig. 549
For Fig. 200
Single Hose Pump



Fig. 550
For Fig. 202
Double Hose Pump

Furnished complete with hollow brass ball and strainer.

Fig. 549		Fig. 550	
For Pump Size No.	Each	For Pump Size No.	Each
0	\$.90	5	\$1.30
1	1.00	6	1.60
2	1.30	7	1.30
3	1.00	8	1.60
4	1.30		

Fig. 549 for pump size No. 0 fits special bilge pump, Fig. 723.

Weighted Clapper Valves

FOR NAVY BILGE PUMPS AND BASIN PUMPS



Fig. 147



Fig. 148

Fig. 147—Valve for Navy Bilge Pumps	Each	\$.80
Fig. 148—Valve for Basin Pumps		.60

Pump Valve



Galvanized iron with oak leather clapper, galvanized iron weights on both sides of leather riveted together and screwed to casting.

Fig. 237						
Diameter, inches	1½	2	2½	3	3½	4
Wgt. per doz., lbs.	3	4	6	7	9	11
Price per doz.	2.75	2.75	2.75	3.00	4.00	4.50

Improved Plunger

Malleable iron stem threaded to cast iron wheel to support oak leather disc plunger.



Fig. 238

Diam. Inches	Weight Per Dozen Lbs.	Price Per Dozen
1½	2½	\$2.75
2	3	2.75
2½	4½	3.00
3	6	3.25

Leather Plungers

OAK LEATHER

Riveted together, strong and durable.



Fig. 239

For Diam. Pump Inches	Weight Per Dozen Lbs.	Price Per Dozen
2	2	\$2.75
2½	2½	2.75
3	3	3.00
3½	3½	3.60
4	4	4.00

Wood Pump Handles

Turned from soft wood, smooth finish, 9 inches long.



Fig. 230

Diam. of hole, in.	¾	1¼
Price per doz.	\$1.44	\$1.92

Wood Pump Rods

Pointed on one end.



Fig. 231

NOTE—¾ inch only furnished in 6 inch multiples.
 1½ inch only furnished in 12 inch multiples.

Diam., inches	¾	1¼
Lengths, ft.	2 to 6	6 to 12
Price per ft.	\$.08	\$.10

Plunger for Navy Bilge Pumps

ALL BRASS



Fig. 103

This style plunger assembly used on all "Perko" navy type bilge pumps. All cast bronze handle with "man size" grip. The brass vertical rod is ½ inch diameter. The plunger itself consists of a bronze casting with ¼ inch self lubricated flax packing set in a groove. This packing is far superior to leather and with ordinary use will give fine results for years, yet it is very easy to replace.

For cylinder—2¼ inches inside diameter. Each, complete \$4.20



Flexible Couplings
DIE CAST WHITE BRASS

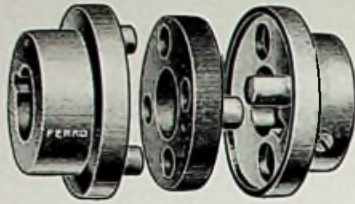


Fig. 687

Die cast under tremendous pressure, a heavy leather disc, 5/16" thick with two inserts on each side furnished complete with set screws. 5/8 and larger have keyway and set screws.

No.	Price Each	Bore Inches	Length Inches	Outside Diameter Inches	Outside Diameter Hub Inches
1	\$1.00	3/8 and 1/2	1 1/4	1 1/4	1
2	1.50	3/8 to 3/4	1 1/2	2 1/4	1 1/2

No extra charge for combination of size bores. Be sure to specify size bore, both ends, when ordering.

Rubber Hose and Couplings
FOR NAVY BILGE PUMPS



Fig. 812

An extra heavy rubber hose in sizes necessary to fit our navy type bilge pumps and strainers. Couplings are cast bronze.

Hose Only			Couplings Only	
Inside Diam. Inches	Outside Diam. Inches	Per Foot	Pipe Size	Each
1	1 1/2	\$.28	1	\$.54
1 1/4	1 3/8	.40	1 1/4	.90
1 1/2	2 1/8	.48	1 1/2	1.20

Hose Clamps

GALVANIZED—HEAVY



Fig. 823

For Inside Diameter Hose Inches	Per Dozen
1	\$1.00
1 1/4	2.00
1 1/2	2.25

V Type Pulleys
DIE CAST WHITE BRASS

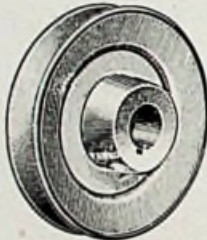


Fig. 688

No.	Price Each	Outside Diameter Inches	Bore Inches	Running Diameter Inches
1	\$1.00	3	3/8 to 3/4	2 1/8
2	1.50	4	1/2 to 3/4	3 1/2
3	2.00	5	1/2 to 3/4	4 3/4

Be sure to specify size bore when ordering.

Clothes Hammocks

PULLMAN BERTH TYPE—GREEN

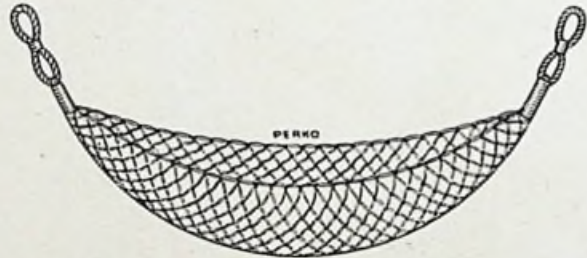


Fig. 566

The same type as used in Pullman sleeping cars. These have many uses in a boat. Length overall, 66 inches. Price Each\$1.95

Brass Grease Cups
FOR PERKO GEAR PUMPS



Fig. 961

Drawn from heavy gauge sheet brass. This cup is of light weight yet practically indestructible.

No.	Each	Height Inches	Inside Diam. Inches	Pipe Thread Inches	Capacity Ounces
1	\$.30	1 1/8	1/2	1/8	1/8
2	.35	1 3/8	3/4	1/8	1/4
3	.45	2 3/8	1 1/4	1/8	2 1/2

Plates for Hanging Berths

CAST BRONZE



Fig. 1043

Top of plate is beveled to fit curve of ceiling. Furnished in pairs for right and left hand mounting. Hole 1/2 inch diameter.

Polished Bronze Per Pair	Nickel Plated Per Pair	Chrom. Plated Per Pair	Length Overall Inches	Width Overall Inches	Thickness Inches
\$1.30	\$1.70	\$2.00	2 1/2	1 1/8	1/4



"Perko" Zinc Marine Oilers

BRASS BOTTOM



Fig. 326

Made of heavy gauge pure zinc, spring brass bottom, machine cut thread, interchangeable spouts.

No.	3	4
Capacity	8 ozs.	12 ozs.
Diameter	4 in.	4 1/2 in.
Length spout	4 in.	6 in.
Wt. per gross	40 lbs.	48 lbs.

PRICE PER GROSS

No.	3	\$56.00
	4	70.00

EXTRA SPOUTS

No.	3	4 inch	\$16.00
	4	6 inch	18.00

Gasoline Funnels

GALVANIZED—FOR OUTBOARD MOTORS AND RUNABOUTS



Fig. 589

Heavy gauge iron, fine copper mesh strainer and splash guard.

Diam. Top Inches	Each	Height Inches	Capacity Gallons
8	\$1.40	9	1/2
10	1.60	9	1

Signal Torch



Fig. 177

Made of heavy galvanized iron. Handle riveted to body, cast iron claws for holding wick.

Diameter, 5 1/2 inches
Height, 15 inches
Weight, 2 3/4 pounds

Price each \$4.00

Eastern Funnel

NARROW TOP—FOR NARROW SPACES



Fig. 318

Heavy galvanized iron, wire enclosed bead around mouth, extra long spout, fine copper mesh strainer.

Diam. Top Inches	Length Overall Inches	Diam. Spout Inches	Length Spout Inches
5 1/2	16	1	7

Each Galvanized \$1.40

Pitch Payers



Fig. 178

Heavy galvanized iron, double seamed and soldered, handle riveted to top, inside strainer riveted to body.

Diam. Inches	Length Body Inches	Length Overall Inches	Weight Lbs.	Price Each
7	13	20	1 1/2	\$2.50

Folding Stool

CAST BRONZE SUPPORTS

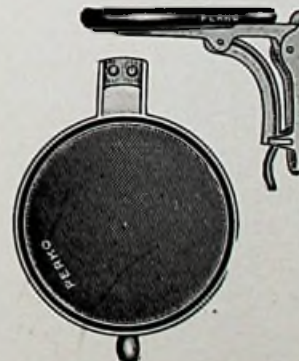


Fig. 1009

An ideal fitting for the average cruiser, appreciated by boat owners who have spent hours at the wheel.

No.	Each	Diam. Seat Inches	Offset Inches
1	\$6.50	11	14
2	9.50...	13	16



Corner Lavatory

WHITE VITREOUS CHINA

With chromium plated low spout pump, Fig. 479



Fig. 830

With integral back and round basin with overflow, fitted with chromium plated waste plug, chainstay, chain and stopper. Size of outlet 1 1/4 inches outside diameter. Inlet to pump 1/2 inch inside diameter.

No.	Complete with Pump Each	Complete Except Pump Each	Size of Sides Inches	Diam. of Basin Inches	Height Back Inches
1	\$29.50	\$19.00	12x12	10	2 1/2
2	34.50	24.00	14x14	11	2 1/2

Furnished with chromium plated compression faucet if desired, add \$3.50 to price of lavatory without pump.

Flat Back Lavatory

With Chromium Plated low spout compression faucet

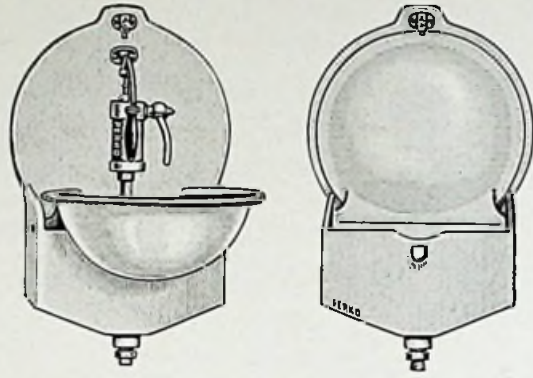


Fig. 831

No.	Complete with Faucet Each	Complete Except Faucet Each	Size Inches	Diam. of Basin Inches	Height Back Inches
3	\$19.50	\$16.00	12x12	10	2 1/2

Folding Lavatories

VITREOUS ENAMELED ENTIRELY
CHROMIUM PLATED PUMP AND FITTINGS



Open

Closed

Fig. 732

Ideal where space is limited. A one piece back with folding basin. Smooth white vitreous enameled all over. The quick acting pump and all other metal parts are brass, chromium plated. Basin is held in closed position by a spring catch. Inlet and outlet fittings are threaded for 3/4 inch pipe.

Complete assembly weighs 42 pounds.

Each	Height Inches	Width Inches	Projection When Open Inches	Diam. Basin Inches	Depth Basin Inches
\$33.00	20	13 3/4	14	10	4 1/2

Flat Back Lavatory

WHITE VITREOUS CHINA

With Chromium Plated high spout pump, Fig. 473



Fig. 832

With integral back and round basin. Complete with chromium plated waste plug, chainstay, chain, and stopper. Size of outlet 1 1/4 inch outside diameter, inlet to pump 1/2 inch inside diameter.

No.	Complete with Pump Each	Complete Except Pump Each	Size Inches	Diam. of Basin Inches	Height Back Inches
4	\$28.00	\$18.50	14x14	11	2 1/2

For detailed information on various types of basin and galley pumps see page 72-73.

Cast Iron Lavatory

PORCELAIN ENAMELED—WHITE
THE "BYRD"

With Chromium Plated gooseneck spout pump, Fig. 1040

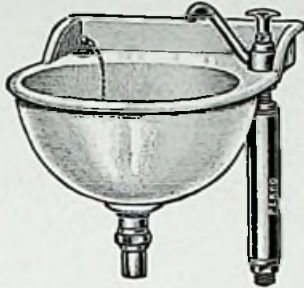


Fig. 335

White enameled iron lavatory without overflow.

Furnished complete with waste plug, chain stay, chain and rubber stopper, also screws and washers for mounting.

Complete Except Pump Each	Complete with Pump Each	Size Inches	Diam. of Basin Inches	Height Back Inches
\$9.00	\$17.50	12x12	10½	2

Pressed Steel Lavatory

PORCELAIN ENAMELED—WHITE
WITH BRACKETS FOR MOUNTING

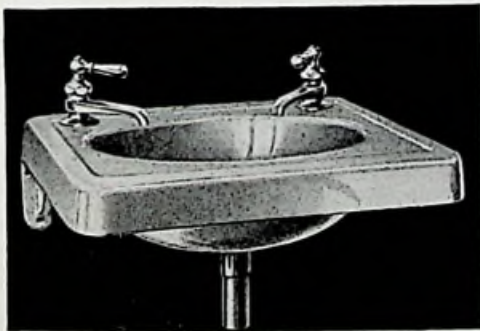


Fig. 336

Pressed in one piece out of 18 gauge ingot iron, finished in 3 coats of porcelain enamel, an exclusive process. The underside is also enameled so that its attractiveness is not lessened when fully exposed.

Each	Outside Measurements Inches	Oval Size Basin Inches	Inside Depth Inches	Weight Pounds
\$7.00	14x16½	9½x12¾	4¾	11

Price includes brackets, Tailpiece and Plug.

Price does not include Faucets—can be used with Pumps shown on pages 72 and 73.

Pressed Steel Corner Lavatory

PORCELAIN ENAMELED—WHITE

For small cruisers or sail boats where space is limited.

Has 1¾ inch diameter hole in shelf for faucet or pump.

Complete with chromium plated tail piece and rubber drain plug.



Fig. 404

Each	Size Bowl Inches	Depth Inches	Outside Dimensions Inches	Tail Piece Inches	Weight Pounds
\$4.75	9x7¼	4⅛	12x11	1¼	3

Galley Sink

PRESSED STEEL—PORCELAIN ENAMELED WHITE



Fig. 402

With flat rim and chromium plated combination sink drain and stopper in one unit, 1¼ inch tail piece.

No.	Each	Size Inside Inches	Size Outside Inches	Depth Inches	Wt. Lbs.
1	\$4.75	10 x12	11½x13½	4¾	3
2	4.80	10½x16	12¾x18	4¾	4
3	5.75	11½x17¼	14 x20	4½	5
4	7.25	14 x21½	16¼x24	4½	7

No. 2 size can be furnished in old ivory color at no extra charge.

Galley Sinks

CAST IRON—PORCELAIN ENAMELED INSIDE



Fig. 833

With flat rim and 1 inch flange, complete with chromium plated brass plug type strainer and rubber stopper. Connections for 1½ inch lead pipe, 2 inch outlet in sink.

No.	Each	Width Overall Inches	Length Overall Inches	Depth Inside Inches
1	\$ 6.00	12	12	6
2	7.00	12	18	6
3	8.00	14	20	6
4	10.30	16	24	6



“PERKO” MARINE CLOSETS

FOR ABOVE OR BELOW WATERLINE
 WHITE VITREOUS CHINA BOWLS—ALL BRONZE PUMPS AND FITTINGS
 BIRCH SEATS AND COVERS—MAHOGANY OR WHITE FINISH

BOWL is of rim flushing type and of latest design to eliminate loose pipe connections where supply pipe is connected to it.

PUMP for supply and discharge is 2½ inch with felt packed piston. Length of stroke 3½ inches.

VALVES, waste valve contains leather clack washers. A combination supply and check valve.

WASTE ARM has ¾ inch pipe size clean out opening ample to allow cleaning out of foreign matter or quick draining when hauling out.

OUTLET is full size 1½ inch opening with 2 inch pipe size coupling nut.

INLET is full size ¾ inch opening with 1 inch pipe size coupling nut.

The Boatman

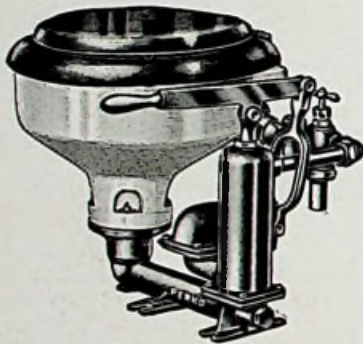


Fig. 828

The Yachtsman

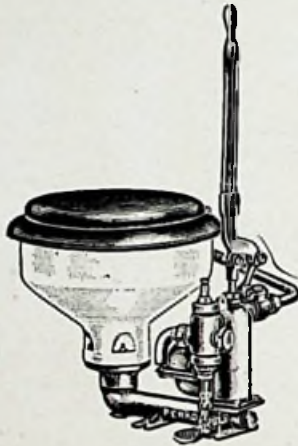


Fig. 829

The Seaman

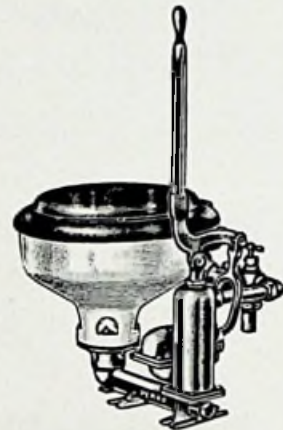
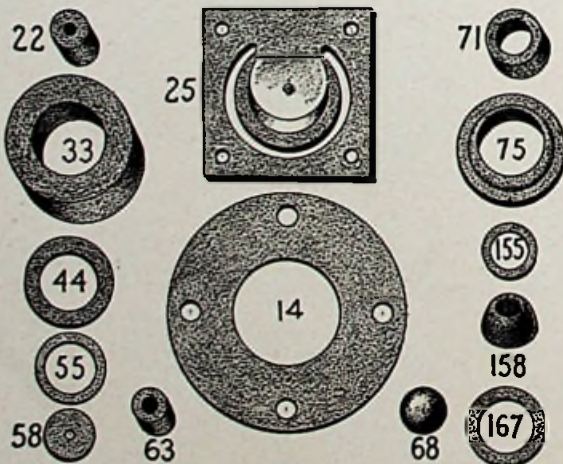


Fig. 1025

Fig. 828		Fig. 829		Fig. 1026	
With Mahogany Seat and Cover Each	With White Seat and Cover Each	With Mahogany Seat and Cover Each	With White Seat and Cover Each	With Mahogany Seat and Cover Each	With White Seat and Cover Each
\$36.00	\$39.00	\$39.75	\$42.75	\$37.50	\$40.50
Mahogany Seat and Cover Only Each	White Seat and Cover Only Each	White Vitreous China Bowls Only Each	Overall Width Side to Side Inches	Overall Width Front to Back Inches	Overall Height Inches
\$4.75	\$6.00	\$13.00	17½	16	14¼

Furnished with pump on right or left hand side. Right hand facing furnished unless otherwise specified.



Repair Parts for “Perko” Closets

Part No.	Part Name	Each
14	Rubber Gasket for Bowl Flange	\$.45
22	Felt Packing for Piston Rod	.30
25	Leather Clack Valve, Weighted	.60
33	Felt Packing for Piston	.60
44	Rubber Washer for Rising Main Coupling	.15
55	Rubber Washer for Hand Valve Coupling	.15
58	Rubber Disc for Hand Check Valve	.15
63	Felt Packing for Hand Valve Stem	.15
68	Rubber Ball for Return Check Valve	.20
71	Felt Packing for Flush Elbow	.15
75	Rubber Gasket for Bowl Spud	.25
155	Rubber Washer for Foot Valve Coupling	.15
158	Rubber Washer for Foot Valve Seat	.25
167	Rubber Washer for Foot Valve Cap	.15

Outlet Connections CAST BRONZE

Used as outlet fittings for engines, pumps, lavatories, water closets, etc. Threaded to fit standard pipe. Complete with large flange lock nut.

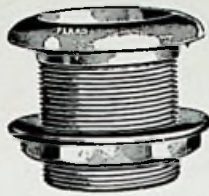


Fig. 322

Size Pipe Inches	Price Each	Length under Flange Inches	Weight Each
1/4	\$.65	1 3/8	1 oz.
3/8	.75	2 3/8	3 oz.
1/2	.90	2 3/4	4 oz.
3/4	1.00	2 3/4	8
1	1.25	2 1/2	12
1 1/4	1.75	3	1 1/2 lbs.
1 1/2	2.50	3 3/8	2 1/4
2	3.00	3 1/2	2 1/2
2 1/2	5.00	3 3/4	3 3/4

Inlet Connections CAST BRONZE

A good, dependable connection, easy to install. Fits flush with outside of hull. Complete with large flange lock nut and hose coupling.

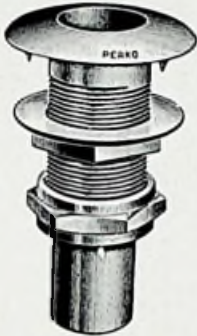


Fig. 64

Size Pipe Inches	Without Strainer Each	With Strainer Each	For Planking Inches	Weight
1/4	\$1.15	\$1.40	7/8	2 oz.
3/8	1.25	1.50	1 1/8	4 oz.
1/2	1.40	1.70	1 1/8	7 oz.
3/4	1.65	2.00	1 5/8	10
1	2.00	2.45	1 3/4	1 lb.
1 1/4	2.75	3.25	1 3/4	2
1 1/2	3.75	4.35	2 1/4	2 3/4
2	5.00	5.65	2 1/2	3 3/4

Water Outlet CAST BRONZE

For use on boats with water outlet on side of hull. Large flange protects hull from stain. Hood prevents spray entering boat. Standard pipe thread will fit standard lead pipe connections.



Fig. 332

No.	Size Pipe Inches	Diam. Flange Inches	Length of Pipe Inches	Weight
1	3/4	2 3/4	2 1/4	12 oz.
2	1	3	3 3/4	1 lb.

No.	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
1	\$2.00	\$2.50	\$2.75
2	2.50	3.00	3.25

Speedboat Strainers CAST BRONZE ONE PIECE

Designed to prevent clogging. Will admit full supply of water at all speeds.

Entire strainer including threaded neck is one solid casting.

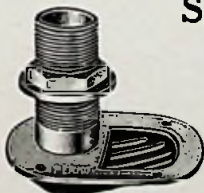


Fig. 65

Size Pipe Inches	Price Each	Length Pipe Inches	Size Strainer Inches	Weight Each
1/2	\$1.25	2 1/4	2 1/2 x 3 1/2	11 oz.
3/4	1.50	2 1/8	3 x 4	14 oz.
1	2.00	3	3 x 4	1 1/4 lbs.
1 1/4	2.50	3 3/8	3 3/8 x 4 1/2	1 1/2 lbs.
1 1/2	3.00	3 3/8	4 1/4 x 6 3/4	2 1/2 lbs.

Scoop Strainers CAST BRONZE

Can be used with inlet connection, Fig. 64. No. 1 will fit up to 1/2 inch. No. 2 will fit up to 1 inch. No. 3 will fit up to 1 1/4 inches.



Fig. 66

No.	Price Each	Outside Dimensions Inches	Weight Each
1	\$.35	3 1/2 x 2 1/2	4 oz.
2	.50	5 x 3 1/4	7 oz.
3	1.00	6 1/4 x 4 1/4	1 lb.

Round Strainers PLAIN CAST BRONZE



Fig. 86

Diam. Inches	Price Each	Depth Inches	Weight Each
2 1/2	\$.30	1/2	2 oz.
3	.35	5/8	4 oz.
3 1/2	.45	3/4	5 oz.
4	.50	3/4	6 oz.
5	.75	1	12 oz.
6	1.00	1 1/4	1 lb.
8	2.00	1 3/8	2 lbs.
10	4.00	1 3/8	3 lbs.

Bronze Sea Cocks

WITH DRAIN PLUGS—ROUND WAY



Fig. 835



Fig. 834

Size Inches	Fig. 835 Each	Fig. 834 Each	With Strainer Add Each	Without Hull Connection Deduct Each
3/4	\$ 5.35	\$ 5.70	\$.35	\$.85
1	6.35	7.00	.45	1.10
1 1/2	12.20	12.95	.60	2.20
2	17.70	18.45	.65	2.70

Angle Sea Cocks CAST BRONZE



Fig. 836

Heavy cast bronze handle.

Tail piece for lead pipe or hose connection — 3/4 inch for inlet, 1 1/4 inch for outlet.

Size Inches	Weight Each Pounds	Without Strainer Each	With Strainer Each
2	2	\$3.60	\$3.95
4	4	6.60	7.20

Angle sea cocks will not accommodate through hull connections.



Round Portlights

GALVANIZED IRON AND CAST BRONZE
NEW STYLE—IMPROVED
GLASS AREA IS SAME DIAMETER AS OPENING



Fig. 317

Diam. Opening Inches	Galv. Each	Plain Bronze Each	Pol. Bronze Each	Diam. Glass in Clear Inches	Diam. Frame Inches	Thickness of Glass Inches
3	\$2.75	\$3.00	\$5.00	3	6 5/8	1/4
4	3.00	3.25	6.00	4	7 5/8	1/4
5	3.75	4.50	7.25	5	8 3/4	3/8
6	4.50	5.25	8.00	6	9 3/4	3/8
7	6.25	7.00	10.00	7	11	1/2
8	7.75	8.50	12.50	8	12 1/4	1/2
9	10.25	11.50	16.50	9	14 3/8	1/2
10	12.50	14.00	20.00	10	14 7/8	1/2
12	19.00	21.00	30.00	12	17 1/8	1/2

All sizes are recessed for screens.
 For screens see Fig. 434.
 9 and 10 inch have Two Fastenings
 12 inch have Three Fastenings

Round Frames for Portlight Glass

CAST BRONZE



Fig. 71

Inside Diam.	Outside Diam.	Plain Bronze Each	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
3 7/8	5 3/4	\$.55	\$1.00	\$1.40	\$2.00
4 3/8	6 1/4	.60	1.10	1.50	2.10
4 7/8	6 3/4	.65	1.25	1.75	2.40
5 1/4	7 1/4	.70	1.50	2.10	2.75
5 3/4	8	1.00	1.85	2.45	3.10
6 1/4	8 1/2	1.30	2.25	2.85	3.60
7 1/4	9 3/4	1.65	2.75	3.45	4.25
8 1/4	11 1/4	2.00	3.25	4.00	5.00
9 1/4	12 1/4	2.50	3.75	4.75	5.75
10 1/4	13 1/4	3.00	5.00	6.00	7.00

MORE-AIR PORTLIGHTS

INSIDE PATTERN—FOR WOOD HULLS
CAST BRONZE—PLAIN AND POLISHED
COMPLETE WITH OUTSIDE FINISHING RING
GLASS AREA IS SAME DIAMETER AS OPENING

ALL SIZES ARE RECESSED FOR SCREENS
FOR SCREENS SEE FIG. 434

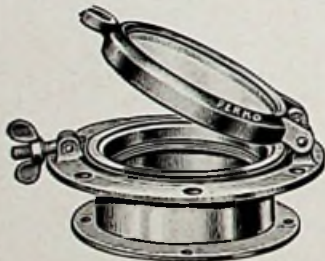
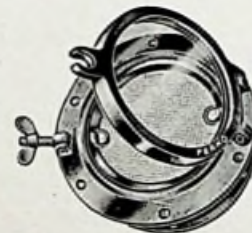


Fig. 157

Showing Screen in Place



Opening Inches	For Thickness of Wood							
	1 1/2 Inch		3 Inch		4 1/2 Inch		6 Inch	
	Plain Each	Polished Each	Plain Each	Polished Each	Plain Each	Polished Each	Plain Each	Polished Each
4	\$4.50	\$6.00	\$5.25	\$6.75	\$6.00	\$7.50	\$6.75	\$8.25
5	5.25	7.25	6.00	8.00	6.75	8.75	7.50	9.50
6	6.50	8.75	7.25	9.50	8.25	10.50	9.50	11.75
7	8.25	11.00	9.50	12.25	10.75	13.50	12.00	14.75
8	10.75	13.75	12.00	15.00	13.75	16.75	15.75	18.75
9	14.00	17.75	15.50	19.25	17.75	21.50	20.00	23.75
10	17.50	23.00	20.25	25.75	23.50	29.00	27.00	32.50
12	23.50	33.00	26.75	36.25	31.00	40.50	35.75	45.25

For 1 inch wood, use 1 1/2 inch price. For 2 or 2 1/2 inch wood use 3 inch price, etc.

Diameter frame up to 8 inch, add 3 inches. 9 to 12 inch, add 4 inches.

Without outside finishing ring, deduct from above prices the following:

	4 Inch	5 Inch	6 Inch	7 Inch	8 Inch	9 Inch	10 Inch	12 Inch
Plain	\$.45	\$.55	\$.65	\$.80	\$1.00	\$1.50	\$2.00	\$2.50
Polished	.60	.75	.85	1.10	1.35	2.00	2.75	3.25

Above items desired **CHROMIUM PLATED**, add 50% to Polished Bronze Prices

"Perko" Alcohol Burner

CAST BRONZE—NICKEL FINISH



Fig. 979

The burner that is used in Perko Alcohol Stoves, which have proven very successful and are used on hundreds of boats throughout the country.

This burner furnishes intense cooking heat and is practically noiseless in operation, safe and dependable. A good grade of denatured alcohol should always be used.

The slotted burner is more desirable than other types as the flame covers a larger area.

Complete with wire brush filter and fittings for installing \$6.00
 Wire brush filters only, each80
 Needle Valves with handle only 1.30

Fuel Tank for Alcohol Stoves

COPPER—1 GALLON CAPACITY



Fig. 980

Made of heavy weight sheet copper, highly polished. Fittings include shutoff valve, 5 feet of copper tubing and tubing connections.

Complete With Fittings Each	Tank Only No Fittings Each	Diameter Inches	Length Inches
\$5.00	\$4.00	5 1/2	11 1/4

ample space between burner and burners. Y
 for keeping dishes or food warm.

Two burners will operate about 10 hours on one gal. of alcohol.

	Extreme Length Inches	Extreme Height Inches	*Extreme Width Inches	Weight Complete Pounds
2 Burner	20	8 1/2	12 1/4	26
3 Burner	31	8 1/2	12 1/4	35

2 Burner Complete Each	3 Burner Complete Each	Brass Pot Holders Per Pair
\$20.00	\$29.00	\$1.75

Stove only, without tank, tubing or fittings deduct \$2.00 each.

* Width shown is extreme of body, not including valve
 Pot holders above are for our vitreous enameled stove
 NOTE—State number of burners when ordering.

Liverpool Heads

Of heavy gauge metal, all parts riveted, top and bottom double seamed. Fits over standard stove pipe.



Fig. 347

Size Inches	Galv. Each	Brass Each
3	\$ 5.50	\$ 7.00
3 1/2	5.75	7.25
4	6.00	7.50
4 1/2	6.60	8.60
5	7.20	9.30
5 1/2	8.60	10.20
6	8.90	12.00
7	10.00	15.00
8	15.00	18.00
10	18.00	25.00

Water Deck Irons

GALVANIZED CAST IRON



Fig. 430

Size of Stove Pipe Inches	Price Each	Outside Diam. of Neck Inches	Diam. Flange Inches	Weight Pounds
2 1/2	\$1.50	2 3/4	6 3/4	1 7/8
3	1.75	3 1/8	7 1/2	3 1/2
3 1/2	2.00	3 13/16	8 3/8	4
4	2.25	4 3/8	9 1/4	5 3/8
4 1/2	2.50	4 13/16	10	6 1/2
5	2.75	5 3/8	10 1/2	7
5 1/2	3.50	5 13/16	11	9
6	4.00	6 1/8	11 1/4	9 3/8
7	5.00	7 3/8	13	11
8	7.00	8 7/8	14 3/8	16 1/4

Tail Pieces

CAST BRONZE—FOR SEACOCKS

For lead pipe or hose connections, furnished complete with leather washer.



Fig. 67
Straight Tail Piece



Fig. 78
90 Degree Tail Piece

Size Inches	Price Each Fig. 67	Price Each Fig. 78	Weight Each
3/4	\$.65	\$1.00	5 oz.
1	.75	1.40	6 oz.
1 1/4	1.25	1.75	8 oz.
1 1/2	1.25	2.00	1 lb.
2	2.00	2.75	1 1/2 lb.



PERKO ALCOHOL STOVES

THOROUGHLY INSPECTED AND PASSED FOR INSURANCE PURPOSES
 BAKED OPALESCENT SILVER FINISH—ALCOHOL RESISTING

CONSTRUCTION of heavy gauge lead coated sheet steel, double seamed and riveted at all joints, heavy wire bead around all edges.

THESE STOVES use high grade denatured alcohol which is a safe dependable fuel and can be obtained anywhere at small cost.

THE BURNERS are cast bronze and give a clear blue flame not disturbed by vibration or rough seas. These burners have rectangular flame openings which permits flame to cover the entire bottom of a pot or pan.

TOP OF STOVE is enclosed on three sides, an exclusive feature protects burners from draft and overflow from pot cannot run down the back or sides.

NEEDLE VALVES are improved and allow precise flame adjustment and stems have bakelite ferrules to prevent burnt fingers.

TUBING CONNECTIONS are flared type, non leakable.

TRAY is removable and of ample size and depth.

FULL DIRECTIONS for lighting, cleaning, etc., furnished with each stove.

Pressure Type

WITH PRESSURE GAUGE, AIR PUMP
 AND TANK IN BOTTOM

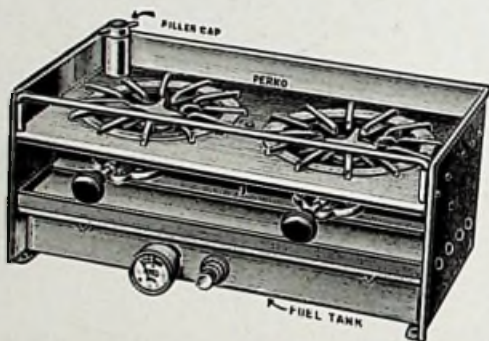


Fig. 1014

AIR PRESSURE GAUGE is installed in the tank, it is very accurate, easy to read and shows the maximum operating pressure for best results.

FILLER PLUG, improved, guaranteed non leakable.

FUEL CONSUMPTION, two burners will operate about 12 hours on 1 gallon of alcohol and 1 pound of air pressure.

TRAY has 1/4 inch sheet asbestos on bottom plus air space to protect fuel tank from heat.

HEAT, with ordinary flame, a quart of water will boil in three minutes.

	Extreme Length Inches	*Extreme Width Inches	Extreme Height Inches	Capacity of Tank Gallons
1 Burner	11 3/4	12 1/4	8 1/2	3/4
2 Burner	20	12 1/4	8 1/2	1 1/2
3 Burner	31	12 1/4	8 1/2	2

1 Burner Complete Each
\$18.00

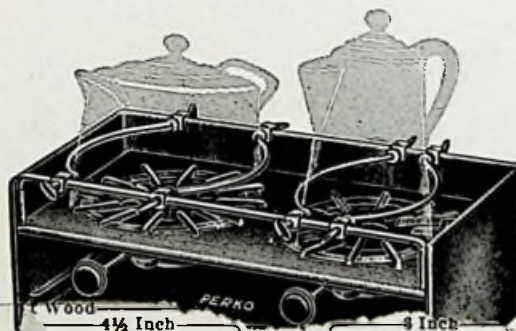
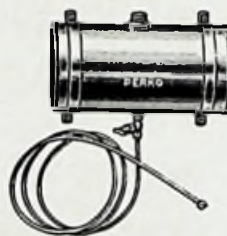
2 Burner Complete Each
\$25.00

3 Burner Complete Each
\$34.00

* Width shown is extreme of Burner

Gravity Type

WITH ONE GALLON COPPER TANK AND
 FIVE FEET COPPER TUBING



	Plain Each	Polished Each	Plain Each	Polished Each
0	\$6.00	\$7.50	\$6.75	\$8.25
:5	6.75	8.75	7.50	9.50
1	8.25	10.50	9.50	11.75
1 1/2	10.75	13.50	12.00	14.75
2	13.75	16.75	15.75	18.75
2 1/2	17.75	21.50	20.00	23.75
3	23.50	29.00	27.00	32.50
3 1/2	31.00	40.50	35.75	45.25

1 inch wood use 8 inch price, etc.

1 1/2 inch, add 4 inches.

Prices the following:

	8 Inch	9 Inch	10 Inch	12 Inch
10	\$1.00	\$1.50	\$2.00	\$2.50
10	1.35	2.00	2.75	3.25

NOTE—State Number of Burners, add 50% to Polished Bronze Prices



Perko Vitreous Enameled Alcohol Stoves

THOROUGHLY IMPROVED IN FINISH AND APPEARANCE
FINISHED IN WHITE VITREOUS ENAMEL WITH BLACK TRIM
ADJUSTABLE FRONT RAIL—INVISIBLE FUEL TANK

These stoves have all the construction and operating advantages of our 1938 models with modernizing improvements in finish and appearances.

CONSTRUCTION of heavy gauge sheet steel, welded at all joints.

BURNERS are cast bronze, same as used in our 1938 models. These have proven extremely satisfactory. No improvement necessary.

TRAY is removable and finished in white vitreous enamel.

GUARD RAIL is adjustable for various sizes of pots, small, large or medium. fastened in desired position by brass thumb nuts.

GRATES are cast iron with black vitreous enamel finish.

FUEL, a good grade of "burning alcohol" should always be used, easily obtainable.

FINISH, the entire body of stove is finished in white vitreous enamel with black enamel around all edges, joints, screw holes, etc.

Gravity Type

WITH ONE GALLON POLISHED COPPER TANK
AND FIVE FEET OF COPPER TUBING

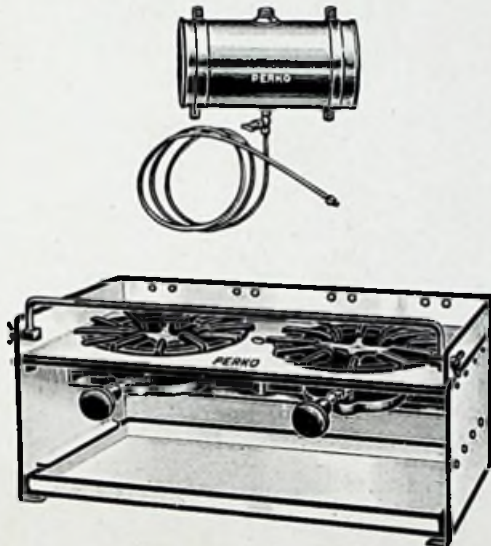


Fig. 562

Has ample space between tray and burners. Handy for keeping dishes or food warm.

Two burners will operate about 10 hours on one gallon of alcohol.

	Extreme Length Inches	Extreme Height Inches	*Extreme Width Inches	Weight Complete Pounds
2 Burner	20	8½	12¼	26
3 Burner	31	8½	12¼	35
2 Burner Complete Each				\$20.00
3 Burner Complete Each				\$29.00
			Brass Pot Holders Per Pair	\$1.75

Stove only, without tank, tubing or fittings deduct \$2.00 each.

* Width shown is extreme of body, not including valve handle.
Pot holders above are for our vitreous enameled stoves only.
NOTE—State number of burners when ordering.

Pressure Type

WITH PRESSURE GAUGE, AIR PUMP AND
INVISIBLE FUEL TANK

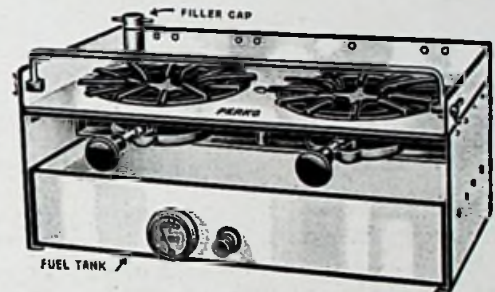


Fig. 574

AIR PRESSURE GAUGE is installed in the tank, it is very accurate, easy to read and shows the maximum operating pressure for best results.

FILLER PLUG, improved guaranteed non leakable.

FUEL CONSUMPTION, two burners will operate about 12 hours on one gallon of alcohol and one pound air pressure.

TRAY has integral front apron which entirely hides the fuel tank and adds a great deal to the entire appearance of the stove. Tray also has ¼ inch sheet asbestos on bottom plus air space to protect tank from heat.

VENTILATION, ample ventilating holes in sides and back of stove furnishing plenty of cool air around fuel tank.

HEAT, with ordinary flame a quart of water will boil in three minutes.

	Extreme Length Inches	*Extreme Width Inches	Extreme Height Inches	Capacity of Tank Gallons
2 Burner	20	12¼	8½	1½
3 Burner	31	12¼	8½	2
2 Burner Complete Each				\$27.00
3 Burner Complete Each				\$36.00
			Brass Pot Holders Per Pair	\$1.75



Perko Cabin Heater

WITH ALCOHOL BURNER AND PRESSURE TANK
WHITE VITREOUS ENAMELED FINISH



Fig. 590

A heater that is extremely attractive in appearance, and will increase the temperature of the average cabin 15 to 20 degrees in less than one hour.

Contains our well known alcohol burner, pressure tank, air gauge, air pump, heating elements, etc., all entirely enclosed in white vitreous enameled sheet steel body.

Door is sliding type, cannot open accidentally.
Tank is kept cool by ample ventilation.

Each Complete	Extreme Height Inches	Extreme Width Inches	Extreme Depth Inches	Capacity of Tank Gallons
\$24.50	16	10½	14½	¾

Pressure Alcohol Stove in Gimbals

WHITE VITREOUS ENAMELED STOVE
CAST BRONZE GIMBALS

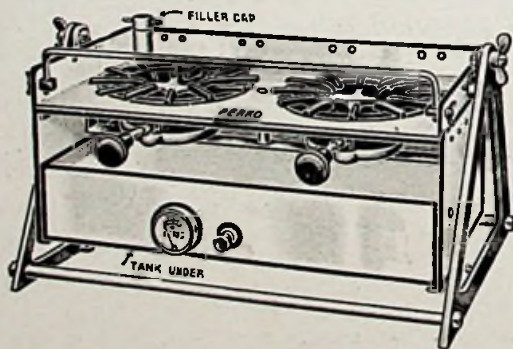


Fig. 591

Stove hangs in balanced horizontal plane when vessel is heeled over to port or starboard. This feature is particularly desirable on sailing craft but very useful on vessels of all types.

Stove will not sway unnecessarily when thumb nuts are tightened.

The stove is our Fig. 574 shown on page 87.

	Complete Each	Gimbals Only Each	Extreme Length Inches	Extreme Width Inches	Extreme Height Inches
2 Burner	\$35.00	\$8.00	22	12¼	11½
3 Burner	45.00	9.00	33	12¼	11½

Hot Air Cabin Heater

CAST IRON PLATE—CAST ALUMINUM BODY
6-12-32 AND 110 VOLTS

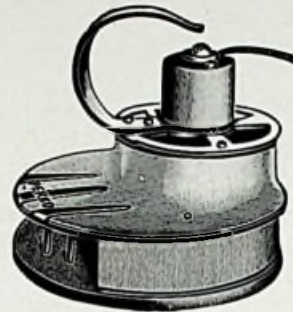


Fig. 595

Now you can use your galley stove to heat your boat.

Works equally well on gas, alcohol, kerosene, coal or any other type of stove.

The TRADE WIND Hot Air Heater takes the heat from the stove and distributes it to all corners of the cabin. This blast of hot air will heat the average cabin in a few minutes and maintain a comfortable temperature as long as required.

Just place the heater on the stove over the burner, connect electric fan wires to battery, light the stove and in a few minutes the cabin will be as comfortable as you want it.

Temperature of air can be regulated by height of flame on stove.

This heater consists of a heating chamber, small electric fan, switch for fan and handle for carrying.

HEATS INSTANTLY—ECONOMICAL TO OPERATE

Ampere draw from battery is very slight.

Volts	Each	Amperes	Diameter Inches	Height Inches	Weight Pounds
6	\$16.00	1.5	8½	7	9½
12	16.00	.75	8½	7¼	9¾
32	16.00	.28	8½	7¾	10¼
110	17.75	.08	8½	8	11

The 110 volt heater furnished for

A. C. and D. C. current.

Specify Voltage When Ordering.

OVENS

FOR PERKO ALCOHOL STOVES

Bakes and roasts over any kind of cooking burner (alcohol, gas, gasoline, or oil), consuming but one-quarter the fuel required to heat ordinary range oven. Bakes biscuits, pies, muffins, cakes, custards, puddings, beans, macaroni and cheese, potatoes, etc., thoroughly and well, roasts meats to a turn.

The Gem



Fig. 1104

Gem Oven is built of high-grade material and consists of asbestos lined Hood with Heat Indicator, Base with Octagon Shelf insulated with asbestos. Wire Stand and Tripod.

Each	Height Inches	Size Bottom Inches	Size Middle Inches	Weight Pounds
\$3.50	10	9 1/2 x 9 1/2	12 x 12	8

The Stanley

WITH HEAT INDICATOR

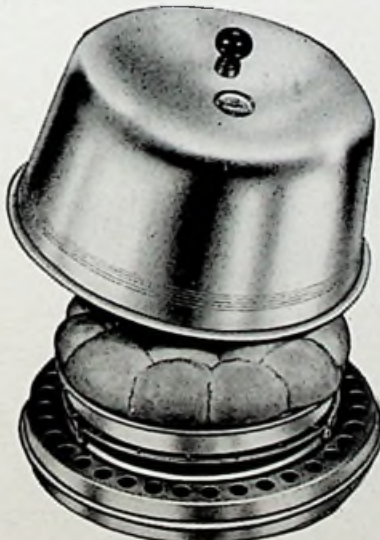


Fig. 1103

Stanley Oven consists of aluminumized steel base with heat deflector lined with heavy asbestos, tinned wire stand and polished aluminum hood.

Each	Height Inches	Diameter Inches	Weight Pounds
\$2.75	6 1/4	10 3/8	6

Operating Directions Furnished with Each Oven

Safety Electric Fans

STREAMLINED FLEXIBLE RUBBER BLADES

6-12-32 VOLTS

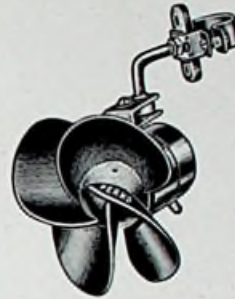


Fig. 244

Invaluable for circulating air in small cabins, etc., where space is limited. The flexible rubber blades eliminate possibility of accidents but furnish maximum air delivery.

Furnished with bracket and integral turn switch, attractively finished in light gun metal enamel.

0 Volt Each	12 Volt Each	32 Volt Each	Diam. Fan Inches	Depth Overall Inches	Weight Pounds
\$3.95	\$5.95	\$7.45	6	4 1/4	1

Specify voltage when ordering.

Electric Fans

MARINE TYPE—6-12-32-110 VOLTS

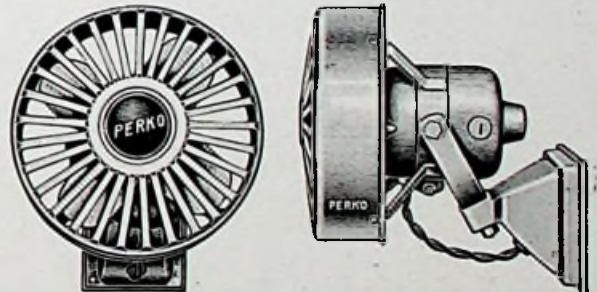


Fig. 648

An ideal fan for small cabins. The motor is of sturdy semi-enclosed construction with bronze bearings. The fan is adjustable to any suitable angle, and has a cast aluminum safety guard around the blades.

The air delivery is approximately 300 cubic feet per minute at a velocity of 400 feet per minute.

The power consumption is approximately 25 watts.

Standard finish is gray lacquer.

Each	Height Overall Inches	Diam. Guard Inches	Diam. Blades Inches	Size Base Inches	Weight Pounds
\$13.00	8	7	6	2 3/4 x 2 3/4	6



“Perko” Marine Exhaust Fans

ELECTRIC 6—12—32—OR 110 VOLTS

HEAVY CAST ALUMINUM CASING AND FLANGE

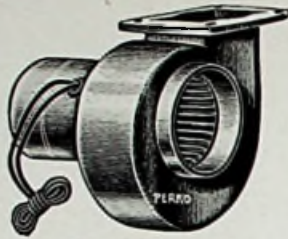


Fig. 778

For removing dangerous gasoline fumes from the bilge and engine room, exhausting excess heat and cooking odors from the galley. Getting rid of foul air or odors from cargo holds and bilges.

An absolute necessity to the motor boat because their use decreases the hazard of fires and explosions from gasoline fumes.

Exhaust fan consists of heavy duty fully enclosed spark proof motor driving a sirocco type exhaust fan.

No.	Size Intake Inches	Size Outlet Inches	Dimensions Overall Inches	Capacity Cubic Feet Per Minute	Size Flange Inches
1	3	2 1/4	7 1/2 x 6 x 6	90	3 1/2 x 3 1/2
2	4	4	8 1/2 x 8 x 8	186	4 1/2 x 4 1/2

Volts	No. 1 Each		No. 2 Each		Amperes		Watts	
	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
6	\$10.50	\$26.00	3.25	7.	19.6	42.0		
12	10.50	26.00	1.70	4.	20.8	48.0		
32	10.50	26.00	.75	1.5	20.0	49.0		
110	13.00	29.00	.25	.45	27.0	50.0		

The 110 volt fan has a universal motor, for AC and DC current.

A caution plate is furnished with every fan.

Heavy Duty Blowers

FOR CONTINUOUS OPERATION
4 INCH INLET AND OUTLET

No. 3—With 110 volt A. C. standard open frame motor. 1/20th H. P., 1750 R. P. M., 186 cubic feet capacity. Each\$45.00

No. 4—With 110 volt A. C. standard open frame motor. 1/4 H. P., 3450 R. P. M., 385 cubic feet capacity. Each\$58.00

Exhaust Fan Ventilator

WITH SWIVEL DECK PLATE—CAST BRONZE



Fig. 634

Can be turned in any direction, made in two heights, furnished with cover for deck plate when vent is removed. Side of deck flange can be cut away for installing against side of deck house.

No.	Diam. Bottom Opening	Extreme Height Inches	Size of Mouth Inches	Diam. Body Inches	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
1	2	6 1/8	2 1/4 x 4 1/2	4	\$8.00	\$8.75	\$9.50
2	2	8	2 1/4 x 4 1/2	4			

“Perko” Exhaust Fan and Ventilators

WITH ROUND OR OVAL MOUTH VENTILATOR AND NO. 1 EXHAUST FAN; 3 INCH INTAKE

Round Mouth

Oval Mouth

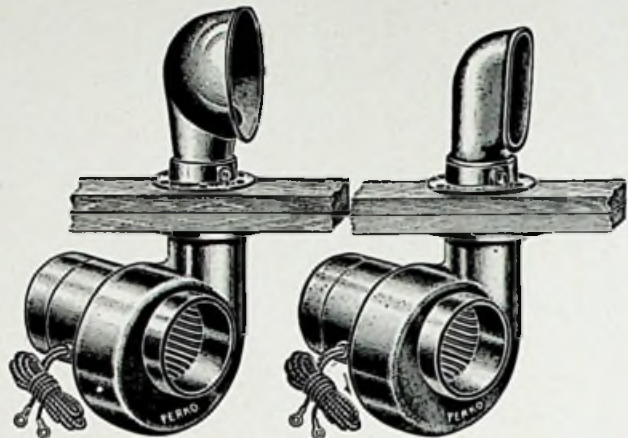


Fig. 780

Fig. 781

Fig. 780 has a spun brass or copper ventilator 2 1/2 inch bottom opening, 5 inch mouth, 7 inches high overall.

Fig. 781 has a cast bronze ventilator 2 inch bottom opening, 2 1/4 x 4 1/2 inch mouth, 6 1/2 inches high overall.

Both ventilators have cast bronze swivel deck plates.

Price complete—either style \$17.00

Don't forget to mention the voltage.

For information on Exhaust Fan see Fig. 778.

Turbine Ventilator

GALVANIZED IRON AND COPPER



Fig. 744

For removing gasoline fumes from engine room and bilge, cooking odors from the galley, ventilation of the cabins, etc.

The moving breeze whirls the head and the resulting vacuum causes a powerful upward lift to the air below. Absolutely quiet in operation, durable and rainproof.

Diam. Body Inches	Galv. Iron Each	Copper Each
4	\$ 8.50	\$13.00
5	8.50	13.00
6	8.50	13.00
7	8.50	14.00
8	10.00	15.00
10	11.50	18.00
12	14.00	23.00

Ship and Yacht Ventilators

SEAMLESS STEEL—16 GAUGE
HOT DIPPED GALVANIZED

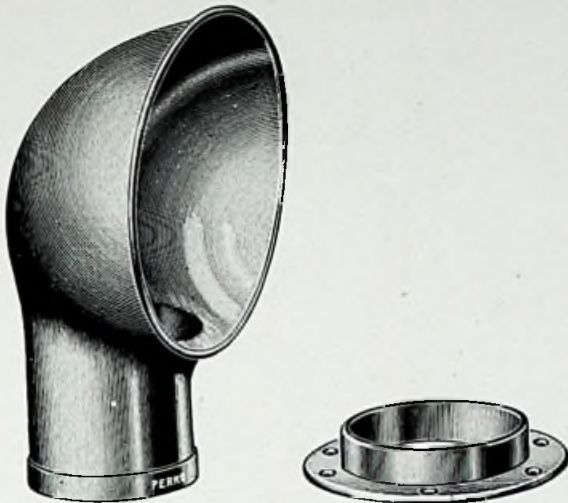


Fig. 557

Made of 16 gauge sheet steel and hot galvanized after fabrication. Joints are welded smooth before galvanizing and have no visible seams after galvanizing.

Furnished with brass rim around mouth and with or without bottom bands or deck flanges.

Hoods with deck flange have thumb screws in band to fasten to flange, deck flange is grooved.

Diam. Bottom Opening Inches	Hood Only Without Band Each	Hood Only With Band Each	Hood With Galvanized Deck Flange	Diam. Mouth Inches	Height Overall Inches
10	\$44.00	\$47.00	\$ 59.00	20	26
12	52.00	55.00	69.00	24	30
14	60.00	63.00	79.00	28	36
16	66.00	69.00	87.00	32	42
18	70.00	73.00	93.00	36	48
20	80.00	84.00	107.00	40	52
24	90.00	94.00	120.00	48	60

We can furnish above with galvanized and bronze swivel deck plates as Fig. 419. Price on application.

Ice Box Ventilators

CAST BRONZE—POLISHED

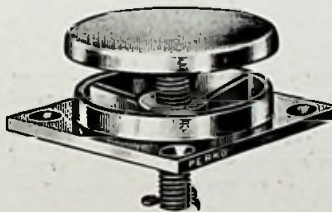


Fig. 783

No.	Polished Bronze Each	Chromium Plated Each	Diam. of Opening Inches	Size Plate Inches
1	\$2.00	\$3.00	1 1/8	2 1/2 x 2 1/2
2	2.25	3.25	1 1/2	3 1/4 x 3 1/4
3	3.25	4.25	2	4 1/8 x 4 1/8
4	4.00	5.25	2 3/8	4 1/8 x 4 1/8

Oval Mouth Ventilators

CAST BRONZE

Of high grade castings, finely finished, green enameled interior.

The screw type is furnished complete with watertight cover and key for use when vent is removed.

The swivel type is adjustable and can be fastened in any position by three thumb screws. A brass friction cover is also furnished for use when vent is removed.

SCREW TYPE

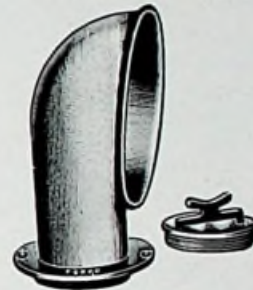


Fig. 509

Plate Opening Inches	Pol. Bronze Each	Nickel Plated Each	Chrom. Plated Each	Height Above Deck Inches	Size Mouth Inches
3	\$12.00	\$14.00	\$16.00	8 1/8	6 1/4 x 4
4	15.00	17.00	19.00	8 3/8	6 1/2 x 4 3/4

SWIVEL TYPE

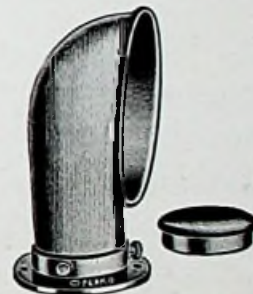


Fig. 515

Diam. Throat Inches	Pol. Bronze Each	Nickel Plated Each	Chrom. Plated Each	Height Above Deck Inches	Size Mouth Inches
3	\$13.00	\$15.00	\$17.00	9 1/8	6 1/4 x 4
4	16.00	18.00	20.00	9 3/8	6 1/2 x 4 3/4

Swivel Ventilator

ROUND MOUTH—CAST BRONZE

Made of heavy cast bronze, swivel deck plate, thumb screw for fastening in position. Cast cover to take place of vent when removed. Set screw to prevent loss of thumb screw. Vent painted green on inside.

Diam. bottom opening, 3 1/4 in.
Diameter mouth, 5 7/8 inches
Height overall, 9 inches
Diameter base, 6 1/4 inches
Weight each, 11 pounds

PRICE EACH

Polished \$13.50
Nickel Plated 15.50
Chromium Plated 17.50



Fig. 198



Seamed Hood Ventilator WITH BRONZE SCREW DECK PLATE

Constructed of heavy sheet steel or brass. Steel ventilators are completely formed and then hot galvanized.



Fig. 151

Deck Plate Opening Inches	Opening of Mouth Inches	Height Overall Inches
2	4	5
2½	5	6
3	6	7
3½	7	10
4	8	11
4½	9	12
5	10	14
6	12	15
8	16	21
12	24	30

Deck Plate Opening Inches	Galv. Each	Polished Brass Each
2	\$ 6.00	\$ 7.75
2½	6.25	8.00
3	6.50	8.25
3½	7.25	9.25
4	8.25	10.25
4½	11.00	13.25

Deck Plate Opening Inches	Galv. Each	Polished Brass Each
5	\$13.25	\$15.50
6	18.00	21.00
8	28.00	32.00
12	65.00	74.00

Riveted Hood Ventilator

WITH BRONZE SCREW DECK PLATE

Constructed of heavy gauge sheet iron, hot galvanized or brass. Riveted at the joints. Brass rim around mouth on galvanized vents, 4½ inch and smaller.

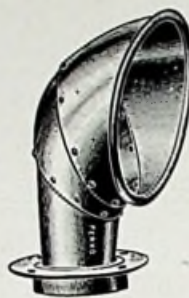


Fig. 369

Deck Plate Opening Inches	Diam. Mouth Inches	Height Overall Inches
3	6	8
3½	7	9
4	8	11
4½	9	12
5	10	13
6	12	15
8	16	20
12	24	30

Deck Plate Opening Inches	Galv. Each	Polished Brass Each
3	\$10.00	\$12.00
3½	11.50	13.75
4	13.00	15.50
4½	15.50	17.50

Deck Plate Opening Inches	Galv. Each	Polished Brass Each
5	\$19.00	\$22.00
6	24.00	27.00
8	35.00	42.00
12	77.00	86.00

Seamed Hood Ventilator

WITH BRONZE SWIVEL DECK PLATE

Heavy sheet steel or brass. Steel vents are hot galvanized after forming. Furnished with spun brass cover for deck plate when vent is removed, at small additional charge.



Fig. 575

Deck Plate Size Inches	Diam. Mouth Inches	Height Overall Inches
3	6	7½
4	8	10
5	10	12½
6	12	15
8	16	20
9	18	22½
10	20	25
12	24	30

Deck Plate Size Inches	Galv. Each	Polished Brass Each
3	\$ 7.75	\$ 9.50
4	11.00	12.50
5	14.50	16.75
6	20.00	23.00

Deck Plate Size Inches	Galv. Each	Polished Brass Each
8	\$26.50	\$30.00
9	33.00	42.00
10	47.00	56.00
12	64.00	74.00

Riveted Hood Ventilator

WITH BRONZE SWIVEL DECK PLATE

Made of heavy gauge sheet steel, hot galvanized or brass. All joints riveted. Brass rim around mouth on galvanized vents, 4½ inch and smaller. Brass cover for deck plate at small additional charge.



Fig. 368

Deck Plate Size Inches	Diam. Mouth Inches	Height Overall Inches
3	6	8
4	8	11
5	10	13
6	12	15
8	16	20
9	18	23
10	20	25
12	24	30

Deck Plate Size Inches	Galv. Each	Polished Brass Each
3	\$11.00	\$13.50
4	15.75	18.00
5	20.50	23.00
6	26.00	29.50

Deck Plate Size Inches	Galv. Each	Polished Brass Each
8	\$35.00	\$41.00
9	42.00	51.00
10	56.00	65.00
12	75.00	85.00

THE SIZES SHOWN ON THE ABOVE VENTILATORS ARE STANDARD. SPECIAL DIAMETERS AND LENGTHS CAN BE FURNISHED, MADE TO ORDER. SPECIAL PLATED OR PAINTED FINISHES AT SMALL ADDITIONAL CHARGE.

Above items desired NICKEL PLATED, add 20% to Polished Brass Price
Above items desired CHROMIUM PLATED, add 40% to Polished Brass Price

Spun Ventilators

Spun from heavy gauge sheet brass or copper. Complete with cast bronze screw deck plate, cover and key.

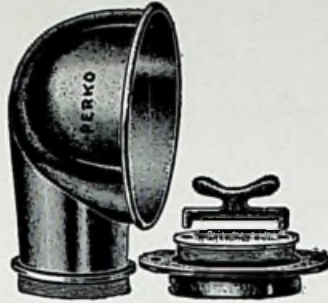


Fig. 152

Deck Plate Size Inches	Polished Brass Each	Polished Copper Each	Diameter Mouth Inches	Height Overall Inches
2	\$ 6.50	\$ 7.75	4	6
2½	7.00	8.25	5	7
3	7.50	8.50	6	8
3½	8.25	9.25	7	9
4	8.75	10.00	8	10½
5	16.50	18.75	10	14

Nickel Plated, add 20% to above prices.
Chromium Plated, add 40% to above prices.

Cast Bronze Hood Ventilator

WITH SCREW DECK PLATE



Fig. 421

A ventilator that will last longer than the boat. Highly polished on outside, painted green on inside. With cover and key for screw deck plate.

Deck Plate Size Inches	Diam. Mouth Inches	Height Overall Inches	Net Weight Lba.
3	6	7¾	4½
4	8	9¾	8½

Size Inches	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
3	\$12.00	\$14.00	\$16.00
4	15.00	17.00	19.00

Hammered Copper Ventilators

WITH SCREW OR SWIVEL DECK PLATE

Heavy gauge sheet copper, hammered to shape by hand, hammer marks remaining in surface. With cover and key for screw deck plate.

Screw Deck Plate

Swivel Deck Plate



Fig. 367



Fig. 560

Size Inches	With Screw Deck Plate Each	With Swivel Deck Plate Each	Diam. Mouth Inches	Height Overall Inches
3	\$17.50	\$20.50	6	8
4	23.50	27.50	8	11
5	39.00	43.00	10	13
6	44.00	48.00	12	15
8	68.00	70.00	16	20

Larger Sizes—Price on Application

Seamless Steel Ventilators

HOT DIPPED GALVANIZED

WITH CAST BRONZE DECK PLATES



Screw Deck Plate
Fig. 510



Swivel Deck Plate
Fig. 513

These are our latest improvement in hood type ventilators, made of heavy gauge sheet steel and hot galvanized after fabrication. The body is smooth and free of seams, has a brass rim around the mouth and makes a sturdy and good looking ventilator.

Cast Bronze Ventilator

ROUND MOUTH—SCREW DECK PLATE



Fig. 199

Diam. bottom opening, 3 inches
Diameter mouth, 6 inches
Height overall, 8½ inches
Diameter deck flange, 4¾ in.
Weight, 5 pounds

	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
	\$9.75	\$11.75	\$13.75

Deck Plate Opening Inches	With Screw Deck Plate Each	With Swivel Deck Plate Each	Diam. Mouth Inches	Height Overall Inches	Gauge Before Galvanizing
3	\$12.00	\$14.00	6	8	24
4	15.50	18.00	8	11	24
5	19.50	22.00	10	13	24
6	29.50	32.50	12	15	24
8	46.50	48.00	16	20	20



Streamline Ventilator

FOR CRUISERS
CAST BRONZE

Side View



Front View



Fig. 633

Designed for mounting against side of deck house or cabin. Takes up very little space. Practical and pleasing to the eye. Will fit over pipe up to 2 inches.

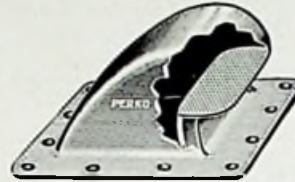
Size of Mouth Inches	Extreme Height Inches	Extreme Length Inches	Extreme Width Inches	Weight Each Pounds
4x1 3/8	5 3/4	6 3/4	2 3/8	1 3/8
Polished Bronze Per Pair		Nickel Plated Per Pair	Chromium Plated Per Pair	
\$7.00		\$8.00	\$9.00	

A pair consists of one right hand and one left hand.

Cruiser Ventilator STREAMLINE—CAST BRONZE



Fig. 908



Cut away view showing screen and water guard

An extremely neat ventilator for cruiser decks and cabin roofs.

An integral water guard inside mouth prevents spray or rain from entering ventilator. A bronze screen permanently installed to keep insects out of cabin.

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Size Base Inches	Height Overall Inches	Weight Pounds
\$7.00	\$7.50	\$8.00	7x7	3 1/2	4 3/4

Space Saver Ventilator

CAST BRONZE

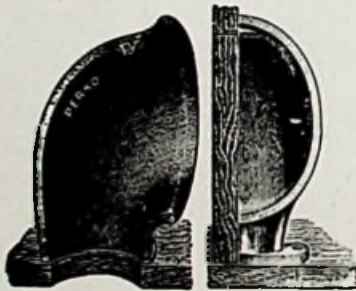


Fig. 782

Designed especially for mounting against outside of deck house or cabin, takes up very little space, can be used to advantage in connection with exhaust fan fig. 778.

No.	Inside Diameter at Base Inches	Inside Measurements at Mouth Inches	Extreme Height Inches
1	2 1/2	2 3/8 x 5	6 3/4
2	3 1/2	3 1/8 x 7 1/2	9

No.	Plain Bronze Per Pair	Polished Bronze Per Pair	Nickel Plated Per Pair	Chrome Plated Per Pair
1	\$4.50	\$5.00	\$6.00	\$ 7.00
2	7.50	8.00	9.50	11.00

Engine Compartment Outlet Ventilator

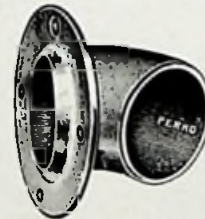


Fig. 329

For use on hulls of runabouts or cruisers. Made of cast bronze, highly polished, interior painted in green enamel.

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Diam. Opening Inches	Diam. Flange Inches	Weight Ounces
\$1.75	\$2.00	\$2.50	2 1/8	4	19

Transom Ventilators

CAST BRONZE

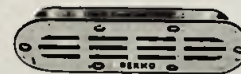


Fig. 1069

The importance of ventilation to all parts of boats cannot be overstressed.

These are for installation in stern transom. Furnished with or without mosquito screening.

Plain Bronze Each	Pol. Bronze Each	Chrom. Plated Each	Size Flange Inches	Depth Collar Inches	Weight Pounds
\$1.00	\$1.50	\$2.25	6 3/4 x 2 1/4	3/4	3/4

With bronze screen soldered in add \$.50 each.

Clam Shell Ventilators

CAST BRONZE
IMPROVED

Now made in two sizes, with base improved in appearance.



Fig. 323

No.	Width Opening Inches	Height Opening Inches	Size Base Inches	Weight Oz.
4	2 3/4	1 3/4	3 5/8 x 3 1/2	11
5	3 1/2	2	4 x 3 3/4	14
	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	
4	\$1.40	\$1.70	\$2.00	
5	1.50	1.80	2.10	

Streamline Ventilator

CAST BRONZE
CLAM SHELL TYPE

A new design of runabout ventilator that will match other streamline fittings on the deck. Made in three sizes, small size can be used as shield for water outlet in hulls of cruisers.



Fig. 324

No.	Width Opening Inches	Height Opening Inches	Size Base Inches	Weight Oz.
1	1 1/2	1	2 1/4 x 3	4
2	1 3/4	1	2 5/8 x 3 3/8	6
3	2 1/8	1 5/8	3 5/8 x 4 1/4	12
	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	
1	\$1.20	\$1.40	\$1.70	
2	1.30	1.50	1.80	
3	1.40	1.70	2.00	

Streamline Ventilator

CAST BRONZE
FOR RUNABOUTS

Cast in one piece, painted green on inside, made in two sizes.



Fig. 476

No.	Width Opening Inches	Height Opening Inches	Size Base Inches	Weight Lbs.
6	3 1/2	2 3/4	5 x 6	1
7	4 3/4	3 1/4	6 x 7	2
8	5 3/4	3 1/2	7 x 8	2 3/4
	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	
6	\$2.50	\$2.75	\$3.10	
7	3.25	3.50	4.00	
8	4.25	4.75	5.25	

Automatic Boat Drainer

BRASS TUBING—CAST BRONZE FITTINGS
BALL TYPE—STREAMLINE

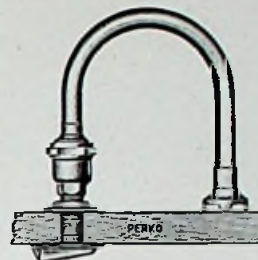


Fig. 397

The most dependable and safest automatic boat drainer on the market. Requires no attention after it is installed. Water cannot back up into the boat as the top of the tubing is above the water line.

A sponge rubber ball is forced into a machined seat automatically closes the opening when the boat is in reverse or not in motion.

Heavy bronze strainer in inlet end.

Starts draining at 7 miles per hour.

No.	Each	Height Inside Hull Inches	Diam. Tubing Inches	For Thickness Hull Inches	Weight Pounds
1	\$ 7.50	8	3/4	up to 1 1/2	2
2	10.00	15 1/2	1 1/8	up to 2 1/4	4

Garboard Drain Plug

CAST BRONZE—PLAIN

A few of these installed in garboard allows quick drainage of boat when hauled out, by removing heavy plug. Complete with wrench for removing plug, tapered thread, 1-in. pipe size. Absolutely water-tight.

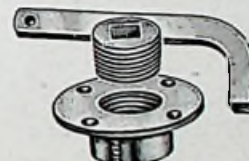


Fig. 124

Complete With Wrench Each	Diameter Flange Inches	Depth Inches	Weight Ounces
\$1.60	3 1/8	1	10

Self Locking Gas Tank Cap

CAST BRONZE



Fig. 520

A half turn will open or lock cap in an instant. Locking device is indicated at A. Interior of neck below flange is threaded for 1 1/2 inch pipe.

Polished Bronze Per Set	Nickel Plated Per Set	Chromium Plated Per Set	Diam. Opening Inches	Diam. Flange Inches	Height Closed Inches
\$2.00	\$2.50	\$3.00	1 1/2	3 1/8	1 1/4



Maxim Silencers

WET TYPE—MODEL M3
CAST IRON



Fig. 334

For Exhaust Pipe Inches	Each	Diameter Inches	Length Overall Inches	Weight Pounds
1½	\$ 12.75	4¾	9¾	8¾
2	15.50	6¼	11	15
2½	21.00	7 13/16	12 3/8	30
3	26.00	9 3/16	13 1/2	40
3½	35.00	11	14 3/4	60
4	39.00	12 3/8	15 3/4	80
5	104.00	14	23	145
6	149.00	14 5/16	27 1/2	170

Removable Flanges on both ends to connect standard pipe or tubing.

Use same size Silencer as diameter of Exhaust Pipe.

Used with equal success on Diesel as well as gasoline engines.

Designed to take all the cooling water discharge from the engine making unnecessary any other water discharge through the hull. Can be installed practically anywhere in the exhaust line that is convenient, either near the engine or near the stern, however a two foot tail pipe at the silencer outlet will give best results.

Maxim silencers are available for dry exhausts of gasoline and Diesel engines. Give bore, number of cylinders, R. P. M. and exhaust size.

Maxim Silencers

CAST IRON—WET TYPE—MODEL M-4

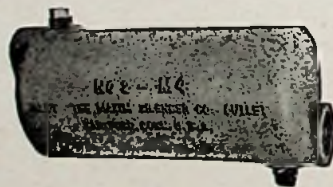


Fig. 755

Admirably suited to the line of small engines being presented to the field at the present time for the propulsion of small boats and for use with generating units in larger vessels.

Similar in construction to model M-3 and installed in like fashion.

For Exhaust Pipe Inches	Each	Diam. Inches	Length Overall Inches	Weight Pounds
½	\$5.00	3¼	7¾	4
¾	6.00	3½	8¼	5
1	7.00	3¾	9	6
1¼	8.00	4¼	9½	10

Exhaust Pipe Flanges

CAST BRONZE



Fig. 214

For Pipe Inches	Inside Diameter Inches	Outside Diameter Inches	Weight Each
2	2 3/8	4 1/8	13 oz.
2½	2 7/8	5 1/4	1 lb.
3	3 1/2	6 1/4	1½ lbs.
3½	4	6 7/8	1½ lbs.

Size	Plain Bronze Each	Polished Bronze Each	Chromium Plated Each
2	\$1.00	\$1.75	\$2.25
2½	1.00	1.75	2.25
3	1.50	2.25	2.85
3½	1.50	2.25	2.85

Exhaust Tube Flanges

CAST BRONZE



Fig. 738

For Tubing Inches	Inside Diam. Inches	Outside Diam. Inches	Weight Each
2	2 1/8	4	11 oz.
2½	2 5/8	4 3/8	14 oz.
3	3 1/8	5	1 lb.
3½	3 5/8	5½	1½ lbs.
4	4 1/8	6	1½ lbs.

Size	Plain Bronze Each	Polished Bronze Each	Chromium Plated Each
2	\$.90	\$1.65	\$2.15
2½	1.00	1.75	2.25
3	1.00	1.75	2.25
3½	1.40	2.15	2.75
4	1.45	2.20	2.80

Check Valves

CAST BRONZE

A simple but exceptionally dependable check valve. Threaded to fit standard pipe.



Fig. 273

Size Pipe Inches	Complete Each
¾	\$2.50
1	3.00
1¼	3.50
1½	4.00

Plunger



Fig. 68

Spring



Fig. 69

Plunger Only Each	Springs Only Each	Length Overall Inches
\$.60	\$.12	2¾
.70	.15	3
.80	.17	3
.90	.20	3¼

Gasolene Strainer

PLAIN BRONZE—WOVEN COPPER SCREEN

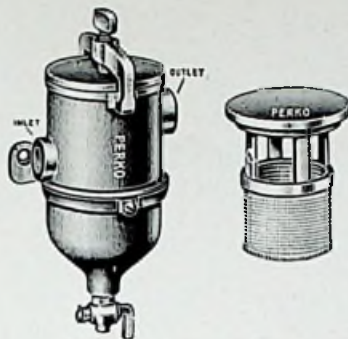


Fig. 299

With Yoke, Thumbscrew and Supporting Bracket.

Cover easily removed and the strainer removed for cleaning without disturbing pipe connections. Pet cock at bottom drains the settling chamber. Side bracket supports the strainer, relieving the fuel pipes of all weight.

★Size No.	Price Each	Length Overall Inches	Diam. Inches	Tapped For Pipe Inches	Weight Each Pounds
1	\$5.00	5½	2¾	¼ or ⅜	3
1½	7.00	6¼	3⅛	⅜ or ½	5
2	9.00	7¼	3¾	½ or ¾	7

Intake Water Strainers

CAST BRONZE

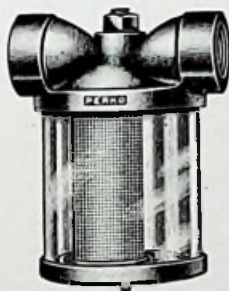


Fig. 493

A durable water strainer, to be located between the inlet connection and the water pump on the engine.

A double core of bronze screen cloth prevents sand and dirt from entering the pump and water jacket.

A special heat resisting boro silicate glass cylinder makes it possible to observe conditions at all times.

May be taken apart readily for cleaning.

No.	Each	For Pipe Size Inches	Extreme Height Inches	Extreme Width Inches
1	\$ 9.00	½ or ¾	5¼	3⅝
2	15.00	1 or 1¼	7½	5¼

Specify size pipe when ordering.

Engine Aligners

CAST IRON—PAINTED



Fig. 1029

These wedge type engine aligners allow vertical and horizontal engine adjustment quickly and with slight effort.

Consists of two main parts, a lower wedge which bolts to the engine bed by elongated bolt holes for horizontal adjustment and the upper wedge which slides between the lower wedge and the mounting lug of the engine.

The engine is held down by a bolt which passes through a slot in the upper wedge into a threaded part of the lower wedge.

To adjust height of engine the hold down bolt is loosened and the upper wedge is slid on the lower wedge by turning the adjusting screw with a socket wrench. Provision is made for locking adjusting screw in desired position.

No. 1 Aligner is for engines up to about 700 pounds.

No. 2 Aligner is for engines over 700 pounds.

No.	Each	For Bolts Inches	Length Overall Inches	Length Between Bolts Inches	Width Inches	Weight Pounds
1	\$2.50	⅜	6⅛	5⅛	1¼	2
2	3.40	½	8½	7⅜	2	3

No.	Height To Middle Adjustment Inches	Total Vertical Adjustment Inches	Total Horizontal Adjustment Inches
1	1¾	½	½
2	2¾	¾	¾

Gy-A-Liner Engine Aligners

CAST IRON—PAINTED

Patent No. 2123484

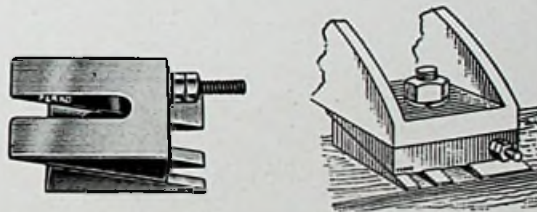


Fig. 1097

Proper alignment of engine eliminates whipping of propeller shaft, excessive heating of stuffing boxes and other bearings.

No training, experience, or unusual mechanical ability is called for to install or adjust the Gy-A-Liner. Nothing tricky or delicate.

Consists of two cast iron wedges adjusted by a galvanized bolt to various heights as required.

Suitable for all light and medium weight engines.

Each	Size Inches	For Engine Bolt Inches	Height of Adjustment Inches	Weight Each Pounds
\$.95	2½x2½	½	1⅜	¾

Columbian Propellers

MANGANESE BRONZE AND MONEL METAL
AILSA CRAIG TYPE

FOR GENERAL ALL AROUND USE, THE MOST
POPULAR OF ALL COLUMBIAN PROPELLERS

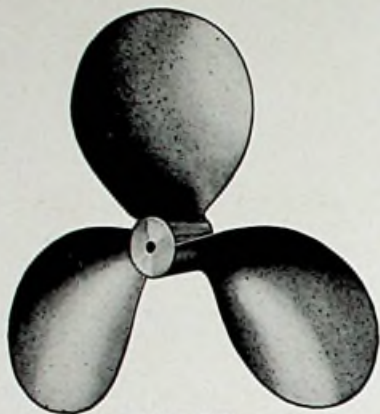


Fig. 809

Diam. Inches	Manganese Bronze		Monel Metal	
	Blade	Boring	Blade	Boring
8	\$ 7.30	\$ 1.70	\$ 11.70	\$ 2.75
9	8.30	1.70	13.58	2.75
10	8.80	1.70	14.00	2.75
11	9.20	1.80	14.75	3.00
12	9.95	2.05	15.95	3.50
13	10.85	2.15	17.40	3.50
14	12.70	2.30	20.40	4.00
15	14.05	2.65	22.50	4.25
16	16.05	2.65	25.75	4.25
17	18.00	3.00	28.80	5.00
18	19.20	3.00	30.75	5.00
19	23.40	3.30	37.45	5.50
20	27.60	3.30	44.25	5.50
21	33.00	3.70	52.80	6.00
22	38.40	3.70	61.45	6.00
23	42.60	4.20	68.50	6.75
24	46.80	4.20	75.00	6.75
25	51.00	4.80	82.00	8.00
26	55.20	4.80	89.00	8.00
27	61.80	5.50	99.00	9.00
28	67.00	5.50	107.00	9.00
30	74.40	6.10	120.00	10.00
32	84.00	7.00	135.00	11.50
33	90.00	8.40	145.00	13.50
34	94.80	8.40	152.00	14.00
35	100.20	9.60	160.00	15.50
36	104.40	9.60	168.00	15.50
38	124.80	11.30	200.00	18.00
40	160.80	12.85	258.00	20.50
42	172.80	16.20	277.00	26.00
44	201.60	17.70	322.00	29.00
46	240.00	19.20	384.00	31.00
48	282.00	24.00	452.00	40.00
50	306.00	31.00	490.00	50.00

High Speed Type STYLE S. S.



Fig. 810

Popular in certain sections of the
country for high speed boats.

PRICES SAME AS AILSA
CRAIG TYPE ABOVE

Columbian Propellers

BRONZE—PEERLESS QUALITY
AILSA CRAIG TYPE

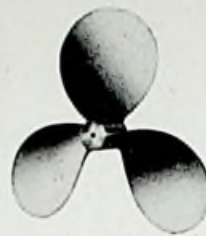


Fig. 739

Diam. Inches	Three Blade	Boring	Diam. Inches	Three Blade	Boring
8	\$ 4.87	\$1.70	25	\$ 34.00	\$ 4.80
9	5.53	1.70	26	36.80	4.80
10	5.87	1.70	27	41.20	5.50
11	6.13	1.80	28	44.67	5.50
12	6.63	2.05	30	49.60	6.10
13	7.23	2.15	32	56.00	7.00
14	8.47	2.30	33	60.00	8.40
15	9.37	2.65	34	63.20	8.40
16	10.70	2.65	35	66.80	9.60
17	12.00	3.00	36	69.60	9.60
18	12.80	3.00	38	83.20	11.30
19	15.60	3.30	40	107.20	12.85
20	18.40	3.30	42	115.20	16.20
21	22.00	3.70	44	134.40	17.70
22	25.60	3.70	46	160.00	19.20
23	28.40	4.20	48	188.00	24.00
24	31.20	4.20	50	204.00	31.00

Speed Boat Rudders CAST MANGANESE BRONZE

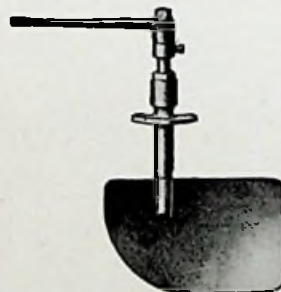


Fig. 813

Furnished complete with tiller, collar, nut and rudder
port.

No.	Size of Rudder Inches	Diam. of Stock, Ina.	Total length of Stock, Inches	Length of Tiller, Ina.	Suitable for Boats	Price Complete	Extra for longer stocks, per inch	Rudder only with straight stock 12 in. long
1	9x14	1	12	12	16 ft. to 22 ft. long	\$20.90	\$.12	\$10.10
2	10x16	1	12	12	20 ft. to 26 ft. long	22.60	.12	12.80
3	11x18	1½	12	14	26 ft. to 35 ft. long	25.40	.15	14.50
4	12x20	1½	12	16	30 ft. to 40 ft. long	31.90	.20	19.20

Hyspeed Rudder and Stock

CAST MANGANESE BRONZE

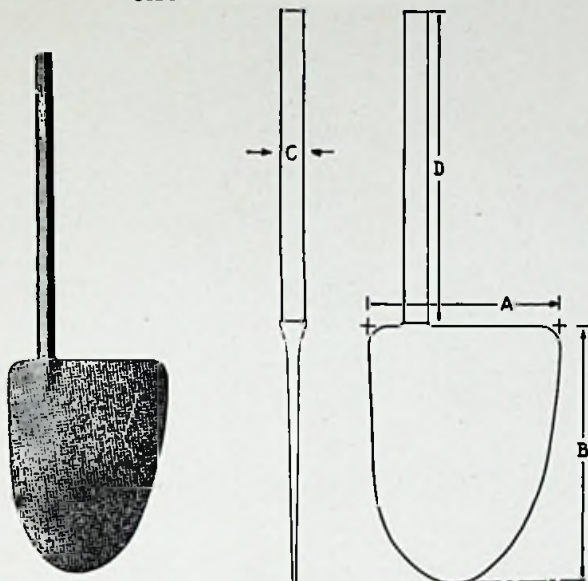


Fig. 818

Constructed in perfectly balanced proportion. Designed for express cruisers, runabouts, speedboats and all boats not carrying a skag.

DIMENSIONS, INCHES

No.	A	B	C	D	Each
1	9	12	1	16	\$10.25
2	10 1/2	14	1 1/8	18	12.80
3	12	16	1 1/4	18	14.50
4	13 1/2	18	1 3/8	24	20.25
5	15	20	1 1/2	24	28.00
6	16 1/2	22	1 3/4	30	41.00
7	18	24	2	36	56.00
8	20	26	2 1/4	40	70.00

Launch and Cruiser Rudders

CAST MANGANESE BRONZE



Fig. 816

Blade Size Inches	Blade Thickness Inches	Diam. of Stock Inches	Total Length of Stock, Ins.	Lunger Stocks Per Inch	Price Each
12 x 12	1/4	3/4	12	.12	\$10.00
13 x 13	1/4	7/8	12	.12	11.00
14 x 14	1/4	7/8	12	.12	12.00
15 x 15	1/4	1	12	.12	14.00
16 x 16	1/4	1	12	.12	16.00
18 x 16	1/4	1	12	.12	17.00
18 x 18	1/4	1	12	.12	19.00
20 x 18	1/4	1 1/4	18	.20	21.00
20 x 20	1/4	1 1/4	18	.20	24.00
22 x 18	3/8	1 1/4	18	.20	24.00
22 x 20	3/8	1 1/4	18	.20	32.00
22 x 22	3/8	1 1/4	18	.20	33.00
24 x 20	3/8	1 1/4	18	.20	33.00
24 x 22	3/8	1 1/4	18	.20	33.50
24 x 24	3/8	1 1/4	18	.20	34.50
24 x 26	3/8	1 1/2	22	.24	50.00
26 x 26	3/8	1 1/2	22	.24	50.00

Rudder Ports with Stuffing Box

CAST BRONZE—PLAIN
WITH BRASS GREASE CUPS

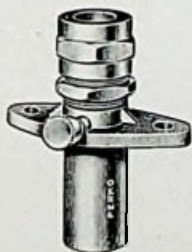


Fig. 1089

Eliminates leakage at rudder post entrance through the hull.

Bronze bearing is full length of casting. Assures smooth action with minimum wear.

Size Inches	Each	Size Flange Inches	Length Bearing Inches	Drilled for Fastening Inches	Weight Pounds
1	\$5.50	4 1/4 x 2 1/2	5 1/4	3/8	3 1/2
1 1/8	6.00	5 x 2 5/8	5 1/4	1/2	3 3/4
1 1/4	6.50	5 3/4 x 3	6 3/8	1/2	5 1/2
1 3/8	7.00	6 1/4 x 3 1/4	6 3/4	1/2	6 1/2
1 1/2	7.50	6 1/2 x 3 1/2	6 3/4	1/2	6 3/4

Rudder Shoes or Skags

CAST MANGANESE BRONZE

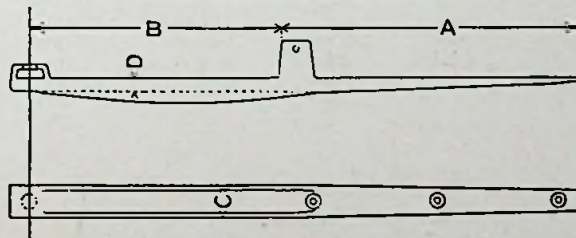


Fig. 817

DIMENSIONS, INCHES

No.	A	B	C	D	Price Plain Each
1	18	14	2	1/4	\$ 6.50
2	20	15	2 1/4	3/8	7.50
3	21 1/2	16	2 1/2	3/8	10.00
4	24	17	2 3/4	1/2	12.00
5	26	18	3	1/2	15.00
6	28	20	3	1/2	18.00

Special sizes and styles furnished to order, send sketch.

Galvanized Rudders

GALVANIZED FORGED STEEL

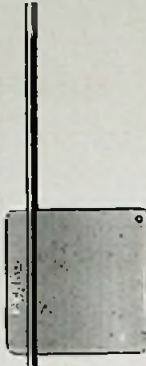


Fig. 647

Size No.	Galv. Each	Size Plate Inches	Length Rudder Post Inches	Diam. Rudder Post Inches	Weight Each Pounds
0	\$ 5.00	12x12x $\frac{1}{8}$	40	$\frac{3}{4}$	11
1	6.00	14x14x $\frac{1}{8}$	42	$\frac{3}{4}$	13
2	8.50	16x16x $\frac{1}{8}$	48	1	25
3	11.00	18x18x $\frac{1}{8}$	52	1	35

Rudder Skags

DROP FORGED STEEL AND BRONZE

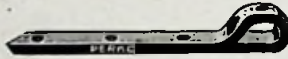


Fig. 649

Size No.	Galv. Each	Plain Bronze Each	Dimensions Inches	For Rudder Post Inches	Weight Each Pounds
0	\$2.00	\$4.00	24x1 $\frac{1}{2}$ x $\frac{3}{8}$	$\frac{3}{4}$	4 $\frac{1}{2}$
1	3.00	7.00	30x1 $\frac{3}{4}$ x $\frac{1}{2}$	$\frac{3}{4}$	9
2	5.00	14.00	42x2 x $\frac{3}{8}$	1	17

Straight Tillers

GALVANIZED MALLEABLE IRON AND BRONZE

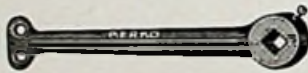


Fig. 650

Length Inches	Galv. Each	Plain Bronze Each	Size of Square Hole Inches	Weight Each (Iron) Pounds
8	\$1.10	\$2.00	$\frac{1}{8}$ x $\frac{1}{8}$	1
10	1.25	2.25	$\frac{1}{8}$ x $\frac{1}{8}$	1 $\frac{3}{4}$
12	1.75	2.50	$\frac{3}{4}$ x $\frac{3}{4}$	2 $\frac{1}{4}$
15	2.25	5.00	$\frac{3}{8}$ x $\frac{3}{8}$	3 $\frac{1}{2}$

Rudder Pipes

GALVANIZED STEEL AND BRASS

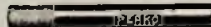


Fig. 652

Size No.	Galv. Each	Brass Each	Pipe Size Inches	Length Inches	Weight Each Pounds
0	\$1.00	\$2.25	$\frac{3}{4}$	12	1 $\frac{3}{8}$
1	1.00	2.25	$\frac{3}{4}$	12	1 $\frac{3}{8}$
2	1.50	3.50	1	15	2
3	1.75	4.50	1 $\frac{1}{4}$	18	2 $\frac{1}{2}$

Quadrant Tillers

GALVANIZED MALLEABLE IRON AND BRONZE



Fig. 651

Radius Inches	Galv. Each	Plain Bronze Each	Square Hole Adjustable Inches	Weight Each (Iron) Pounds
7	\$2.00	\$5.00	$\frac{1}{8}$ to $\frac{3}{4}$	3
10	3.50	7.00	$\frac{1}{8}$ to 1	5 $\frac{1}{4}$
12	5.00	10.00	$\frac{3}{4}$ to 1 $\frac{1}{4}$	8 $\frac{1}{2}$
15	7.50	14.00	$\frac{3}{4}$ to 1 $\frac{1}{4}$	13
18	13.00	24.00	1 to 1 $\frac{3}{8}$	27
24	25.00	45.00	1 $\frac{1}{2}$ to 1 $\frac{3}{4}$	46

Rudder Stuffing Boxes

CAST BRONZE



Fig. 499

Size No.	For Diam. Rudder Post Inches	Weight Each Ounces	Price Each
0	$\frac{3}{4}$	6	.50
1	$\frac{3}{4}$	6	.50
2	1	7	.60
3	1 $\frac{1}{4}$	7	.90

Bronze Rudder Collars



Fig. 815

For Diam. Stock Inches	Price Each	Outside Diameter Inches	Thickness Inches	Weight Ounces
1	\$1.00	1 $\frac{3}{4}$	$\frac{1}{16}$	7
1 $\frac{1}{8}$	1.00	1 $\frac{3}{4}$	$\frac{1}{16}$	6 $\frac{1}{2}$
1 $\frac{1}{4}$	1.25	2 $\frac{1}{8}$	$\frac{1}{16}$	11
1 $\frac{3}{8}$	1.50	2 $\frac{1}{2}$	1 $\frac{1}{8}$	19
1 $\frac{1}{2}$	1.80	2 $\frac{1}{2}$	1 $\frac{1}{8}$	19

Aluminum Racing Fin

CAST SILICON ALUMINUM



Fig. 189

Length Overall Inches	Depth Blade Inches	Size Flange Inches	Weight Lbs.	Price Each
12 $\frac{1}{2}$	5	2 $\frac{1}{2}$ x 10	1 $\frac{1}{2}$	\$2.00



Strap Rudder Braces

GALVANIZED MALLEABLE IRON

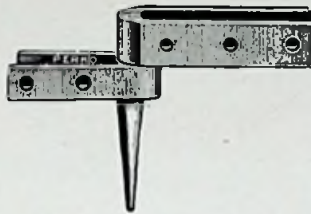


Fig. 217

Size No.	Per Set Complete	Pintles Only Pair	Straps Only Pair	Between Straps Inches	Weight Per Set Pounds
00	\$.70	\$.40	\$.30	3/8	3/4
0	.90	.50	.40	3/4	1
1	1.20	.70	.50	7/8	1 1/2
2	1.40	.80	.60	1	2
3	1.80	1.00	.80	1 1/4	2 7/8
4	2.50	1.50	1.00	1 1/2	4 1/4

Set consists of two Pintles and two Straps.

Sliding Rudder Fittings

CAST BRONZE

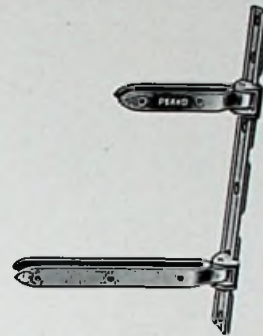


Fig. 552

For use on dinghys and small sail boats. Rudder can be quickly and easily attached or removed. The rudder slides on a cast bronze track which has a stop at the bottom.

Complete Per Set	Track Only Each	Between Straps Inches	Width Track Inches	Length Track Inches
\$4.25	\$1.65	7/8	1	18

Screw Rudder Braces

GALVANIZED MALLEABLE IRON

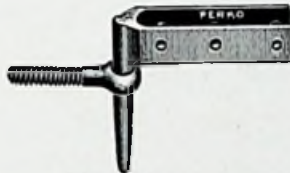


Fig. 201

Size No.	Per Set Complete	Pintles Only Pair	Gudgeons Only Pair	Between Straps Inches	Weight Per Set Pounds
1	\$.50	\$.40	\$.10	5/8	5/8
2	.64	.50	.14	3/4	3/4
3	.90	.70	.20	7/8	1
4	1.18	.90	.28	1 1/8	1 1/2

Bronze Rudder Braces

CAST BRONZE—PLAIN

Pintle

Strap Gudgeon



Fig. 1070



Fig. 1071

Plate Rudder Braces

GALVANIZED MALLEABLE IRON



Fig. 743

Plate Gudgeon

Plate Gudgeon



Fig. 1072



Fig. 1073

Screw Gudgeon



Fig. 1074

DESIGNED FOR SQUARE STERN BOATS

Size No.	Price Per Set	Plates Only Per Pair	Pintles Only Per Pair	Opening Between Straps Inches	Est. Wt. in Lbs.
1	\$.80	\$.40	\$.40	5/8	3/4
2	1.00	.50	.50	3/4	1
3	1.30	.60	.70	7/8	1 3/8
4	1.50	.70	.80	1	2 1/8

Set consists of Two Plates and Two Pintles

No.	Between Straps Inches	Fig. 1071 Pintles Each	Fig. 1070 Strap Gudgeon Each	Fig. 1072 Plate Gudgeon Each	Fig. 1073 Plate Gudgeon Each	Fig. 1074 Screw Gudgeon Each
0	1/2	\$.30	\$.25	\$.25	\$.25	\$.10
1	5/8	.35	.30	.30	.30	.10
2	3/4	.40	.35	.35	.35	.15



Thrust Ball Bearings

Flat Race
Bronze Retainers



Fig. 786

Grooved Race
Steel Retainers



Fig. 942

Diameter Shaft Inches	Fig. 786	Fig. 942	Outside Diameter Inches	Thickness Inches
5/8	\$.90	\$1.00	1 1/8	1/8
3/4	1.00	1.10	1 1/4	1/8
7/8	1.05	1.15	1 3/8	5/8
1	1.10	1.25	1 1/2	5/8
1 1/8	1.25	1.35	2	5/8
1 1/4	1.30	1.40	2 1/8	5/8
1 3/8	1.65	1.75	2 1/4	5/8
1 1/2	1.65	1.85	2 3/8	5/8
1 5/8	2.20	2.20	3	1 1/8
1 3/4	2.20	2.20	3 1/8	1 1/8
2	2.85	2.85	3 1/4	1 1/8
2 1/4	3.10	3.10	3 3/8	1 1/8
2 1/2	3.60	3.60	3 1/2	1 1/8

Safety Shaft Collars

CAST SEMI STEEL—MACHINED



Solid Type
Fig. 787



Split Type
Fig. 788

Shaft Size Inches	Solid Type Price Each	Split Type Price Each
5/8	\$.40	
3/4	.45	\$.65
7/8	.45	.70
1	.55	.75
1 1/8	.60	.85
1 1/4	.70	.95
1 3/8	.75	1.00
1 1/2	.80	1.10
1 3/4	1.00	1.30
2	1.10	1.50

Split type is not made in 5/8 inch size.

Thrust Ball Bearings

GROOVED RACES
STEEL RETAINING BAND



Fig. 943

Diam. Shaft Inches	Price Each	Outside Diam. Inches
5/8	\$.90	1 1/8
3/4	1.00	1 1/4
7/8	1.00	1 3/8
1	1.10	1 1/2
1 1/8	1.25	2
1 1/4	1.25	2 1/8
1 3/8	1.65	2 1/4
1 1/2	1.65	2 3/8
1 5/8	2.20	3
1 3/4	2.20	3 1/8
2	2.85	3 1/4
2 1/4	3.10	3 3/8
2 1/2	3.40	3 1/2

Flat Bearings

BABBITTED



Fig. 789

For Shaft Size Inches	Price Each	Size of Base Inches
3/4	\$1.10	2 x 5 1/4
7/8	1.30	2 3/4 x 5 3/8
1	1.30	3 3/8 x 6
1 1/8	1.60	3 3/8 x 6
1 1/4	1.60	3 3/8 x 7
1 3/8	1.95	3 3/8 x 7
1 1/2	1.95	4 1/2 x 7 1/4
1 3/4	2.75	4 3/4 x 7 1/2
2	3.50	

Intermediate Bearings

BABBITTED



Fig. 941

Diameter Shaft Inches	Price Each	Length Overall Inches	Length Bearing Inches
1	\$3.60	7 1/4	3 1/2
1 1/8	3.60	8 1/4	3 3/4
1 1/4	4.25	8 1/4	3 3/4
1 3/8	4.25	8 1/4	3 3/4
1 1/2	4.75	9 1/4	4 1/4
1 3/4	5.50	9 1/4	4 1/4
2	5.50	10 1/2	5

Rear Bearings



Fig. 790

Shaft Size Inches	Price Each	A Inches	E Inches	F Inches
3/8	\$ 3.85	7 7/8	6	5 1/4
1	4.68	13 1/2	10 3/4	5 1/2
1 1/8	4.68	13 1/2	10 3/4	5 1/2
1 1/4	5.50	15	12	6 1/4
1 3/8	5.50	15	12	6 1/4
1 1/2	6.60	16 1/2	13 1/2	7 1/4
1 3/4	7.70	20	16 1/2	7 1/4
2	11.00	20	16 1/2	8 1/8

Above prices do not include grease cup.

"Northeast" Thrust and Intermediate Bearing Combined ALL ENCLOSED—RETAINS GREASE

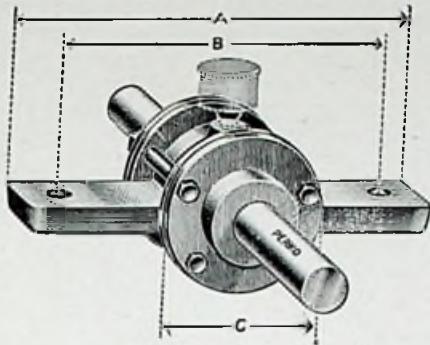


Fig. 742

No more dry or burnt out thrust bearings due to lack of grease.

A heavy housing containing two sets of thrust bearings for forward and reverse. Dirt cannot get in, grease cannot get out.

For Size Shaft Inches	Price Each	A Inches	B Inches	C Inches
5/8	\$7.70	10 1/2	9 1/2	3 3/4
3/4	8.80	10 1/2	9 1/2	3 3/4
7/8	10.00	10 1/2	9 1/2	3 3/4
1	11.00	11	9 1/2	3 1/2
1 1/8	12.10	11 1/4	9	3 1/2
1 1/4	13.20	11 1/4	9	4 1/8
1 3/8	15.40	11 1/4	9	4 1/8
1 1/2	17.60	11 1/4	9	4 1/8
1 3/4	19.80	12	10	4 1/2
2	22.00	12	10	4 1/2

Prices Do Not Include Grease Cups

"Northeast" High Speed Radial and Thrust Bearing Combined NO MORE SCORED SHAFTS

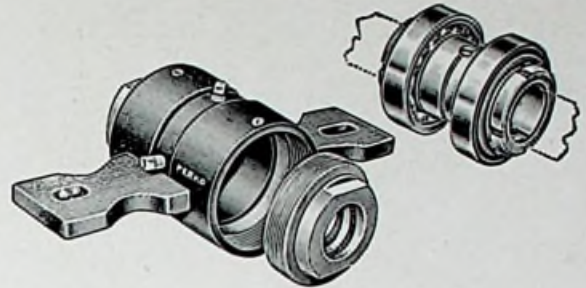


Fig. 1090

Here is a radial and thrust bearing that will increase R. P. M. due to use of ball bearings throughout. Takes care of the thrust both forward and backward along with the radial load. Requires no attention. Will stand high speed up to 8,500 R. P. M.

Will not throw grease. Just fill with gear grease up to bottom plug in housing.

Shaft can not be scored as it is enclosed by an internal housing which turns with the shaft on high speed ball bearings.

For Size Shaft Inches	Each	Width Arms Overall Inches	Width Center to Center of Holes Inches
3/4	\$11.00	10	8
7/8	12.00	11	9
1	13.20	11	9
1 1/8	16.25	11	9
1 1/4	17.20	11	9
1 3/8	19.50	11	10
1 1/2	21.10	11	10
1 3/4	24.00	11	9 1/2
2	27.00	12	10
2 1/4	28.50	12	10
2 1/2	32.80	12	10

Universal Joints DROP FORGED STEEL

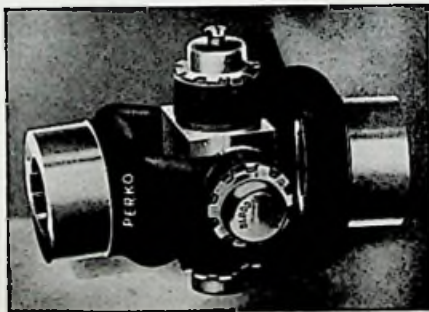


Fig. 791

An extremely rugged joint designed principally for marine use, turns in a small circle and is lubricated through a simple opening, the use of these joints will reduce vibration and lengthen the life of the boat and motor.

Size No.	Price Single Joint Each	Price Double Joint Each	Maximum Shaft Diameter Inches	Diameter Swing Inches	Length Single Joint Inches
1	\$10.40	\$18.80	1 3/8	4 3/8	7 1/2
2	14.00	25.30	1 1/2	5 1/8	7 1/2
3	17.80	30.40	1 7/8	5 3/4	8 1/2
4	21.80	37.25	1 7/8	6 1/8	8 1/2
5	32.80	60.00	2 1/8	6 3/4	10 1/2
6	65.00	119.00	2 3/4	8 1/8	14 1/2

Shaft Couplings CAST IRON

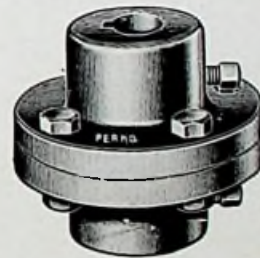


Fig. 327

No.	Price Each	Size Shaft Inches	Diam. Flange Inches	Length Overall Inches
1	\$3.50	3/4-1	4	3 1/2
2	4.25	3/4 to 1 1/2	4 1/2	4 1/8
3	5.25	1 1/8 to 1 1/2	5	4 3/4
14	8.00	1 to 2	6	6 1/2

For divided sizes such as 1 x 1 1/8, etc., add \$.50 each. For special boring, not listed, add \$1.00 each.

For 1/2 coupling add \$.25 to half of above prices. No bolts furnished.

SIZE OF KEYWAY IN SHAFT COUPLINGS

Size Shaft Inches	Size Keyway Inches
3/4 - 7/8	1/8
1 - 1 1/8	1/4
1 1/4	3/8
1 3/8 - 1 1/2	1/2
1 3/4 - 1 3/4	5/8
1 7/8 - 2	3/4



GOODRICH CUTLESS BEARINGS

Stock Sizes—Table of Dimensions, Weights and 1939 Prices

SIZES SHOWN HERE ARE IN STOCK FOR IMMEDIATE SHIPMENT

A Shaft Diam. Inches	B Outside Diam. Inches	Standard Length Inches	E Rubber Wall Inches	D Metal Wall Inches	Shipping Weight Lbs.	Price Each	Sp'l L'gths Price Per Lin. In.
3/4	1 1/4	3	1/8	1/8	3/4	\$ 6.20	\$2.27
7/8	1 3/8	3 1/2	1/8	1/8	3/4	7.20	2.27
1	1 1/2	3 1/2	1/8	1/8	3/4	7.20	2.27
1	1 1/2	4	1/8	1/8	1	8.30	2.38
1	1 5/8	4	3/8	1/8	1 1/4	8.30	2.38
1	2	4	3/8	1/8	1 1/2	8.30	2.38
1 1/8	2 1/8	4 1/2	1/8	1/8	1 1/4	9.80	2.44
1 1/8	2 1/4	4 1/2	1/8	1/8	1 1/2	9.80	2.44
1 1/8	2	4 1/2	1/8	1/8	1 3/4	9.80	2.44
1 1/4	2 3/4	5	1/8	1/8	1 1/2	11.20	2.50
1 1/4	2	5	1/4	1/8	1 3/4	11.20	2.50
1 1/4	2 1/8	5	1/8	1/8	1 3/4	11.20	2.50
1 3/8	2 7/8	5 1/2	1/8	1/8	1 3/4	12.40	2.66
1 3/8	2 1/8	5 1/2	1/8	1/8	2 1/4	12.40	2.66
1 3/8	2 3/8	5 1/2	1/4	1/8	2 1/2	12.40	2.66
1 1/2	2	6	1/8	1/8	2	14.30	2.78
1 1/2	2 3/8	6	1/8	1/8	2 1/2	14.30	2.78
1 5/8	2 1/8	6 1/2	1/8	1/8	2 1/4	16.70	3.02
1 5/8	2 5/8	6 1/2	3/8	1/8	3	16.70	3.02
1 3/4	2 3/8	7	1/8	1/8	2 3/4	18.90	3.16
1 3/4	2 5/8	7	1/8	1/8	3 1/4	18.90	3.16
1 7/8	2 3/8	7 1/2	1/4	1/8	3 1/4	20.80	3.26
1 7/8	2 5/8	7 1/2	1/4	1/8	4	20.80	3.26
2	2 5/8	8	1/8	1/8	3 1/2	21.80	\$3.30
2	3	8	3/8	1/8	4 1/2	21.80	3.30
2 1/8	2 1/8	8 1/2	1/8	1/8	4 1/2	23.50	3.30
2 1/8	3 1/8	8 1/2	3/8	1/8	4 3/4	23.50	3.30
2 1/4	2 1/8	9	1/8	1/8	4 1/2	25.40	3.36
2 1/4	3 1/8	9	1/8	1/8	5	25.40	3.36
2 1/4	3 3/8	9	1/8	1/8	6	25.40	3.36
2 3/8	3 3/8	9 1/2	3/8	1/8	6	27.30	3.38
2 1/2	3 1/8	10	1/8	1/8	5	28.20	3.44
2 1/2	3 3/8	10	1/8	1/8	6	28.20	3.44
2 5/8	3 3/8	10 1/2	1/4	1/8	6	30.80	3.50
2 3/4	3 3/8	11	1/8	1/8	5 3/4	33.40	3.56
2 3/4	3 3/4	11	3/8	1/8	6	33.40	3.56
2 7/8	3 3/4	11 1/2	1/8	1/8	6 3/4	34.70	3.62
3	3 3/4	12	1/4	1/8	8	36.80	3.66
3	4	12	3/8	1/8	8 1/2	36.80	3.66
3 1/8	4 1/4	12 1/2	1/8	1/8	8 1/2	39.60	3.72
3 1/4	4	13	1/4	1/8	9 1/4	42.60	3.86
3 1/4	4 1/4	13	3/8	1/8	10	42.60	3.86
3 3/8	4 1/2	13 1/2	1/8	1/8	10 3/4	46.00	4.02
3 1/2	4 1/4	14	1/4	1/8	10	49.10	4.14
3 1/2	4 1/2	14	3/8	1/8	11 1/2	49.10	4.14
3 5/8	4 1/2	14 1/2	1/8	1/8	12 3/4	53.60	4.36
3 3/4	4 1/2	15	1/4	1/8	10 1/2	59.50	4.68
3 3/4	5	15	1/8	1/8	17 3/4	59.50	4.68
3 3/4	5 1/4	15	1/8	1/8	18	59.50	4.68
3 7/8	5 1/4	15 1/2	1/2	1/8	20	63.60	4.84
4	5	16	1/8	1/8	28	68.40	5.04
4	5 1/4	16	1/8	1/8	29 1/2	68.40	5.04
4 1/8	5 1/4	16 1/2	3/4	1/8	31	71.60	5.12
4 1/4	5 1/2	17	1/8	1/8	29 1/2	74.40	5.12
4 3/8	5 3/4	17 1/2	1/2	1/8	33 1/2	77.80	5.22
4 1/2	5 1/2	18	1/8	1/8	33 1/4	82.00	5.36
4 1/2	5 3/4	18	1/8	1/8	35	82.00	5.36
4 5/8	6 1/8	18 1/2	1/2	1/4	39	89.40	5.68
4 3/4	6 1/8	19	1/8	1/4	43 3/4	96.30	5.94
4 7/8	6 1/8	19 1/2	1/8	1/8	43	101.20	6.10
5	6 1/8	20	1/8	1/4	45	106.60	6.28
5	6 1/2	20	1/2	1/4	50 1/4	106.60	6.28
5 1/4	7	21	1/8	1/8	80 1/4	118.30	6.64
5 3/8	7	21 1/2	1/8	1/8	75	124.00	6.80
5 1/2	7	22	1/2	3/8	65	129.20	6.95
5 5/8	7	22 1/2	1/8	1/4	70	134.50	7.04
5 3/4	7	23	3/8	1/4	62 3/4	140.20	7.18
6	7 1/2	24	1/2	1/4	70	156.00	7.64



Fig. 1021

Stern Bearings

WITH GOODRICH CUTLESS BEARINGS
CAST BRONZE

With Oval Flange

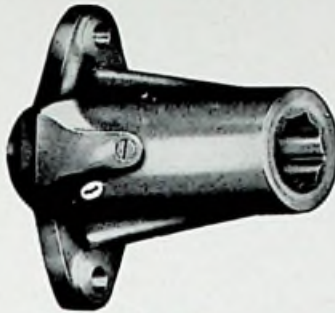


Fig. 381

With Square Flange

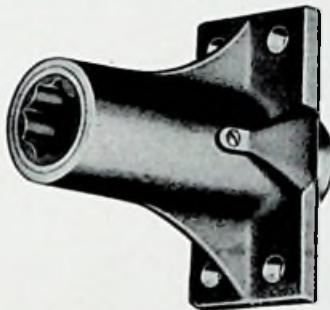


Fig. 382

The advantages of this type of bearing are many. The castings are made of high grade bronze of heavy construction and will last as long as the boat.

The flanges correspond in sizes with the usual bronze and babbitted bearings of this type. The Goodrich Cutless Bearing can be easily removed from the main casting by taking out the set screws holding same.

No vibration. Sand or silt is carried out without injury to shaft or bearing.

No attention or adjustment necessary. These bearings are provided with scoops for water lubrication and no additional scoops or other provisions for water supply are necessary.

Size Shaft Inches	Each	Size Flange Inches	Length Bearing Inches
1	\$13.70	5 x 2 1/2	4
1 1/8	16.40	5 1/2 x 2 3/4	4 1/2
1 1/4	18.90	6 x 3	5
1 3/8	21.40	6 1/2 x 3 1/4	5 1/2
1 1/2	27.00	7 x 3 1/2	6
1 3/4	35.80	8 x 4	7
2	43.70	9 1/4 x 4 3/8	8
2 1/4	55.60	10 1/2 x 5 1/4	9
2 1/2	64.80	11 1/2 x 5 3/4	10
2 3/4	79.00	12 3/4 x 6 3/8	11
3	93.00	14 x 7	12

Rubber Engine Mountings

PREPARED FOR MARINE ENGINE
INSTALLATIONS—LACQUERED

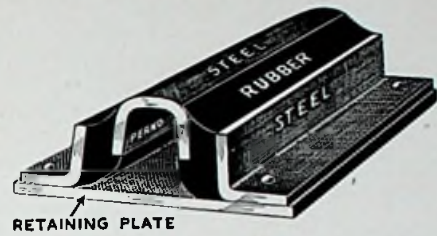


Fig. 455

Provides an elastic mounting for moving machinery of all kinds.

Made of 3 metallic members securely bonded to 2 resilient rubber elements arranged in such a manner that the loads are carried in a combination of shear and compression, the central inverted metal "U" carries the load and the extended metal flanges on either side are bolted to the engine bed, thus the rubber connector strips absorb and stop vibration created by the engine, eliminating vibrational noises, and increasing the mechanical efficiency of the engine.

The adhesion of the rubber to the metal is over 250 pounds per square inch.

Furnished in various lengths for various installations.

The rubber is coated with a long life elastic lacquer making it impervious to the effects of bilge water, oil, grease and dampness.

Furnished with or without a steel plate riveted to the flanges, the steel plate permits the fastening of the mounting to the engine before installing so that engine can be properly lined up.

If plate is not used the rubber will stretch and lose its compression quality before the mounting is bolted to the bed.

The only time the plate is not necessary is when the type of installation will allow the mounting to be bolted to the bed before the weight of the engine is put on it, this of course should not be done when installing an engine in a boat, as proper "lining up" would be extremely difficult.

Extreme Width Inches	Height with Retaining Plate Inches	Height without Retaining Plate Inches
4 1/16	1 1/2	1 3/8

WITH RETAINING PLATE

Length Inches	4	6	8	10	12
Price Each	\$3.00	\$4.00	\$5.00	\$6.25	\$6.75

WITHOUT RETAINING PLATE

NOT LACQUERED

Length Inches	4	6	8	10	12
Price Each	\$2.00	\$2.75	\$3.60	\$4.50	\$5.00



Stuffing Boxes
CAST BRONZE—REGULAR

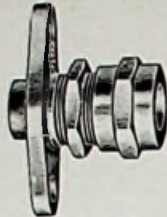


Fig. 320

Size Shaft Inches	Each	Size Flange Inches	Length Bearing Inches	Drilled for Fastening Inches	Weight Pounds
5/8	\$1.60	3 5/8 x 1 3/4	2 3/8	3/8	1 1/8
3/4	1.75	4 1/8 x 1 3/4	2 3/8	3/8	1 1/8
7/8	2.00	4 1/4 x 1 7/8	2 7/8	7/8	1 1/2
1	2.25	4 1/2 x 2 1/4	3	7/8	1 3/4
1 1/8	2.75	5 1/8 x 2 3/8	3 1/4	1 1/2	2 1/4
1 1/4	3.25	6 x 2 5/8	3 3/8	1 1/2	3
1 3/8	4.00	6 1/4 x 3	3 3/8	1 1/2	3 1/4
1 1/2	4.50	6 1/2 x 3	3 7/8	1 1/2	3 1/2
1 3/4	6.50	7 x 3 3/4	3 3/4	5/8	5 3/4

Stern Bearings
CAST BRONZE—REGULAR

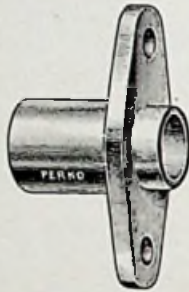


Fig. 321

Size Shaft Inches	Each	Size Flange Inches	Length Bearing Inches	Drilled for Fastening Inches	Weight Pounds
5/8	\$.75	3 5/8 x 1 3/4	2 3/8	3/8	12 oz.
3/4	1.00	4 1/8 x 1 3/4	2 3/8	3/8	13 oz.
7/8	1.25	4 1/4 x 1 7/8	2 7/8	7/8	1 lb.
1	1.50	4 1/2 x 2 1/4	3	7/8	1 1/4
1 1/8	1.75	5 1/8 x 2 3/8	3 1/4	1 1/2	1 1/2
1 1/4	2.00	6 x 2 5/8	3 3/8	1 1/2	2
1 3/8	2.50	6 1/4 x 3	3 3/8	1 1/2	2 1/4
1 1/2	3.25	6 1/2 x 3	3 7/8	1 1/2	2 1/2
1 3/4	4.00	7 x 3 3/4	3 3/4	5/8	3 3/4

Stuffing Boxes and Stern Bearing
THREADED FOR PIPE

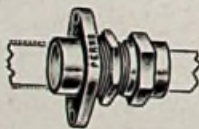


Fig. 711



Fig. 712

Size Shaft Inches	Stuffing Box Each	Stern Bearing Each	Size Flange Inches	Tapped for Pipe Inches	Drilled for Fastening Inches
3/4	\$2.50	\$1.75	4 x 2 1/8	3/4	3/8
7/8	2.75	2.00	4 3/4 x 2 3/8	1	7/8
1	3.00	2.25	4 3/4 x 2 7/8	1	7/8
1 1/8	3.50	2.50	5 3/4 x 3	1 1/4	1 1/2
1 1/4	4.00	2.75	6 x 3	1 1/4	1 1/2
1 3/8	5.00	3.50	6 1/2 x 3 3/8	1 1/2	1 1/2
1 1/2	5.50	4.25	6 3/4 x 3 3/4	1 1/2	1 1/2

Stuffing Boxes
CAST BRONZE—HEAVY

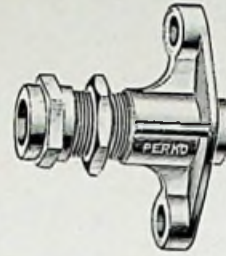


Fig. 631

Size Shaft Inches	Plain Each	Babbitted Each	Size Flange Inches	Drilled for Fastening Inches	Lgth. Bearing Inches	Weight Pounds
3/4	\$3.50	\$4.75	4 1/2 x 2 1/2	3/8	3 1/2	2 1/2
7/8	4.00	5.50	5 1/8 x 2 3/4	3/8	4	3 1/4
1	4.50	6.25	5 3/4 x 3	1/2	4 1/2	4
1 1/8	5.00	6.75	6 3/8 x 3 1/4	1/2	5	4 3/4
1 1/4	6.00	7.75	7 x 3 1/2	5/8	5 1/2	6 1/3
1 3/8	7.00	8.75	7 3/8 x 3 3/4	5/8	6	8
1 1/2	8.50	10.75	8 1/8 x 4	3/4	6 1/2	9 1/2
1 5/8	10.00	13.25	8 5/8 x 4	3/4	7	10 1/2
1 3/4	11.50	15.00	9 1/8 x 4	3/4	7 1/2	11 1/2
1 7/8	13.00	17.00	9 3/4 x 4 1/4	3/4	8	13
2	14.50	19.00	10 1/8 x 4 1/2	3/4	8 1/2	14 1/2

Length of Bearing does not include Packing Nut.

Stern Bearings
CAST BRONZE—HEAVY

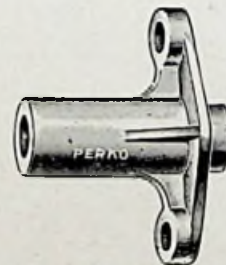


Fig. 632

Size Shaft Inches	Plain Each	Babbitted Each	Size Flange Inches	Drilled for Fastening Inches	Lgth. Bearing Inches	Weight Pounds
3/4	\$2.50	\$3.75	4 1/2 x 2 1/2	3/8	3 1/2	1 3/4
7/8	2.75	4.25	5 1/8 x 2 3/4	3/8	4	2 1/2
1	3.00	4.75	5 3/4 x 3	1/2	4 1/2	3 1/4
1 1/8	3.25	5.00	6 3/8 x 3 1/4	1/2	5	3 3/4
1 1/4	3.75	5.50	7 x 3 1/2	5/8	5 1/2	4 3/4
1 3/8	4.50	6.25	7 3/8 x 3 3/4	5/8	6	6 1/2
1 1/2	5.50	7.75	8 1/8 x 4	3/4	6 1/2	7 3/4
1 5/8	6.75	10.00	8 5/8 x 4	3/4	7	8 1/2
1 3/4	8.00	11.50	9 1/8 x 4	3/4	7 1/2	9
1 7/8	9.25	13.25	9 3/4 x 4 1/4	3/4	8	10 3/4
2	10.75	15.25	10 1/8 x 4 1/2	3/4	8 1/2	11 3/4

Extra Heavy Stuffing Box RECTANGULAR FLANGE—CAST BRONZE

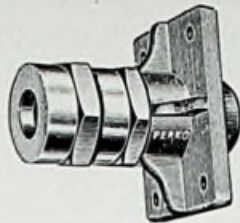


Fig. 819

For Diam. Shaft Inches	Plain Each	Babbitted Each	Size of Flange Inches	Length Bearing Inches
1	\$ 5.25	\$ 7.00	5 x3	4 1/8
1 1/8	5.75	7.50	5 1/2 x3 1/4	4 1/8
1 1/4	6.75	8.50	5 3/4 x3 5/8	4 5/8
1 3/8	8.00	9.75	6 x4	5 1/8
1 1/2	10.00	12.25	6 x4 1/2	5 5/8
1 3/4	12.50	16.00	6 1/2 x4 1/2	7
2	16.00	20.50	7 3/4 x5	7 7/8
2 1/4	22.00	28.00	8 1/4 x5 1/2	8
2 1/2	32.00	40.00	9 x6 1/2	8 1/2

Extra Heavy Stern Bearing RECTANGULAR FLANGE—CAST BRONZE

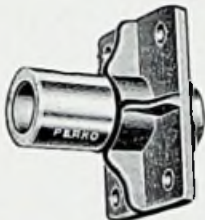
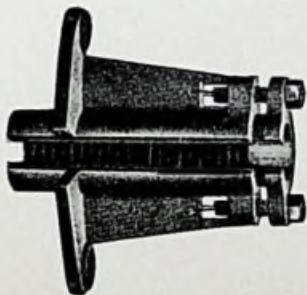


Fig. 906

Size of Flange and Bearing same as Fig. 819 above.

For Diam. Shaft Inches	Plain Each	Babbitted Each
1	\$ 3.50	\$ 5.25
1 1/8	4.00	5.75
1 1/4	4.50	6.25
1 3/8	5.50	7.25
1 1/2	6.50	8.75
1 3/4	9.00	12.50
2	11.75	16.25
2 1/4	16.50	22.50
2 1/2	24.00	32.00

Flax Packed Stuffing Box and Stern Bearing WITH RECTANGULAR OR OVAL FLANGE



RECTANGULAR FLANGE—Fig. 811
OVAL FLANGE—Fig. 821

Shaft Size Inches	Size Flange Inches	Length Bearing Inches	Price Each
1	5 1/4 x2 5/8	5 1/4	\$ 6.25
1 1/8	6 x3	5 3/4	6.50
1 1/4	6 5/8 x3 1/8	6 1/4	7.00
1 3/8	7 1/4 x3 5/8	6 3/4	7.75
1 1/2	8 x4	7 3/4	11.00
1 3/4	9 1/4 x4 5/8	9	16.00
2	10 1/2 x5 1/4	9 3/4	20.00
2 1/4	12 x6	11 1/8	26.00
2 1/2	13 1/4 x6 5/8	12 1/4	35.00

Self Aligning Stuffing Box CAST BRONZE—RECTANGULAR FLANGE



Fig. 734

Rubber mounted motors are in common use, so why not a good, strong, practical rubber mounted stuffing box.

Our self-aligning shaft log Fig. 671 is very popular, but this stuffing box does the trick where a wood log is used.

A cast bronze base and stuffing box joined by heavy rubber hose and extra strong hose clamps.

No.	Price Each	For Size Shaft Inches	Size Flange Inches	Length From Flange to End of Box Inches
1	\$7.00	3/4 - 7/8 - 1	5x3 1/4	6 3/4
2	11.00	1 1/8 - 1 1/4	6x4 3/4	7 3/4
3	13.00	1 5/8 - 1 1/2	7x4 1/2	8 3/4
4	36.00	1 3/4 - 2	8x6	15 1/2

No. 4 size has Stuffing Gland like Fig. 630 instead of Nut, and four hose clamps.

Can be made one inch shorter if desired by cutting off that much hose.

Improved Stuffing Box EXTRA HEAVY—CAST BRONZE

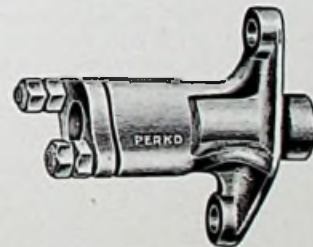


Fig. 630

A decided improvement over the regular type of stuffing box, extremely strong and heavily constructed, no nuts to bind on shaft or turn off, used with right or left hand engines, packing gland is kept in proper adjustment by two heavy tightening nuts and two lock nuts.

Size Shaft Inches	Plain Each	Babbitted Each	Size Flange Inches	Drilled for Fastening Inches	Length Bearing Inches
1	\$4.50	\$6.25	5 1/4 x3	1/2	5
1 1/8	5.00	6.75	6 3/8 x3 1/4	1/2	5 1/2
1 1/4	6.00	7.75	7 = 3 1/2	5/8	6
1 3/8	7.00	8.75	7 5/8 x3 3/4	5/8	6 1/2
1 1/2	8.50	10.75	8 1/8 x4	3/4	7
1 3/4	11.50	15.00	9 1/8 x4	3/4	8
2	14.50	19.00	10 1/4 x4 1/2	3/4	9



Adjustable Shaft Logs

ALL CAST BRONZE—EXTRA HEAVY



Fig. 627

Without doubt a shaft log superior to any other as yet on the market, made entirely of high grade cast bronze, stuffing box is adjustable to any angle in a 360° radius and is supported by two adjustable lugs to keep it from turning with the shaft should binding or freezing ever occur. Furnished complete with grease cup and rubber gasket for installing.

No.	Price Each	Size Shaft Inches	Length Base Inches	Width Base Inches	Weight Pounds
1	\$13.75	3/4, 7/8, 1	16	3 1/2	14
2	20.00	1 1/8, 1 1/4	22	4 1/4	19
3	29.50	1 3/8, 1 1/2	26	5	30
4	38.00	1 3/4, 2	28	5 1/2	57

Specify Shaft Size When Ordering

Self Aligning Shaft Log

CAST BRONZE



Fig. 671

A shaft log designed for high speed motors, the stuffing box and shaft are cushioned in rubber which will eliminate excessive wear of both and reduce vibration to a minimum. A cast bronze base and stuffing box joined by heavy rubber hose and extra strong hose clamps.

No.	Price Each	For Size Shaft Inches	Size Base Inches	Length Overall Inches	Degrees of Pitch	Weight Pounds
1	\$ 8.00	3/4-7/8-1	11x3 1/2	18	14	6
2	14.00	1 1/8-1 1/4	17x4 1/4	23 1/2	11	12
3	20.00	1 3/8-1 1/2	19x5	28	11	20

STUFFING BOX AND EXTRA RUBBER HOSE FOR SELF ALIGNING SHAFT LOG AND STUFFING BOX



Fig. 672

Fig. 1092

Fig. 673

For Log No.	Box Each	Hose Each	Hose Clamps Per Pair	I. D. Hose Inches	O. D. Hose Inches	Length Hose Inches
1	\$ 3.00	\$.50	\$.60	1 3/4	2 3/8	4
2	4.50	.90	1.40	2 3/8	3	5
3	7.00	1.50	1.70	2 3/8	3 1/2	5
4	15.00	5.00	2.00	3	3 3/4	12

When Ordering Box state Size of Shaft

No. 4 size has stuffing gland like Fig. 627 instead of nut.

Adjustable Strut

ALL CAST BRONZE
MARINE BABBITT BEARING

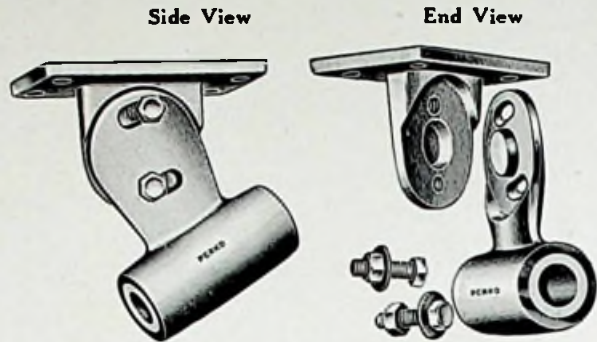


Fig. 628

Adjustable to any practical angle of the propeller shaft, held fast at necessary angle by three heavy bronze bolts, bearing is of a special marine babbitt, the highest grade obtainable. Length of drop is figured from bottom of keel to center of shaft.

Size Shaft Inches	Width Flange Inches	Length Flange Inches	Length Bearing Inches
3/4, 7/8, 1, 1 1/8	3	5 1/2	4 1/8
1 1/4, 1 3/8, 1 1/2	3 1/2	6 1/2	4 1/2

Length Drop In.	Size Shaft Inches						
	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2
5	\$8.00	\$8.00	\$8.00	\$11.00			
6	8.25	8.25	8.25	11.25	\$11.25	\$13.00	\$13.00
7	8.35	8.35	8.35	11.50	11.50	13.25	13.25
8	8.50	8.50	8.50	11.75	11.75	13.75	13.75
9	9.00	9.00	9.00	12.00	12.00	14.10	14.10
10	9.50	9.50	9.50	12.30	12.30	14.35	14.35
11	10.00	10.00	10.00	12.75	12.75	14.65	14.65
12				13.25	13.25	15.00	15.00

Specify Size Shaft and Length of Drop, When Ordering

Adjustable Strut

WITH GOODRICH RUBBER BEARING
CAST BRONZE—EXTRA HEAVY

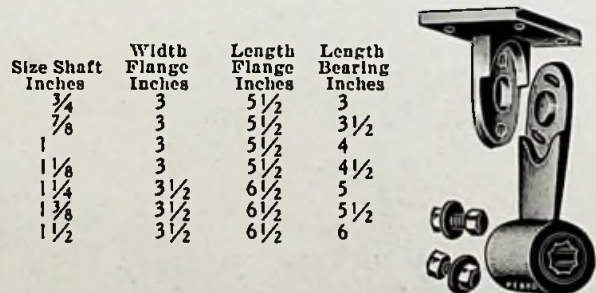


Fig. 1019

Lgth. Drop In.	Size Shaft Inches						
	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2
5	\$18.50	\$19.25	\$22.00	\$24.00	\$28.70	\$30.20	\$32.30
6	18.80	19.55	22.30	24.30	29.00	30.50	32.60
7	19.10	19.85	22.60	24.60	29.30	30.80	32.90
8	19.40	20.15	22.90	24.90	29.60	31.10	33.20
9	19.70	20.45	23.20	25.20	29.90	31.40	33.50
10	20.30	21.05	23.80	25.80	30.20	31.70	33.80
11					30.50	32.00	34.10
12					31.25	32.75	34.85

Specify Size Shaft and Length of Drop when ordering.

Diesel Yacht Control

MANGANESE BRONZE

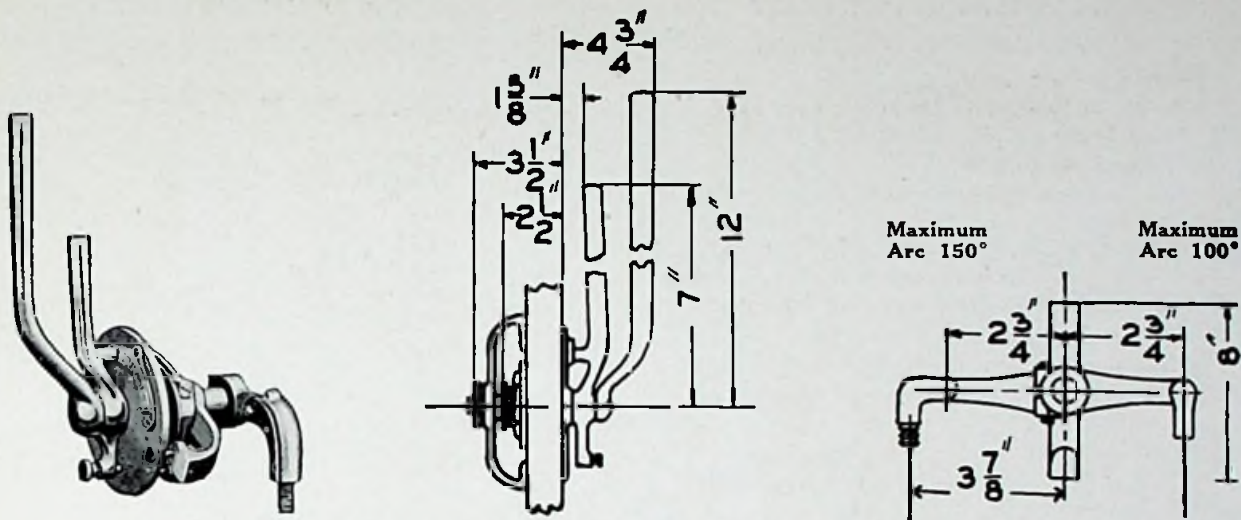


Fig. 1013

A good Diesel yacht control, built for the purpose. Ample leverage and easy to install. The ratchet on this control may be replaced in the event of wear after years of service.

All fittings furnished are 1/2 inch I.P.S. male and female, however, if desired they can be supplied for 3/8 or 1/2 inch solid rod.

Polished Bronze, Each\$39.50 Chromium Plated, Each\$42.50

Diesel Work Boat Remote Governor Control

MANGANESE BRONZE

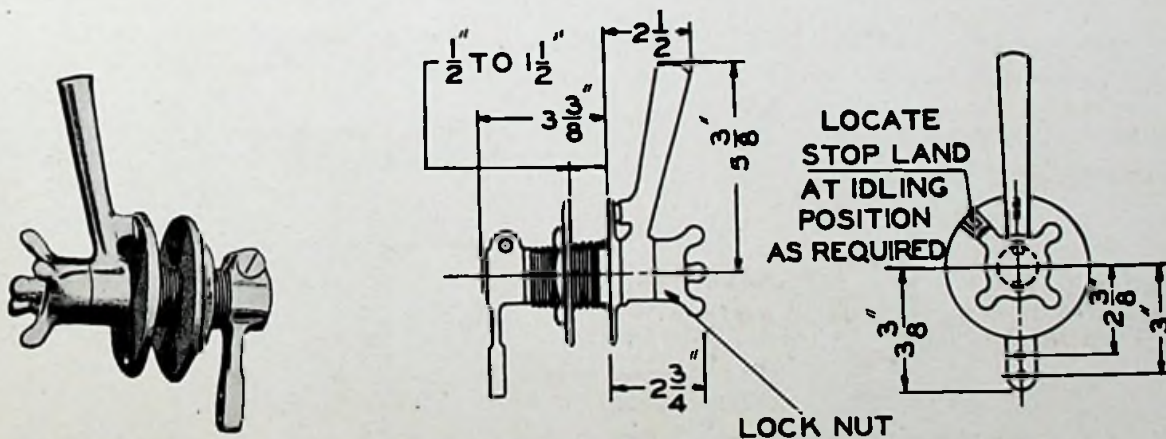


Fig. 1015

As illustrated, this control is compact, of heavy construction and incorporates the important details outlined by the leading manufacturers of Diesel motors. Made entirely of guaranteed Manganese Bronze.

Polished Bronze, Each\$12.00 Chromium Plated, Each\$13.80

"Perko" Reverse Gear Controls

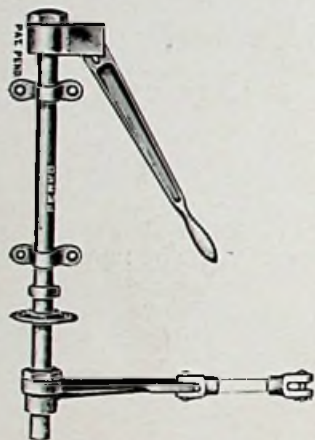
HEAVY CAST BRONZE—POLISHED
FOR 1 INCH OR 1½ INCH SHAFT

NO MACHINING OF SHAFT—NO EXTRA EXPENSE

The main feature of "Perko" controls is that it is unnecessary to have shaft machined, such as threading, key seating or drilling.

A mechanically perfect wedging device is incorporated in both upper and lower lever (patent pending). When installing it is only necessary to insert tapered bushing "B" around shaft and tighten nut "A" and an absolutely fast grip on the shaft is obtained, at no extra expense for machining, and very little labor.

A simple arrangement holds the control handle horizontally and when not in use can be placed in a vertical position by a slight movement of the hand.



Interior view of tapered fastening device.

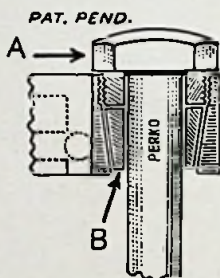


Fig. 663

Length Handle Inches	Length Lower Lever Inches	Sockets Threaded for Rod Inches	Diam. Vertical Shaft Inches	Bulkhead to Center of Shaft Inches	Weight Without Shaft Pounds
18	10	¾	1½	2	15¼

Fittings complete—except shaft	\$20.00
1 inch bronze shaft—per foot	2.00
1½ inch bronze shaft—per foot	2.50

Do not fail to specify size of shaft when ordering

Reverse Gear Controls

SPECIAL CAST BRONZE

A good substantial handle which will not bend under side leverage, special hard government bronze. Handle is removable and a flush plate is furnished to fit opening in deck flange.

Furnished with two sockets threaded for ¾ inch rod. Deck flange is 5 x 2¾ inches. Length of throw is 8½ inches.

Polished Bronze Each	Chromium Plated Each	Length Handle Inches	Length Lever Inches
\$13.50	\$16.25	25	8



Fig. 720

"Perko" Reverse Gear Controls

HEAVY CAST BRONZE—POLISHED
FOR 1 INCH SHAFT

Same tapered bushing device as Fig. 663 in upper and lower levers, no machining of shaft necessary.

Control handle is hinged so that it hangs in vertical position out of way when not in use.

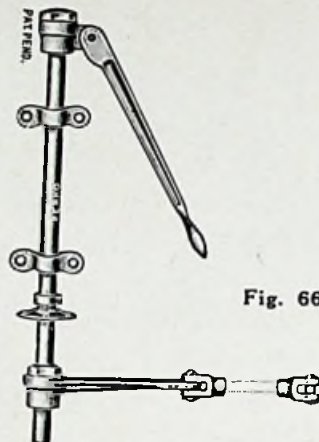


Fig. 664

Length Handle Inches	Length Lower Lever Inches	Sockets Threaded for Rod Inches	Diam. Vertical Shaft Inches	Bulkhead to Center of Shaft Inches	Weight Without Shaft Pounds
18	10	¾	1	2	13¼

Fitting complete—except shaft \$15.00
1 inch bronze shaft—per foot 2.00

Columbian Clutch Control

CAST BRONZE—POLISHED

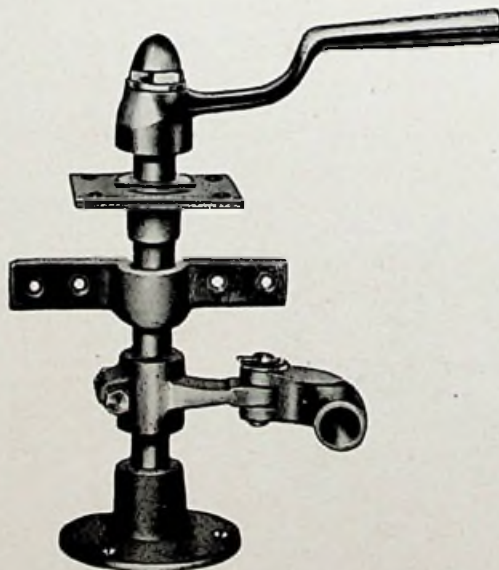


Fig. 822

Furnished as shown with choice of bulkhead bracket or shelf plate and without shaft. All fittings for 1 inch shaft. Length of handle 8 inches.

Price per set \$12.00

Above items, (Except Fig. 720) desired CHROMIUM PLATED, add 40% to Polished Bronze Price

Spark and Throttle Controls

FRICITION TYPE FOR CONTROL ROD
CAST BRONZE

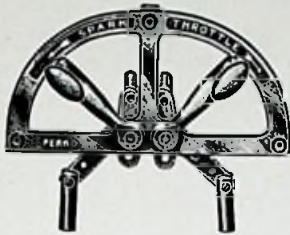


Fig. 653

All control connections are inside bulkhead, out of sight after installation. Control rod sockets are tapped for 1/4 or 5/16 inch rod. Shafts for connecting rods are long enough for mounting on bulkhead 2 inches thick.

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Size Frame Inches	Weight Each Pounds
\$4.75	\$6.00	\$7.00	6 1/2 x 3 1/4	1 1/4

Sockets for 1/4 inch rod furnished unless otherwise specified.

Spark and Throttle Control

FOR 1/4 OR 5/16 CONTROL ROD
CAST BRONZE—RATCHET TYPE



Fig. 331

A strong ratchet holds handles in position desired, furnished complete with control rod sockets threaded for 1/4 or 5/16 inch rod.

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Length Plate Inches	Width Plate Inches
\$5.50	\$6.00	\$7.00	6	2 1/2

BE SURE TO SPECIFY SIZE OF ROD WHEN ORDERING

Spark and Throttle Controls

FRICITION TYPE—FOR BOWDEN WIRE

Same construction as Fig. 653 above except connections which are designed for a bowden wire and casing installation. Equipment includes special clips for connecting bowden wire and two swivel clamps for supporting bowden casing.

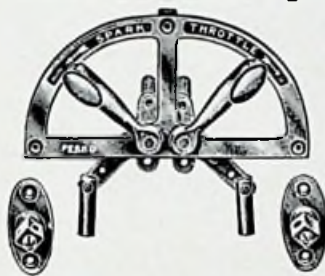


Fig. 654

For more detailed information on bowden clamp refer to Fig. 352.

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Size Frame Inches	Weight Each Pounds
\$6.00	\$7.25	\$8.25	6 1/2 x 3 1/4	1 1/2

Throttle Controls

FOR ROD OR CONTROL WIRE
CAST BRONZE—RATCHET TYPE



Fig. 715

For Control Wire



Fig. 716

For Control Rod

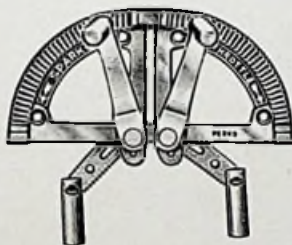
A strong and very practical control for all types of boats, an improved ratchet device that is almost noiseless, yet the handle cannot be shifted out of place by vibration. Furnished with finishing plate for outside of bulkhead, all bolts and swivel fittings for control wire and casing, or rod socket for 1/4 or 5/16 inch rod.

Plain Bronze Each	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Length Plate Inches	Width Plate Inches
\$4.00	\$5.00	\$5.50	\$6.50	6	2 3/8

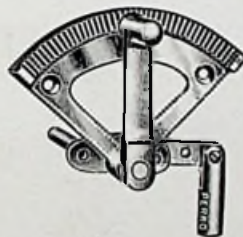
BE SURE TO SPECIFY SIZE OF ROD WHEN ORDERING

Spark and Throttle Controls

RATCHET TYPE—FOR CONTROL ROD
CAST BRONZE



Double
Fig. 691



Single
Fig. 690

Rod connections are inside bulkhead out of sight. Can be mounted on bulkhead up to 1 1/2 inches thick. Rod sockets are for 5/16 inch rod. Furnished for 1/4 inch rod to order.

Fig.	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Size Frame Inches
690	\$2.75	\$3.25	\$4.00	4 1/4 x 3 1/8
691	5.50	6.75	7.75	6 x 3

Front Bulkhead Controls

FOR SPARK AND THROTTLE

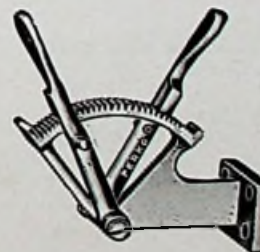


Fig. 409

For use with Control Wire and Casing.

	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
Single	\$2.50	\$3.50	\$5.20
Double	3.50	4.50	6.30



Remote Throttle Controls

PLAIN CAST BRONZE
FOR OUTBOARD MOTOR BOATS
SIDE PATTERN FLOOR PATTERN

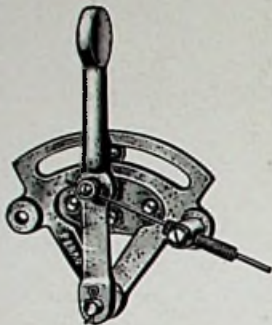


Fig. 350

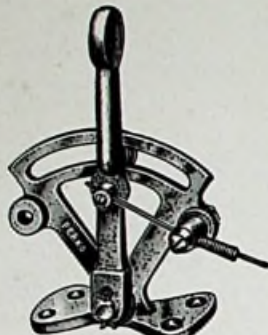


Fig. 351

Sturdily constructed of cast bronze especially designed for the racing driver's convenience. A long handle giving full leverage. Arrangement of side plate allows installation on gunwale while at the same time, it does not project above deck enough to cause injury in case of upsetting. Furnished complete with necessary bowden wire fittings.

Size Floor Plate Inches	Width Overall Inches	Height Overall Inches	Weight Ounces	Either Style Each
3x1 3/4	3 3/4	5 3/4	14	\$1.75

Prices do not include Bowden Wire or Casing.

Spark and Throttle Controls

CAST BRONZE



Fig. 904

Side Bracket



Fig. 905

Position can be changed by loosening one screw. The toothed arc holds control in desired position. Control rod sockets are tapped for 1/4 or 1/8 inch rod.

Fig.		Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
904	Complete Single	\$2.50	\$3.25	\$4.00
904	Complete Double	3.75	4.75	5.75
905	Complete Single	3.25	4.00	4.75
905	Complete Double	4.50	5.50	6.50
905	Brackets Only	1.00	1.50	2.00

Arens Control Wire and Casing

BRONZE WIRE—WITH FABRIC COVER



Fig. 990

This material is remarkable in operation particularly where long lengths or bends of small radius are necessary. All parts treated for protection against rust and corrosion. Guaranteed to give smooth trouble free service.

6 Ft. Lengths Each	9 Ft. Lengths Each	12 Ft. Lengths Each	36 Ft. Lengths Each
\$2.10	\$3.15	\$4.20	\$12.60

Improved Throttle Control

FOR CONTROL WIRE
STRAIGHT PUSH AND PULL—ALL BRASS

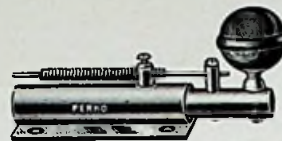


Fig. 190

An improved control giving smoother action to control wire, helps eliminate kinks in wire by direct push and pull of handle. All brass except handle which is 1 1/2 inch bakelite knob. Length of pull is 2 1/2 inches.

Polished Each	Chromium Plated Each	Overall Length Inches	Overall Width Inches	Overall Height Inches	Weight Ounces
\$2.50	\$4.00	6	1 1/2	2 3/8	12

Dashboard Choke Controls

ALL BRASS CONTROL HANDLE



Fig. 371

WITH STEEL CASING AND WIRE			
5 Ft. Lengths Per Set	7 Ft. Lengths Per Set	10 Ft. Lengths Per Set	15 Ft. Lengths Per Set
\$2.00	\$2.20	\$2.50	\$3.00
WITH BRASS CASING AND WIRE			
5 Ft. Lengths Per Set	7 Ft. Lengths Per Set	10 Ft. Lengths Per Set	15 Ft. Lengths Per Set
\$2.50	\$2.90	\$3.50	\$4.50
WITH BRONZE CASING AND WIRE			
5 Ft. Lengths Per Set	7 Ft. Lengths Per Set	10 Ft. Lengths Per Set	15 Ft. Lengths Per Set
\$2.85	\$3.40	\$4.20	\$5.50
WITH ARENS BRONZE CASING AND WIRE			
6 Ft. Lengths Per Set	9 Ft. Lengths Per Set	12 Ft. Lengths Per Set	30 Ft. Lengths Per Set
\$4.00	\$5.30	\$6.50	\$16.75

With nickel plated handle, add \$.25 per set.
With chromium plated handle, add \$.60 per set.

Control Wire Handles

ALL BRASS



Fig. 692

Control wire and casing can be easily attached. For use on a dash or bulkhead up to 2 inches thick.

Polished Brass Each	Nickel Plated Each	Chromium Plated Each
\$1.50	\$1.75	\$2.10

Bowden Wire and Casing

A high grade remote control wire, flexible and strong. Casing is 1/4 inch outside diameter.



Fig. 353

Wire and casing furnished in lengths up to 100 feet each.

	Per Foot
Steel wire with casing	\$.10
Brass wire with casing	.20
Phosphor bronze wire with casing	.27

Control Rod Sockets

STANDARD TYPE—BRASS



Fig. 328

Tapped for Rod Inches	Price Each	Size of Slot Inches
$\frac{1}{4}$	\$.20	$\frac{1}{8} \times \frac{3}{4}$
$\frac{5}{16}$	.25	$\frac{3}{16} \times \frac{3}{4}$

Control Rod Sockets

HEAVY TYPE—CAST BRONZE



Fig. 298

Tapped for Rod Inches	Price Each	Size of Slot Inches
$\frac{1}{4}$	\$.25	$\frac{3}{16} \times \frac{3}{4}$
$\frac{5}{16}$	.30	$\frac{1}{4} \times \frac{3}{4}$

Bowden Casing Clamp

CAST BRONZE—SWIVEL TYPE



Fig. 352

Will hold control casing firmly while swivel feature allows smooth sliding of control wire in casing at any angle; size base, $2\frac{1}{4} \times 1$ inch.

Price Each—Plain Bronze \$.50

Control Wire Sockets

BRASS



Fig. 679

Complete with brass cotter pin and brass set screw.

Price Each \$.25

Price Does Not Include Control Wire

Control Cranks

PLAIN CAST BRONZE

Furnished for single or double controls as desired. Cranks are solid castings with 90 degree angle. Control rod sockets are tapped for $\frac{1}{4}$ inch or $\frac{5}{16}$ inch rod.

Side Type

Upright Type

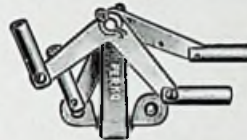


Fig. 636

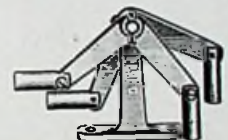


Fig. 637

SIDE OR UPRIGHT TYPE

For Rod Inches	Single Complete Each	Double Complete Each	Cranks Only Each	Brackets Only Each
$\frac{1}{4}$	\$1.10	\$1.75	\$.35	\$.40
$\frac{5}{16}$	1.35	2.25	.40	.50

Elbow Ball Joints

BRONZE

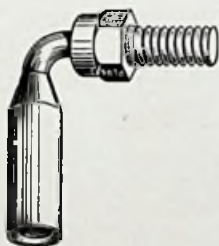


Fig. 792

Ball joints are very desirable when installing spark and throttle controls carburetor or choke control, etc.

Both ends threaded for $\frac{1}{4}$ " rod, 20 threads to inch.

PRICE EACH \$.20

Sounding Leads



Fig. 940

Furnished in all weights up to 50 pounds.
PRICE PER POUND \$.25

Adjustable Ball Joints

BRONZE

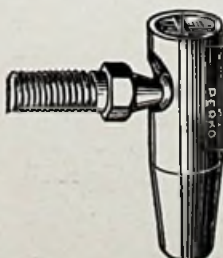


Fig. 793

Adjustable for wear, Ball is held by stiff spring and cannot rattle or work loose.

Threaded $\frac{1}{4}$ ", 20 U.S.S.

PRICE EACH \$.35



Fig. 597

Lead Lines

ITALIAN HEMP

Made of the finest Italian hemp and marked every fathom by the latest approved method.

Length	Each
10 fathoms	\$ 4.50
15 fathoms	6.00
20 fathoms	7.25
30 fathoms	10.00

Prices above do not include lead.



Racing Outboard Steerer

WITH REMOTE THROTTLE CONTROL AND CUTOUT



Fig. 447

Genuine Husted hard rubber wheel with one-piece steel core. Base, drum and control fittings are of silicon aluminium (salt water resisting), strong and sturdy, but light in weight. A strong bronze friction arrangement in base prevents control from accidental turning while wheel is in operation. A spring terminal is provided for motor shut-off. Steerer is furnished complete with 10 feet of Bowden wire and fittings.

Diam. Wheel Inches	Diam. Base Inches	Height Overall Inches	Weight Pounds	Price Each
16 3/4	7 1/8	6 1/2	8 1/2	\$14.00

Runabout Steerer

IMPROVED DASH TYPE WITH THROTTLE AND CHOKE CONTROLS

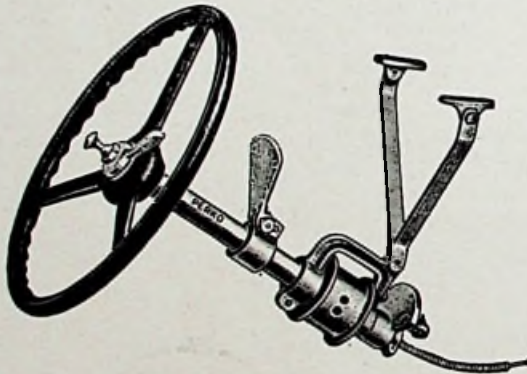


Fig. 448

Genuine Husted hard rubber wheel with one-piece steel core. An adjustable dash bracket which can be fitted on either side of dash board at any angle desired. Adjustable collar allows dash bracket to be placed wherever needed on steerer shaft. A supporting bracket for lower end of steerer can be attached to most suitable place in the boat. Throttle control on wheel complete with 10 feet control casing and wire. Choke control in center of wheel with 14 feet of control casing and wire concealed in hollow shaft. This steerer furnished of all bronze or all aluminum construction, except drum, which is aluminum in either case. Furnished complete with bowden wire.

Diam. Wheel Inches	Length Overall Inches	Size Dash Bracket Inches	Diam. Drum Inches	Weight Bronze Pounds	Each
16 3/4	17 3/4	4x4x1 1/2	3	15	
Polished Bronze—without Choke Control					\$18.00
Polished Bronze—with Choke Control					20.00
Exposed Parts, Nickel Plated, add \$1.00 each.					
Exposed Parts, Chromium Plated, add \$2.00 each.					

Improved Racing Steerer

HARD RUBBER STEEL CORED WHEEL WITHOUT CONTROLS



Fig. 737

The main features of this steerer are, strength combined with lightness of weight, hard rubber steel cored wheel and salt water resisting aluminum castings, larger diameter drum, allowing faster steering action, and reduction of overall height to a minimum.

Designed principally for use in the popular class A B and C outboard motor boats.

Diameter Wheel Inches	Height Overall Inches	Diam. Base Inches	Diam. Drum Inches	Price Each
16 3/4	5	7 1/4	4	\$10.00

Bracket Chain Type Steerer

WITH HARD RUBBER STEEL CORE WHEEL CAST BRONZE BRACKET AND SPROCKET

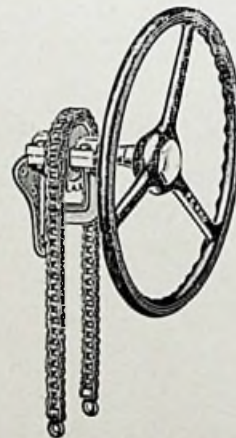


Fig. 699

Furnished complete with 36 inches of bronze sprocket chain 5/8 inch pitch with cast bronze ends.

Each	Diam. Wheel Inches	Diam. Sprocket Inches	Size Bracket Inches	Diam. Shaft Inches	Overall Length Shaft Inches
\$24.00	16 3/4	4 3/8	6 3/4 x 5 1/2	1	8 1/4

Can be furnished with bracket reversed for inside bulkhead mounting. Specify Fig. 699-A, add \$1.00 each.

Galvanized Steerers

GALVANIZED CAST IRON
MAHOGANY DRUM AND GRIPS
HEAVY PATTERN



Fig. 661

Diam. Inches	Each	Size Base Inches	Diam. Drum Inches	Length Drum Inches
12	\$ 3.50	3 3/8 x 3 3/8	2 3/8	3
16	5.25	4 x 4	2 5/8	3 3/8
20	8.75	5 1/8 x 5 1/8	3 1/8	4 5/8
25	18.00	5 3/4 x 5 3/4	4	6

Bronze Steerers

RIBBED PATTERN—WILL NOT BEND
MAHOGANY DRUM AND GRIPS



Fig. 725

Outer edges of Bronze Wheels are Polished. Inside surfaces are in Foundry Finish.

Diam. Inches	Polished Each	Chromium Plated Each	Size Base Inches	Diam. Drum Inches	Length Drum Inches
12	\$ 6.50	\$ 8.50	3 3/8 x 3 3/8	2 3/8	3
16	10.00	12.00	4 x 4	2 5/8	3 3/8
20	17.00	19.50	5 1/8 x 5 1/8	3 1/8	4 5/8

Bronze Steerers

OVAL RIM—OVAL SPOKES
MAHOGANY DRUM AND GRIPS

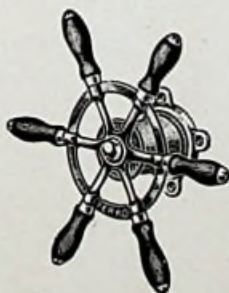


Fig. 660

Diam. Inches	Polished Bronze Each	Chromium Plated Each	Size Base Inches	Diam. Drum Inches	Length Drum Inches
12	\$ 6.50	\$ 8.50	3 3/8 x 3 3/8	2 3/8	3
16	10.00	12.00	4 x 4	2 5/8	3 3/8
20	17.00	19.50	5 1/8 x 5 1/8	3 1/8	4 5/8

Bronze Worm Geared Steerer

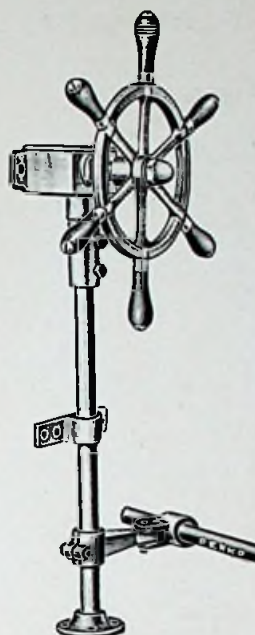


Fig. 820

Worm type gears enclosed in cast bronze case produce powerful action remarkably smooth in operation and insures easy steering, 1 1/4 turns of the wheel obtains 45 degree angle of rudder.

Worm type gears automatically "lock" the rudder in desired position until wheel is turned to change course.

Wheel is of heavy cast bronze, highly polished, with hardwood handles.

Wheel shaft is 1 inch diameter bronze rod and all fittings are for 1 inch diam. rod.

Complete except shafting, with 16 inch bronze wheel	\$35.00
Complete except shafting, with 20 inch bronze wheel	37.25
With 24 inch bronze wheel	41.25
Worm Steerer only, without wheel, shafting or other fittings	16.00
16 inch bronze wheel only	10.00
20 inch bronze wheel only	12.00
24 inch bronze wheel only	16.00
Lower lever with clevis	4.75
Bulkhead bracket only	2.25
Floor plate only	2.25

Worm Geared Dual Steering Unit

ALL BRONZE

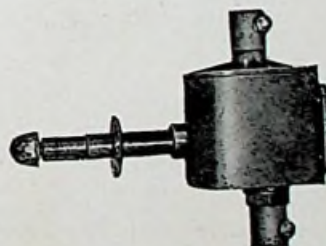


Fig. 537

A very compact assembly incorporating the many advantages of our worm type steerers described above, with the added feature of a connection for a vertical shaft to connect with a steering wheel on the upper deck or cabin roof. Both steering wheels have the same ratio with the lower shaft.

Wheel shaft is 1 inch diameter bronze rod.

All fittings are for 1 inch diameter vertical rod.

Complete as Illustrated Each	Extreme Width Inches	Depth Box Inches	Height Box Inches	Length Shaft Inches
\$50.00	8 1/2	6 1/8	5 1/8	6

For wheel and other fittings refer to Fig. 820.



BRACKET CHAIN TYPE STEERERS

CAST BRONZE BRACKET AND SPROCKET

WITH POLISHED BRONZE WHEEL
FOR OUTSIDE BULKHEAD MOUNTING



Chromium Plated Prices apply
only to wheel, shaft and nut.

Fig. 674

Size Wheel Inches	Polished Each	Chromium Plated Each	Diameter of Shaft Inches
16	\$25.00	\$28.00	$\frac{7}{8}$
20	31.00	34.50	$\frac{7}{8}$
25	36.00	40.00	1

WITH POLISHED BRONZE WHEEL
FOR INSIDE BULKHEAD MOUNTING



Fig. 675

Size Wheel Inches	Polished Each	Chromium Plated Each	Diameter of Shaft Inches
16	\$25.00	\$28.00	$\frac{7}{8}$
20	31.00	34.50	$\frac{7}{8}$
25	36.00	40.00	1

WITH INLAID MAHOGANY WHEEL
FOR OUTSIDE BULKHEAD MOUNTING

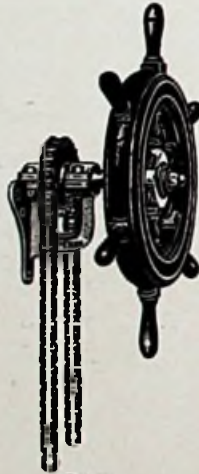


Fig. 676

Size Wheel Inches	Price Each	Diam. of Shaft Inches
20	\$50.00	$\frac{7}{8}$
24	58.50	1
28	68.50	1

WITH INLAID MAHOGANY WHEEL
FOR INSIDE BULKHEAD MOUNTING



Fig. 677

Size Wheel Inches	Price Each	Diam. of Shaft Inches
20	\$50.00	$\frac{7}{8}$
24	58.50	1
28	68.50	1

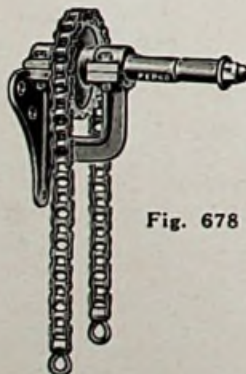


Fig. 678

BRACKET STEERER, COMPLETE EXCEPT WHEEL

Furnished complete with 36 inches of chain as shown, with long shaft and keyway for mahogany wheel. Chain has $\frac{3}{8}$ inch pitch, bracket is $6\frac{1}{4}$ inches high, $5\frac{1}{2}$ inches wide.

Size Wheel Inches	Price Each	Diam. of Shaft Inches
16	\$19.50	$\frac{7}{8}$
20	21.00	$\frac{7}{8}$
24	23.00	1
28	26.00	1

Standard Overall Length of Shaft for Bronze Wheel $7\frac{1}{4}$ inches
Standard Overall Length of Shaft for Mahogany Wheel $9\frac{1}{4}$ inches
Special Length of Shaft, add \$.25 per inch.

Extra 36 inch lengths of Brass Roller Chain with Ends, Price, \$7.50 Each
Extra Sprockets, $4\frac{1}{2}$ diameter, 21 teeth 3.50 Each

Bronze Steering Wheels

6 ROUND SPOKES—ROUND RIM
TEAKWOOD HANDLES

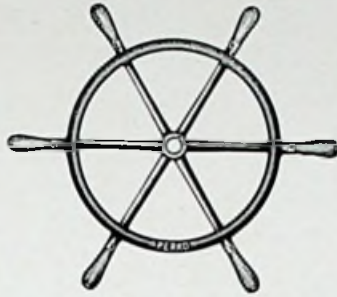


Fig. 197

Diam. Inches	Polished Each	Chromium Plated Each	For Shaft Inches	Diam. Hub Inches	Length Hub Inches	Keyway Inches
20	\$12.00	\$16.00	1	2 1/8	2 1/8	1/4
24	16.00	21.00	1	2 1/8	2 1/8	1/4
28	22.00	28.00	1 1/4	2 1/2	2 1/2	3/8

Bronze Steering Wheel

POLISHED—HEAVY TYPE
USED ON FIG. 674 CHAIN TYPE STEERER

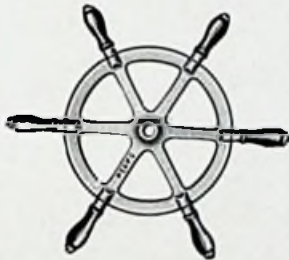


Fig. 976

Diam. Inches	Polished Each	Chromium Plated Each	For Shaft Inches	Diam. Hub Inches	Length Hub Inches	Keyway Inches
16	\$ 7.50	\$ 9.50	7/8	1 1/8	1 1/8	1/4
20	8.50	10.75	7/8	1	1	1/4
25	11.50	15.00	1	1 1/4	1 1/4	1/4

Galvanized Steering Wheels

WITH WOOD HANDLES, BRONZE TIPS



Fig. 977

Diam. Inches	Each	Number Spokes	For Diam. Shaft Inches	Length Hub Inches	Est. Wt. Each in Lbs.
20	\$12.50	6	1 1/8	2 1/8	9
22	15.50	6	1 1/8	2 1/8	13
25	18.00	6	1	2 7/8	16
28	21.00	6	1 1/8	2 1/8	21
30	24.00	8	1 1/4	3 1/8	31
36	33.00	8	1 3/8	3 1/8	41

Mahogany Steering Wheels

INLAID RIM—CAST BRONZE HUB

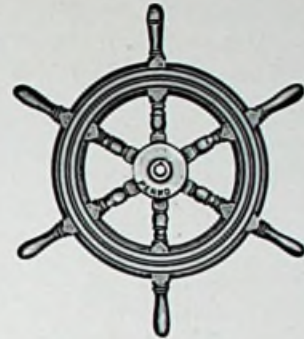


Fig. 657

Diam. Overall Inches	Each	For Diam. Shaft Inches	Thickness of Hub Inches	Size Keyway Inches
20	\$25.00	7/8 or 1	2 1/8	1/4
24	30.00	1	2 1/8	1/4
28	36.00	1	2 1/8	1/4
30	42.00	1	2 1/8	1/4
32	48.00	1 1/8	2 1/8	1/4
34	51.00	1 1/8	2 1/4	1/4
36	66.60	1 1/4	2 1/2	3/8
42	81.50	1 1/4	2 1/2	3/8
48	92.50	1 3/8	2 1/2	3/8

All above wheels are measured from end to end of grips.

Above wheels with drum and stand furnished promptly to order.

Hubs for Wood Steering Wheels

CAST BRONZE



Fig. 1018

Diam. Inches	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Number of Spokes
4	\$ 5.00	\$ 6.00	\$ 6.80	6
5	7.00	8.00	9.00	6
6	14.00	15.00	16.50	8

State Size of Bore and Keyway when ordering.

Lever with Clevis

CAST BRONZE—FOR 1 INCH ROD



Fig. 978

Complete Each	Lever Only Each	Clevis Only Each	Length Overall Inches
\$4.75	\$3.00	\$1.75	10 1/4

Air-tone Marine Horns

POWERFUL TONE OF AN AIR WHISTLE
CHROMIUM PLATED

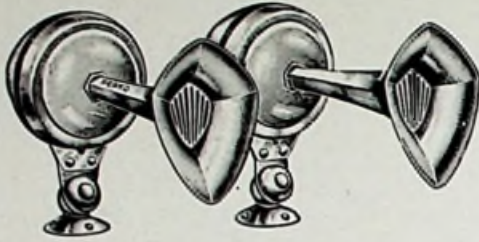


Fig. 808

These matched tone electric horns are the most powerful motor driven horns on the market, used and sold only in pairs, they give a volume of sound equal to an air whistle.

Made of noncorrosive metal, heavily chromium plated, motor and vibrator are fully enclosed and watertight.

Furnished complete with push button and marine relay which eliminates all loss of operating current regardless of how far horns are placed from battery.

Largest diameter, 6 inches; length overall, 13 3/4 inches.

Price per pair, 6 volt	\$27.00
Price per pair, 12 volt	31.00
Price per pair, 32 volt	34.00

Air Whistles

ALL CAST BRONZE

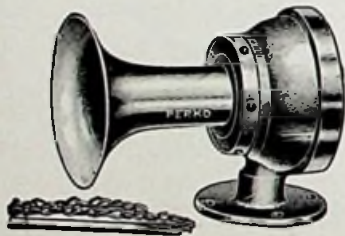


Fig. 825

A very powerful whistle operated by compressed air, its tone is clear cut and sharply defined, has remarkable echoing and fog penetrating qualities. Contains a diaphragm of non-corrosive metal which vibrates when the air enters into the pipe. Nothing to wear out as the only mobile part is the diaphragm. The number 1 whistle operates on a minimum of 10 lbs. pressure and the number 2 on 20 lbs. pressure. The sound projector is polished, and the balance is finished bronze.

A special feature of this whistle is the bronze base for mounting, which contains the pipe connection and air inlet in its vertical post, through the under part of the base.

The tone is easily regulated by turning the projector to right or left, a brass key is furnished for the fastening device which holds projector in position.

No.	Price Each	Diameter of Disc Inches	Diameter Base Inches	Length Overall Inches	For Size Pipe Inches
1	\$10.00	3	3	5 3/4	3/8
2	17.50	4	3 1/2	8 3/4	3/4

Speed-Way Marine Horns

POLISHED BRASS AND CHROMIUM PLATED

These horns produce a high powered commanding note, the long narrow projectors being responsible for the long distance tone carrying qualities and reducing back pressure of tone to a minimum.

Constructed of brass and other corrosion resisting material.

Furnished complete with marine type relay and push button. Very attractive in appearance.

Junior Single

6-12 AND 32 VOLTS

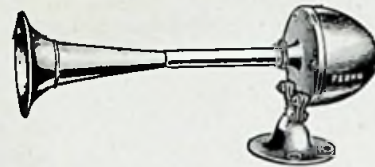


Fig. 110

Volts	Polished Brass Each	Chromium Plated Each	Length Overall Inches	Width Inches
6	\$10.00	\$12.50	19	4 1/2
12	12.00	14.50	19	4 1/2
32	13.50	16.00	19	4 1/2

Junior Twins and Senior Twins

6-12 AND 32 VOLTS

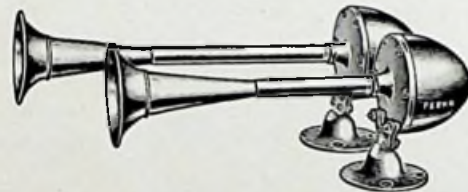


Fig. 111

Type	Length Overall		Width Each Horn Inches
	Short Horn Inches	Long Horn Inches	
Junior	16	19	4 1/2
Senior	18	22 1/2	5 1/8

Volts	Junior		Senior	
	Polished Brass Per Pair	Chromium Plated Per Pair	Polished Brass Per Pair	Chromium Plated Per Pair
6	\$19.50	\$22.50	\$22.50	\$25.00
12	23.50	26.50	26.50	29.00
32	26.50	29.50	29.50	32.00

Whistle Valves

FOR AIR WHISTLES
CAST BRONZE—PLAIN

A very fine fool-proof air whistle valve made of cast bronze with stainless steel valve spring.

Guaranteed for air pressure up to 200 lbs.



Fig. 463

Pipe Size Inches	Each
3/8	\$5.50



ELECTRIC MARINE HORNS

WATERTIGHT—SPLASH PROOF—6, 12 OR 32 VOLTS

These horns are of the highest quality of materials and are especially designed for marine use. A loud, penetrating tone quality superior to any other horn on the market. The "mile-away" and "clear-way" models were developed especially for the U. S. Navy and Coast Guard requirements and are the only American-made horns that pass these requirements. The tone quality of these horns is governed by the remarkable simplicity of construction and the quality of the diaphragm which is of chrome vanadium spring steel.

Clear-Way Horn

All brass, highly polished or chromium plated, furnished complete with push button and cast deck bracket.

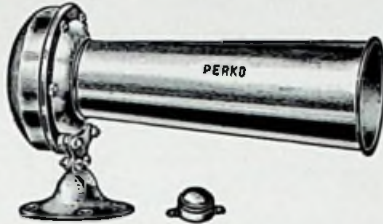


Fig. 73

Length Overall Inches	Height Overall Inches	Diam. Base Inches	6 Volt	
			Polished Brass Each	Chromium Plated Each
13	7 1/4	3 3/8	\$12.50	\$15.00

For 12 volt equipment add \$2.00.
For 32 volt equipment add \$3.50.

Mile-Away Horn

All brass, highly polished or chromium plated. Furnished complete, with push button and cast deck bracket.

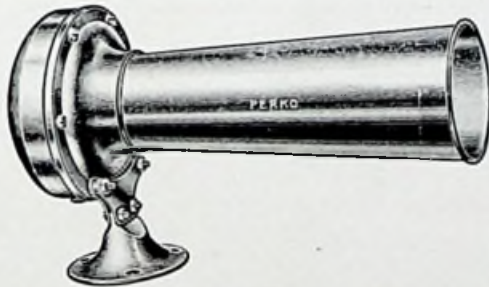


Fig. 75

Length Overall Inches	Height Overall Inches	Diam. Base Inches	6 Volt	
			Polished Brass Each	Chromium Plated Each
15 3/4	8 1/2	3 3/8	\$20.00	\$22.50

For 12 volt equipment add \$2.00.
For 32 volt equipment add \$3.50.

Remote Control Relays

FOR SEARCHLIGHTS, HORNS, ETC.
6-12-32 VOLTS



Fig. 105

For elimination of line loss on long line runs.

Will make searchlights develop more light, horns develop more power. Fans and other small motors run faster.

Very necessary on low voltage battery systems.

Each	Height Inches	Width Inches
\$1.25	1 3/8	3 1/4

Specify voltage when ordering.

Junior Siren

ELECTRIC HIGH SPEED MOTOR

All exposed parts made of brass. Other parts cadmium plated. A powerful and distinctive tone that can be heard under worst atmospheric conditions for a distance of over 1,000 yards. Furnished complete with deck bracket, push button and 10 feet of cable.

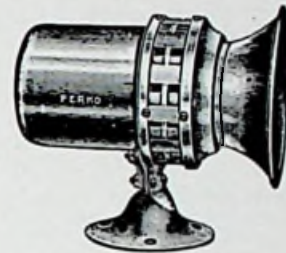


Fig. 192

Length Overall Inches	Height Overall Inches	Diam. Base Inches	6 Volt	
			Polished Brass Each	Chromium Plated Each
7 1/2	5 3/4	3 3/8	\$15.50	\$18.00

For 12 volt equipment add \$2.00.
For 32 volt equipment add \$3.50.

Senior Siren

ELECTRIC HIGH SPEED MOTOR

This type distributes its sound over a radius of more than 1,000 yards. Extremely practical in fog. All exposed parts made of brass. Other parts cadmium plated. Furnished complete with push button and 10 foot cable.



Fig. 193

Height Overall Inches	Diam. Inches	6 Volt	
		Polished Brass Each	Chromium Plated Each
11 1/2	6 3/8	\$15.00	\$17.50

For 12 volt equipment add \$2.00.
For 32 volt equipment add \$3.50.



Fog Horns WITH ADJUSTABLE REED



Fig. 162

These horns have a patented slide on the reed which controls the tone. Very easy to adjust or tune.

Length Overall Inches		Galv. Per Doz.	Brass Per Doz.
18	Without Bell	\$ 9.60	\$15.00
20	With Bell, as illustrated	10.20	16.20
24	With Bell, as illustrated	12.00	18.00

Two Tone Signal Horns



Fig. 165

Solid brass. Very loud, double tone. Blown by mouth. Easily taken apart.

Length Overall Inches	Polished Brass Each	Nickel Plated Each
7 1/2	\$2.00	\$2.45
10	2.40	2.90

Midget Fog Horn GALVANIZED OR POLISHED BRASS WITH NICKEL PLATED MOUTHPIECE



Fig. 253

It's amazing, the fine deep loud tone this small horn produces. Ideal for storing in a small space. Has slotted hole in large end for hanging on wall.

Length Inches	Galvanized Per dozen	Polished brass Per dozen
15	\$8.00	\$12.00

Full Tone Whistle



Fig. 164

Made of solid brass, nickel plated. Blown by mouth or can be attached to compressed air tank or steam pipe by removing mouthpiece. Standard pipe thread, 1/4 inch.

Polished Brass Each	Nickel Plated Each	Chromium Plated Each	Size Inches
\$2.00	\$2.20	\$3.00	1 1/8 x 3/4

Police or Signal Whistle

Solid brass, nickel plated, loud, clear tone.



Fig. 349

Price per dozen, \$6.00

Triplex Motor Boat Whistle WITH METAL MOUTHPIECE

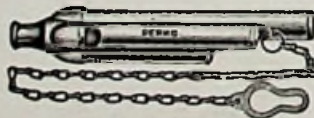


Fig. 168

All solid brass, nickel plated, loud triple tone. Complete with chain.

Length overall, 6 1/2 in.

Price per doz. \$11.40

Mouth Blown Sirens BRASS



Fig. 138

If a signal or warning whistle with a different tone than the usual is desired this is it.

Mouth piece contains a high speed fibre rotator, delicately balanced on bronze needle bearing. Requires no effort to produce a high pitched penetrating sound easily heard a half mile or more away.

A small child can blow it effectively.

No.	Polished Brass Each	Chromium Plated Each	Extreme Length Inches	Diam. Mouth Inches
1	\$3.50	\$4.25	7	3 7/8
2	3.75	4.50	9	4 5/8

Duplex Motor Boat Whistle ALL BRASS—NICKEL PLATED



Fig. 167

A whistle is required by law on outboard motor boats. Loud double tone. Brass, nickel plated mouthpiece. Complete with chain.

Length overall, 3 1/2 inches

Price per dozen \$9.00

Mouth Blown Siren POCKET SIZE—BRASS



Fig. 166

Same mouth piece, rotator and effective tone as Fig. 138 above. Small enough for a vest pocket.

Nickel Plated Each	Extreme Length Inches	Extreme Diam. Inches
\$1.00	2 7/8	1

Wrought Brass Fog Bells

STAMPED FROM BELL METAL



Diameter 6 in. 8 in.
 Hgt. overall 4 in. 5 in.
 Extension 7 3/4 in. 8 3/4 in.
 Weight 1 lb. 2 1/2 lbs.

Fig. 159

Diam. Inches	Plain Brass Each	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
6	\$1.25	\$1.40	\$2.00	\$3.00
8	2.20	2.40	3.00	4.00
Wall Plates only	.30	.35	.45	.60
Arms only	.65	.75	.90	1.10

Cast Fog Bell

MEDIUM WEIGHT—WITH YOKE



Fig. 386

Diam. Inches	Polished Brass Each	Nickel Plated Each	Chromium Plated Each	Height Overall Inches	Weight Pounds
6	\$ 6.40	\$ 7.50	\$ 8.60	7 1/4	4
8	10.40	11.50	13.50	9	9

Cast Fog Bells

LIGHTWEIGHT

Cast from bell metal. With removable bracket.



Fig. 581

Diameter 6 in. 8 in.
 Hgt. overall 4 1/2 in. 5 1/2 in.
 Extension 6 1/2 in. 8 1/2 in.
 Weight 1 1/2 lbs. 4 1/2 lbs.

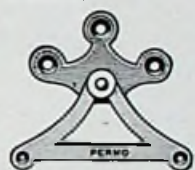
Diam. Inches	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
6	\$3.40	\$4.25	\$5.00
8	5.50	6.50	7.60

Bell Cranks

CAST BRONZE—PLAIN



Upright Type—Fig. 910



Side Type—Fig. 911

No.	Upright Type Each	Side Type Each	Length of Crank Inches
1	\$.60	\$.50	3
2	.90	.60	3 1/4
3	1.20	.75	3 3/4

MEDIUM WEIGHT

Cast from high grade bell metal. Highly polished detachable bracket.



Fig. 420

Diameter 6 in. 8 in.
 Hgt. overall 5 in. 6 1/2 in.
 Extension 6 3/4 in. 8 1/2 in.
 Weight 4 lbs. 8 lbs.

Diam. Inches	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
6	\$5.80	\$ 7.00	\$ 7.80
8	9.85	11.00	12.00

Bell Chain Leaders

CAST BRONZE—PLAIN



Upright Type—Fig. 912



Flat Type—Fig. 913

Diam. Inches	Width of Groove Inches	Single Sheave Each	Double Sheave Each	Triple Sheave Each	Quadruple Sheave Each
2	1 1/8	\$1.00	\$1.50	\$2.50	\$3.50
3 1/2	1 3/8	1.75	2.25	3.50	5.00

HEAVY WEIGHT

Cast from extra heavy bell metal. Complete with removable bracket.



Fig. 150

Diameter 8 in. 10 in.
 Height 8 in. 10 1/2 in.
 Projection 9 in. 12 in.
 Weight 10 lbs. 19 lbs.

Diam. Inches	Polished Brass Each	Nickel Plated Each	Chromium Plated Each
8	\$14.50	\$16.00	\$17.00
10	26.75	28.00	31.00

Brass Telegraph or Bell Chain

Links are stamped from heavy gauge brass, fastened together by brass rivets, which are finished flush with side of link. Furnished in any continuous length desired.

Made to comply with U. S. Navy Specifications.



Fig. 275

Price Per Foot	Length of Links Inches	Thickness Overall Inches	Weight per Foot Ounces
\$.60	3/4	3/8	3 1/2



Regular Deck Plates



Fig. 526

CAST BRONZE
Complete with key.

Diam. Opening Inches	Polished Finish Complete Each	Chromium Plated Complete Each	Polished Covers Only Each	Keys Only Each	Diameter Plate Inches
1	\$.80	\$ 1.30	\$.40	\$.10	2 1/2
1 1/2	.90	1.40	.45	.15	3 1/8
2	1.25	1.80	.65	.20	3 3/8
2 1/2	1.75	2.35	.90	.20	4 1/2
3	2.25	2.90	1.15	.25	4 7/8
3 1/2	2.60	3.30	1.30	.30	5 1/2
4	2.75	3.50	1.40	.35	5 3/4
4 1/2	4.00	4.80	2.00	.40	6 3/8
5	4.25	5.25	2.15	.50	7 1/8
6	5.50	6.75	2.75	.75	8 1/4
8	10.50	12.50	5.25	1.00	10 1/4

Pipe Deck Plates

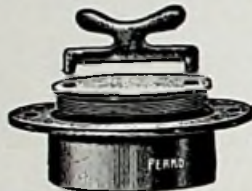


Fig. 528

CAST BRONZE

Standard iron pipe size thread. Complete with key.
Can be furnished with words "water," "gas," "oil," "fuel," cast in cover, on all sizes up to 2 1/2 inch inclusive.

Pipe Size Inches	Polished Finish Complete Each	Chromium Plated Complete Each	Polished Covers Only Each	Keys Only Each	O. D. Plate Inches
3/4	\$ 1.00	\$ 1.50	\$.50	\$.10	2 3/8
1	1.25	1.80	.65	.10	2 7/8
1 1/4	1.50	2.10	.75	.15	3 1/4
1 1/2	1.75	2.40	.90	.15	3 3/4
2	2.00	2.70	1.00	.20	4 1/4
2 1/2	2.50	3.25	1.25	.20	4 3/8
3	3.75	4.75	1.90	.25	5 3/8
3 1/2	6.50	7.75	3.50	.35	6
4	9.00	10.25	4.50	.35	6 3/4
5	11.00	13.00	6.00	.50	8
6	14.00	17.00	8.00	.80	9

Ventilator Deck Plates



Fig. 527

POLISHED
CAST BRONZE
Complete with key and extra ring for hood ventilator.

Diameter Opening Inches	Polished Each	Chromium Plated Each	Diameter Plate Inches	Weight Each
2	\$ 2.00	\$ 2.80	3 3/8	12 oz.
2 1/2	2.50	3.35	4 1/2	1 lb.
3	3.10	3.75	4 7/8	1 1/4 lbs.
3 1/2	3.60	4.30	5 1/2	1 3/4 lbs.
4	4.00	4.75	5 3/4	2 1/4 lbs.
4 1/2	5.50	6.30	6 3/8	3 1/4 lbs.
5	6.00	7.25	7 1/4	3 3/4 lbs.
6	7.50	8.90	8 1/4	4 1/2 lbs.
8	15.00	17.50	10 1/4	7 1/2 lbs.

Swivel Rings

FOR VENTILATORS—CAST BRONZE

When used with hood ventilator, allows it to be turned in any position desired. Complete with thumb screws for fastening.

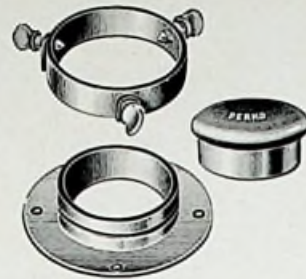


Fig. 419

For Size Ventilator Base Inches	Open- ing in Base Inches	Price Each	For Size Ventilator Base Inches	Open- ing in Base Inches	Price Each
3	2 3/8	\$ 4.00	8	7	\$12.00
4	3 1/2	6.00	9	8 1/8	14.00
5	4	7.50	10	9 1/8	20.00
6	5	9.00	11	10 1/8	22.00
7	6	10.00	12	11 1/8	24.00

Price does not include cap, if cap is desired add 25% to above prices.
Chromium plated swivel rings, add 40% to above.

Manhole Plates

WATERTIGHT GALVANIZED IRON AND CAST BRONZE



Fig. 662

Furnished complete with locking screws, key and rubber packing ring. Absolutely watertight.

Size No.	Complete		Without Grating		Diam. Opening Inches
	Galv. Each	Brass Each	Galv. Each	Brass Each	
0	\$11.00		\$10.00		9
1	13.00	\$26.00	11.00	\$20.00	10
2	17.00	30.00	13.00	23.00	12
3	21.00	37.00	16.00	28.00	14
4	26.00	45.00	20.00	34.00	16
5	30.00	58.00	23.00	45.00	18
6	34.00	78.00	26.00	60.00	20

Deck Plate Key

CAST BRONZE
ADJUSTABLE TO ALL SIZES OF DECK PLATES

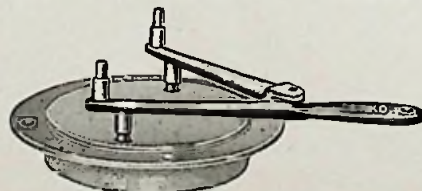


Fig. 826

Will fit all sizes of deck plates up to 10 inch diameter, making it unnecessary to have separate keys for each plate.
Price each \$1.25

Rope Deck Pipes

GALVANIZED CAST IRON AND CAST BRONZE
FOR MANILA ROPE



Fig. 741

For Diam. Rope Inches	BRONZE			Inside Diam. Inches	Diam. Flange Inches
	Plain Bronze Each	Polished Bronze Each	Chrom. Plated Each		
3/4 & 1	\$4.00	\$4.80	\$5.80	1 3/4	3 3/8
1 1/4	5.00	5.80	6.80	2 1/8	4 3/4

GALVANIZED

For diam. Rope Inches	Price Each	Inside Diam. Inches	Diam. Flange Inches	Height Above Deck Inches
3/4 and 1	\$1.55	2	4 3/8	1 7/8
1 1/4	2.50	2 1/2	4 5/8	2

Chain Deck Pipes

GALVANIZED CAST IRON AND BRONZE

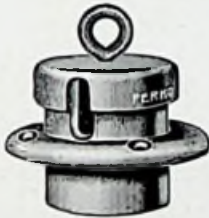


Fig. 341

Inside Diam. Inches	Galv. Each	Polished Bronze Each	Nickel Plated Each	Chrom. Plated Each	For Chain Diam. Inches	Weight Each in Lbs.
1 3/4	\$1.45	\$3.50	\$4.00	\$5.00	1 7/8	1 7/8
2	1.55	4.50	5.00	6.00	1/4	2 3/8
2 1/2	2.50	6.50	7.00	8.00	3/8	4 3/8
3	2.90				1/2	5 7/8
3 1/2	4.60				3/4	9 1/4
4	5.70				3/4	13

Yacht Chain Deck Pipes

GALVANIZED CAST IRON AND BRONZE



Fig. 342

Size No.	Galv. Each	Polished Bronze Each	Nickel Plated Each	Chrom. Plated Each	For Chain Diam. Inches	Diam. Flange Inches
1	\$3.20	\$5.00	\$6.00	\$7.00	1 7/8	3 1/2
2	3.80	6.00	7.00	8.00	3/8	4 1/4
3	5.75	10.00	11.00	13.00	1/2	5

Military Mast Sets

CAST BRONZE—POLISHED

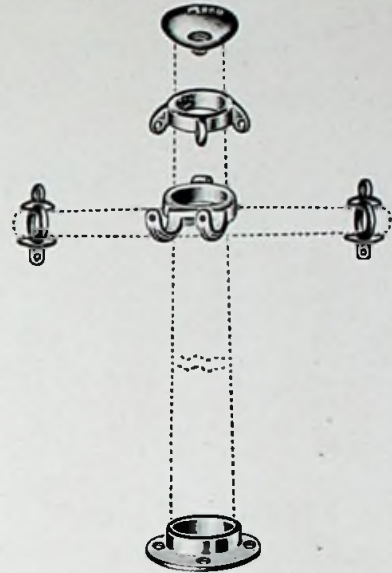


Fig. 586

Furnished in two sizes, a handsome and practical set of fittings, mast cap has small bronze sheave for flag halyards.

Set No.	Inside Diam. Deck Flange Inches	Inside Diam. Cross Arm Bracket Inches	Inside Diam. Eye Band Inches	Inside Diam. Mast Cap Inches	Inside Diam. End Fittings Inches
1	2 3/4	2 1/2	2 7/8	1 7/8	1 1/4
2	3 1/2	3	2 3/4	2 1/4	1 1/2

Set No.	Per Set Complete	Deck Flange Each	Cross Arm Bracket Each	Eye Band Each	Mast Cap Each	End Fittings for Cross Arm Each
1	\$7.50	\$1.50	\$2.00	\$1.50	\$1.50	\$.75
2	10.00	2.00	2.50	2.00	2.00	1.25

Chromium Plated Finish, add 40% to above prices.

Hinged Mast Steps

CAST BRONZE



Fig. 1039

Mast can be lowered to horizontal position parallel with deck, base has integral lug which prevents side strain on hinge.

Inside Diam. Step Inches	Polished Bronze Each	Nickel Plated Each	Chrom. Plated Each	Diam. Base Inches	Height Inside Step Inches
2	\$3.15	\$3.65	\$5.15	4	2 1/2
2 1/2	3.75	4.25	5.75	4 1/2	3
3	6.90	7.40	8.90	5	3 1/2

Boat Cleats

GALVANIZED IRON—CAST BRONZE
OPEN BASE



Fig. 544

Length Inches	Mall. Iron Each	Cast Iron Each	Polished Bronze Each	Nickel Plated Each	Chrom. Plated Each
3½	\$.10	\$.08	\$.30	\$.50	\$.70
4	.12	.10	.40	.60	.85
5	.15	.12	.50	.70	1.00
6	.20	.16	.70	.90	1.20
8	.40	.35	1.25	1.65	1.85
10	.60	.55	1.75	2.15	2.45
12	.90	.80	2.75	3.15	3.60
14	2.00	1.60	5.00	5.50	6.00
18		3.00			

Boat or Fender Cleats

GALVANIZED IRON AND BRONZE
SQUARE BASE



Fig. 583

Length Inches	Mall. Iron Each	Cast Iron Each	Pol. Bronze Each	Nickel Plated Each	Chrom. Plated Each	Weight Each Ounces
2	\$.12	\$.10	\$.30	\$.35	\$.60	1
2¼			.30	.35	.60	1½
3	.19	.12	.40	.55	.75	2½
4	.43	.15	.70	.90	1.10	5
5	.48	.28	1.00	1.20	1.40	9
6	.70	.35	1.20	1.45	1.70	16

Hollow Cleats

CLOSED ENDS
CAST BRONZE



Fig. 572

Length Inches	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Weight
4½	\$.90	\$1.10	\$1.40	8 oz.
5½	1.00	1.20	1.50	9 oz.
6½	1.20	1.45	1.75	10 oz.
8	1.50	1.75	2.10	20 oz.
10	2.50	3.00	3.25	2 lbs.
12	3.75	4.25	4.50	3 lbs.

Canoe Cleats

CAST BRONZE



Fig. 763

Size No.	Length Inches	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
1	2¾	\$.35	\$.55	\$.65
2	2¾	.50	.70	.80

Round Base Cleats

GALVANIZED MALLEABLE IRON AND BRASS



Fig. 1044

Length Inches	Galvanized Each	Polished Brass Each	Chromium Plated Each	Diameter Base Inches
1¾		\$.35	\$.65	1⅞
2¼	\$.12	.40	.70	1⅞
3	.15	.50	.85	1⅞
3½	.20	.80	1.20	1⅞

Improved Cleats

CAST BRONZE



Fig. 384

A definite improvement in cleats long needed.

The large rounded bottoms, legs and ends save wear on the rope but allow more turns of rope.

These are of much sturdier construction and of heavier weight than other types. Take larger fastenings and greater strain.

Length Inches	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	For Rope Inches	Weight Pounds
4	\$.85	\$1.05	\$1.35	¼	½
5	1.15	1.35	1.65	⅜	¾
6	1.35	1.60	1.85	½	1
8	2.00	2.25	2.60	¾	1¾

Flag Pole Cleats

CAST BRONZE



Fig. 584

For attaching to side of bow or stern flag pole. A neat little fitting that has long been desired.

Length Overall Inches	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Size Base Inches
1¼	\$.35	\$.45	\$.65	¾ x ¾

Awning Cleats

GALVANIZED MALLEABLE IRON



Fig. 927

Length Inches	Per 100 Pieces	Weight Per 100 In Lbs.
4 1/2	\$ 4.50	4 3/8
6	6.50	8 3/4
8	10.00	13 3/4

Ship Cleats

CAST IRON—HEAVY



Fig. 511

Length Inches	Galv. Each	Size of Base Inches	Holes for Diam. Bolts Inches	Weight Each Pounds
8	\$.80	4 1/4 x 2 1/8	1/8	3
10	1.20	4 3/4 x 2 1/2	1/2	5 3/4
18	4.00	7 1/2 x 4	3/4	20 1/4
24	6.50	8 1/2 x 4 3/8	7/8	35
30	12.50	10 3/4 x 5 1/2	1	73
36	20.00	13 x 7 1/4	1 1/4	117

Closed Straight Chocks

GALVANIZED CAST IRON AND CAST BRONZE

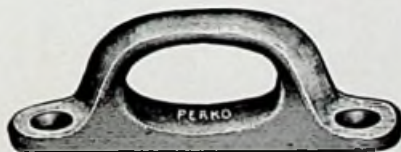


Fig. 163

Length Inches	Galv. Each	Polished Bronze Each	Nickel Plated Each	Chrom. Plated Each	Width Inches
4	\$.22	\$1.00	\$1.25	\$1.50	1
6	.55	1.60	1.85	2.20	1 1/2
8	1.35	2.25	2.75	3.00	1 1/2
10	1.60	3.75	4.25	4.75	2 3/8
12	2.30				2 1/2
15	4.10				3
18	6.50				3 1/2

Beveled Bow Chocks

GALVANIZED AND CAST BRONZE



Fig. 546

Length Overall Inches	Width Inches	For Diam. Rope Inches
3	5/8	3/8
4	3/4	1/2
5	7/8	5/8-3/4
6	1 1/8	7/8
8	1 3/8	1
10	1 3/4	1 1/4
12	2 1/2	1 1/2
15	3	2
18	3 1/4	2 1/4

Length Inches	Galv. Iron Per Pair	Polished Bronze Per Pair	Nickel Plated Per Pair	Chromium Plated Per Pair
3	\$.35	\$ 1.30	\$ 1.70	\$ 2.00
4	.40	1.50	1.90	2.40
5	.50	2.00	2.40	3.10
6	1.00	3.00	3.40	4.20
8	1.60	4.00	4.50	5.30
10	2.40	7.00	7.75	8.50
12	5.00	11.50	12.50	14.00
15	10.00			
18	15.00			

Straight Stern Chocks

GALVANIZED AND CAST BRONZE



Fig. 119

Length Inches	Width Inches	For Diam. Rope Inches
4	1 1/8	5/8
5	1 3/8	3/4
6	1 1/2	7/8
8	1 5/8	1 1/4
10	2 1/4	1 3/8
12	2 5/8	1 5/8
15	2 3/8	1 3/4
18	3 3/4	2

Length Inches	Galv. Iron Each	Polished Bronze Each	Nickel Plated Each	Chrom. Plated Each
4	\$.20	\$.75	\$1.00	\$1.20
5	.30	1.00	1.25	1.55
6	.50	1.50	1.75	2.10
8	1.00	2.25	2.75	2.90
10	1.20	3.75	4.25	4.50
12	2.50	6.00	6.50	7.25
15	5.50			
18	7.50			

Mooring Chocks

CAST BRONZE—POLISHED

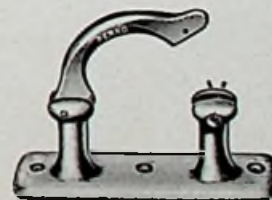


Fig. 413

Length Overall Inches	Width Overall Inches	Opening Inches	Weight Pounds
4 3/8	1 1/2	2x2	3/4

Each
\$2.25

Skene Bulwark Bow Chocks

CAST BRONZE



Fig. 751

Lgth. In.	Plain Bronze Pair	Pol. Bronze Pair	Chrom. Plated Pair	For Diam. Rope Up to Inches	Thick-ness of Rail Inches	Height Inches	Wt. Pair Lbs.
6	\$3.50	\$5.25	\$7.75	1	1 1/4	2 1/4	2 3/4
7	5.50	7.50	10.00	1 1/4	1 1/2	2 3/4	4 1/4

Skene Bow Chocks

CAST BRONZE

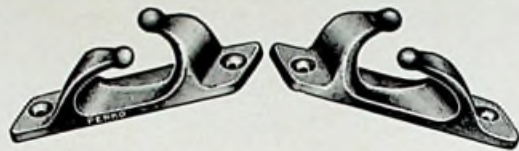


Fig. 160

Size No.	Length Inches	Width Inches	Opening Inches	Weight Per Pair Pounds
1	4 1/2	3/8	3/4	3/4
2	5 1/2	1 1/8	1	1 1/2
3	7 3/4	1 1/2	1 1/4	3 3/4
4	8 1/2	1 3/8	1 1/2	5
5	10 1/2	2	2	8

Size No.	Polished Bronze Per Pair	Nickel Plated Per Pair	Chromium Plated Per Pair
1	\$2.00	\$2.40	\$3.00
2	3.00	3.50	4.00
3	5.00	5.50	6.25
4	7.00	7.75	8.50
5	10.50	11.50	12.50

Skene Bulwark Stern Chocks

CAST BRONZE



Fig. 752

Lgth. In.	Plain Bronze Each	Pol. Bronze Each	Chrom. Plated Each	For Diam. Rope Up to Inches	Thick-ness of Rail Inches	Height Inches	Wt. Each Lbs.
6	\$3.00	\$4.00	\$5.25	1 1/4	1 1/2	2 3/4	2

Skene Stern Chocks

CAST BRONZE



Fig. 161

Size No.	Length Inches	Width Inches	Opening Inches	Weight Each Pounds
11	4	3/8	3/8	1/2
12	5 1/2	1 3/8	1	1
13	7	1 3/4	1 1/2	2
14	9	2 1/4	2	4

Size No.	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
11	\$.90	\$1.15	\$1.40
12	1.50	1.75	2.00
13	3.00	3.50	3.65
14	6.50	7.00	7.50

Bulwark Bow Chocks

CAST BRONZE—POLISHED

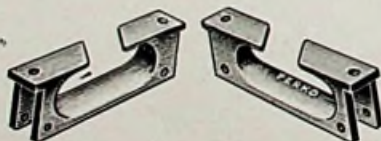


Fig. 768

This pair of chocks is beveled to fit bow angles. The openings are sufficiently large for mooring ropes. Designed to be bolted both through the bulwark and the deck.

No.	Polished Bronze Per Pair	Chromium Plated Per Pair	Length Inches	Width Overall Inches	Height Inches	Size of Rope Inches
1	\$ 7.50	\$ 9.50	10	1	1 7/8	1
2	9.00	12.00	11 1/4	1 1/4	2 1/4	1 1/4
3	12.00	15.00	11 1/4	1 1/2	2 1/2	1 1/2

Bulwark Stern Chocks

CAST BRONZE—POLISHED



Fig. 769

No.	Polished Bronze Each	Chromium Plated Each	Length Inches	Width Overall Inches	Height Inches	Size of Rope Inches
1	\$4.50	\$5.50	9 1/4	1 3/8	2 3/8	1 1/2
2	6.50	8.00	11 1/2	1 3/4	3	1 3/4



Streamline Fittings

Are made of the highest grade of bronze castings. These fittings all follow the same design and will match all other "Perko" streamline items on the deck, such as running lights, flagpole sockets, ventilators, etc. They will add to the appearance of any boat and are good, strong, practical fittings in use.

Streamline Cleat CAST BRONZE



Fig. 114

Length Overall Inches	Size Base Inches	For Rope Diameter Inches	Chromium Plated Each
2 1/2	1 x 2	Up to 1/2	\$.90
3 1/2	1 1/4 x 2 3/4	Up to 5/8	1.25
4 1/2	1 1/2 x 3 1/4	Up to 7/8	1.60
5 1/2	1 3/4 x 4	Up to 1	2.10

Length Inches	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
2 1/2	\$.50	\$.75	\$.90
3 1/2	.80	1.05	1.25
4 1/2	1.10	1.35	1.60
5 1/2	1.50	1.75	2.10

Streamline Stern Chock CAST BRONZE OPEN PATTERN



Fig. 116

Length Overall Inches	Width Base Inches	For Rope Diameter Inches	Chromium Plated Each
3	3/4	Up to 1/2	\$1.00
4	1	Up to 5/8	1.15
5	1 1/8	Up to 3/4	1.60
6	1 3/8	Up to 1 1/8	1.90

Length Inches	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
3	\$.65	\$.85	\$1.00
4	.75	.95	1.15
5	1.10	1.30	1.60
6	1.40	1.80	1.90

Streamline Bow Chocks CAST BRONZE OPEN PATTERN



Fig. 115

Length Overall Inches	Width Base Inches	For Rope Diameter Inches	Chromium Plated Per Pair
3 1/2	3/4	Up to 1/2	\$2.00
4 1/2	1	Up to 5/8	2.30
5 1/2	1 1/8	Up to 3/4	3.20
6 1/2	1 3/8	Up to 1	3.80

Length Inches	Polished Bronze Per Pair	Nickel Plated Per Pair	Chromium Plated Per Pair
3 1/2	\$1.30	\$1.60	\$2.00
4 1/2	1.50	1.80	2.30
5 1/2	2.20	2.50	3.20
6 1/2	2.80	3.10	3.80

Streamline Stern Chocks CLOSED PATTERN

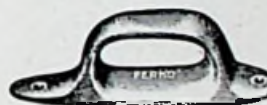


Fig. 118

Length Overall Inches	Width Base Inches	For Rope Diameter Inches	Chromium Plated Each
3	3/4	Up to 1/2	\$1.15
4	1	Up to 5/8	1.40
5	1 1/8	Up to 1	1.95
6	1 3/8	Up to 1 1/8	2.35

Length Inches	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
3	\$.75	\$1.00	\$1.15
4	1.00	1.25	1.40
5	1.40	1.65	1.95
6	1.75	2.15	2.35

Streamline Bow Chocks CLOSED PATTERN



Fig. 117

Length Overall Inches	Width Base Inches	For Rope Diameter Inches	Chromium Plated Per Pair
3 1/2	3/4	Up to 1/2	\$2.30
4 1/2	1	Up to 5/8	2.90
5 1/2	1 1/8	Up to 1	3.90
6 1/2	1 3/8	Up to 1 1/8	4.70

Length Inches	Polished Bronze Per Pair	Nickel Plated Per Pair	Chromium Plated Per Pair
3 1/2	\$1.50	\$1.90	\$2.30
4 1/2	2.00	2.40	2.90
5 1/2	2.80	3.30	3.90
6 1/2	3.50	4.00	4.70

Upright Flag Pole Socket

ROUND BASE—WITH FERRULE
CAST BRONZE



Fig. 220



Fig. 221

Inside Diam. Inches	Diam. Base Inches	Inside Diam. Ferrule Inches	Height Inches	Weight Ounces
3/8	1 3/8		1 3/8	5
3/4	2 1/8	1 1/8	1 3/4	7
7/8	2 3/8	1 1/4	1 7/8	8
1	2 1/2	1 1/2	2	8 1/2
1 1/4	2 3/4	1 3/4	2 1/8	11
1 1/2	3	1 7/8	3	16

Inside Diam. Inches	Polished Bronze. Each	Nickel Plated Each	Chromium Plated Each
3/8	\$.85	\$1.00	\$1.15
3/4	1.00	1.15	1.30
7/8	1.25	1.40	1.60
1	1.35	1.55	1.70
1 1/4	1.75	1.95	2.15
1 1/2	2.25	2.50	2.75

5/8 inch furnished without ferrule.

Upright Flag Pole Socket

SQUARE BASE—NO FERRULE
GALVANIZED CAST IRON



Fig. 570



Fig. 571

Inside Diam. Inches	Galv. Each	Height Inches	Size Base Inches	Weight Each
3/4	\$.30	1 3/4	2 x 2	5 1/2 oz.
1	.40	2 1/4	2 1/4 x 2 1/4	11 1/2 oz.
1 1/4	.65	2 3/4	2 3/4 x 2 3/4	13 oz.
1 1/2	.90	3 1/2	3 x 3	1 1/2 lbs.

Utility Flag Pole Socket

CAST BRONZE

Oval flange takes up very little space on deck. Furnished with set screw for tightening up on flag pole.



Fig. 635

Inside Diameter Inches	Size Flange Inches	Depth Socket Inches	Weight Ounces
1 1/4	2 7/8 x 2 1/4	2 1/8	10

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
\$1.30	\$1.55	\$1.80

Flush Flag Pole Socket

WITH FERRULE
GALVANIZED CAST IRON—CAST BRONZE



Fig. 218



Fig. 219

Inside Diam. Inches	Diam. Flange Inches	Inside Diam. Ferrule Inches	Depth Socket Inches	Weight
3/8	1 3/4		1 3/8	2 1/2 oz.
3/4	2	1 1/8	1 1/2	4 1/2 oz.
7/8	2 1/8	1 1/4	1 5/8	4 3/4 oz.
1	2 3/8	1 1/2	1 3/4	6 oz.
1 1/4	2 3/4	1 3/4	2	10 oz.
1 1/2	3 1/8	1 7/8	2 3/8	1 lb.

Inside Diam. Inches	Galv. Each	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
3/8		\$.70	\$.85	\$1.00
3/4	\$.25	.75	.90	1.05
7/8		.85	1.00	1.20
1	.30	.90	1.05	1.25
1 1/4	.35	1.25	1.45	1.65
1 1/2	.60	1.75	2.00	2.25

5/8 inch furnished without ferrule.
Galvanized furnished without ferrule.

Runabout Flag Pole Socket

CAST BRONZE

Unique design of flange makes this a good looking deck fitting. Complete with set screw for holding pole fast in place.



Fig. 541

Inside Diameter Inches	Size Flange Inches	Depth Socket Inches	Weight Ounces
1 1/4	3 1/2 x 3 1/2	2 1/2	12

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
\$1.50	\$1.75	\$2.00

Streamline Flag Pole Socket

CAST BRONZE

Designed for the better class of runabouts. These sockets will match all other "Perko" streamline deck fittings.



Fig. 222

Diam. Socket Inches	Size Flange Inches	Depth Socket Inches	Weight Lbs.
1 1/4	2 5/8 x 5	2 1/2	1 1/4
Polished Bronze Each		Nickel Plated Each	Chromium Plated Each
\$2.25		\$2.75	\$3.25

Transom Flag Pole Socket

CAST BRONZE

Designed for outboard motor boats or runabouts that have no decking in stern for regular type of socket.



Fig. 225

Diam. Socket Inches	Depth Socket Inches	Length Base Inches	Width Base Inches	Weight Oz.
3/4	1 1/4	3 1/8	1 1/2	8
Polished Bronze Each		Nickel Plated Each		Chromium Plated Each
\$1.00		\$1.25		\$1.60

Streamline Mooring Bitt

CAST BRONZE

A very fine looking yet practical mooring bitt for the better class of outboard motor boats and runabouts. Streamlined base gives racy appearance and matches other streamline fittings on the boat.

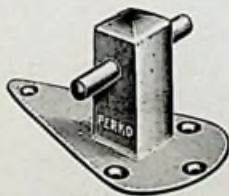


Fig. 354

Length Base Inches	Width Base Inches	Height Overall Inches	Weight Ounces
3 3/4	2 1/4	2 1/2	8
Polished Bronze Each		Nickel Plated Each	Chromium Plated Each
\$1.75		\$2.00	\$2.50

Comb. Bitt and Rope Deck Pipe

CAST BRONZE

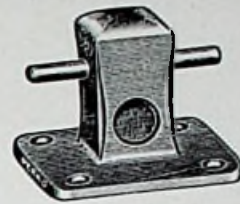


Fig. 431

A hollow one piece casting of minimum weight but maximum strength. An opening in one side of bitt to allow rope to be stored below deck but always ready for use.

No.	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Size Base Inches	Height Inches	For Rope Diam. Inches
1	\$4.50	\$5.00	\$5.75	4 1/2 x 4 1/2	3 1/2	3/4
2	7.75	8.25	9.25	6 x 6	5	1

Mooring Bitt

CAST BRONZE

One solid casting, except horizontal bar, which is of bronze rod and goes clear through casting, brazed both ends.

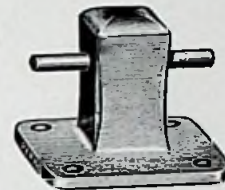


Fig. 608

No.	Size Base Inches	Height Inches	Net Weight Lbs.
1	3 x 3	2 1/2	7 1/2
2	4 1/2 x 4 1/2	3 1/2	1 1/4
3	6 x 6	5	5 1/2
4	7 x 7	6 1/2	12
No.	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
1	\$ 2.25	\$ 2.75	\$ 3.25
2	4.00	4.50	5.25
3	8.00	8.50	9.50
4	11.50	12.50	13.25

Improved Riding Bitts

GALVANIZED CAST IRON AND POLISHED BRONZE



Fig. 926

Size No.	Galv. Each	Pol. Bronze Each	Chrom. Plated Each	Height Inches	Size Base Inches	Bored for Bolt Diam. Inches
00	\$1.20	\$3.10	\$4.35	3 1/2	2 1/2 x 2 1/2	1/4
0	1.80	4.50	6.00	4 1/2	3 x 3	3/8
01	2.40	6.00	7.80	5 3/4	3 1/2 x 3 1/2	3/8
1	3.70	9.00	11.00	7	4 1/2 x 6	1/2
1 1/2	6.75	12.50	15.00	8 1/2	5 x 6	5/8
2	9.25	17.50	20.00	10	5 1/2 x 8 1/2	3/4

Bow Plates

CAST BRONZE AND ALUMINUM



Fig. 494



Fig. 181

Size Plate Inches	Fig. 494 Diam. Eye Inches	Fig. 181 Diam. Eye Inches	Weight Bronze Oz.	Weight Aluminum Oz.
4 1/8 x 4 3/8	1/2	3/4	10	2 1/2
Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Polished Aluminum Each	
\$1.00	\$1.30	\$1.70	\$1.00	

Combination Bow Plate

CAST BRONZE

A bow plate and bow chock combined—small size for outboard motorboats—large size for runabouts.



Fig. 543

No.	Length Inches	Width Inches	Diam. Rope Inches	Weight Oz.
1	3 3/4	4 3/4	Up to 3/4	11
2	3 3/4	4 3/4	Up to 1	15
No.	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	
1	\$2.50	\$2.75	\$3.00	
2	2.75	3.00	3.35	

Rings with Straps

GALVANIZED MALLEABLE IRON AND CAST BRONZE HEAVY PATTERN



Fig. 1020

Size No.	Galv. Each	Plain Bronze Each	Polished Bronze Each	Chrom. Plated Each	Size Ring Inches	Size Plate Inches
1	\$.30	\$.50	\$.80	\$ 1.20	1/4 x 1 1/2	4 1/4 x 3/8
2	.35	.60	.85	1.30	1/8 x 1 3/4	4 1/4 x 3/8

Ring on Plate

GALVANIZED DROP FORGED STEEL



Fig. 607

No.	Galvanized Each	Size Ring Inches	Size Plate Inches	Weight Per 100 in Lbs.
1	\$.40	1 1/8 x 1 1/2	2 x 2 x 1/8	33
2	.50	3/8 x 2	2 x 2 x 1/4	50

Ring on Plate

STREAMLINE PATTERN
CAST BRONZE



Fig. 182

No.	Length Base Inches	Width Base Inches	Size of Ring Inches	Weight Oz.
1	2 3/4	1 1/2	1 1/2 x 1 1/4	4
2	3 1/4	1 3/8	1 1/4 x 1 1/2	6
No.	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	
1	\$.80	\$ 1.05	\$ 1.25	
2	.95	1.20	1.50	

Ring and Deck Strap

CAST BRONZE



Fig. 183

Size Ring Inches	Length Strap Inches	Width Strap Inches	Weight Oz.
1/4 x 1 1/2	3	3/8	4
Plain Bronze Each	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
\$.50	\$.70	\$.90	\$ 1.10

Straps only, deduct \$.20 each.

Ring With Strap

CAST BRONZE



Fig. 1004

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Size Ring Inches	Length Strap Inches
\$.50	\$.70	\$.90	1 1/2 x 1 1/2	2

Straps only, deduct \$.20 each.

Lifting Ring

WITH ROUND BASE
CAST BRONZE

Made in two sizes, No. 1 for outboard boats, No. 2 for runabouts.



Fig. 187



Fig. 188

Nos.	Height Overall Inches	Diam. Eye Inches	Diam. Base Inches	Threaded for Rod Inches	Weight Lbs.
1	3	1 1/8	2	5/8	1 1/2
2	4 1/2	2	2 1/2	5/8	1

No.	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
1	\$1.50	\$1.70	\$2.10
2	2.00	2.30	2.55

Lifting Ring and Cleat

WITH RECTANGULAR BASE
CAST BRONZE



Fig. 542

No.	Length Overall Inches	Height Overall Inches	Diam. Eye Inches	Size Base Inches	Threaded for Rod Inches	Weight
5	4	2 3/8	1 1/8	1 1/2 x 2 1/2	5/8	13 oz.
6	6 1/2	3 1/4	2	2 1/4 x 4 1/4	1	2 1/2 lbs.

No.	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
5	\$2.50	\$2.80	\$3.25
6	3.50	4.00	4.50

Base for Lifting Rings

CAST BRONZE—PLAIN

Designed for fastening to keel of boat by bolts, holes are drilled for 3/8 inch diameter bolt.

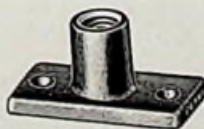


Fig. 446

No.	Each	Size Base Inches	Height Inches	Threaded for Rod Inches	Weight Oz.
1	\$.60	3 x 1 3/8	1 1/2	5/8	7
2	1.00	4 1/4 x 2 1/8	1 1/4	1	15

Bow Eyes

CAST BRONZE

A very handy fitting for the bow of small boats, used for tying up or towing.



Fig. 303

No.	Metal in Eye Inches	Length of Straps Inches	Extreme Length Inches	Inside Diam. Eye Inches
1	3/8	1 3/4	3	3/4
2	1/2	2 3/8	3 3/4	1 1/8

No.	Plain Bronze Each	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
1	\$.45	\$.65	\$.85	\$1.00
2	.65	.85	1.05	1.30

Hatch Handle

CAST BRONZE AND ALUMINUM



Fig. 185

Length Overall Inches	Height Overall Inches	Size Opening Inches	Weight Oz.
5	1 1/4	3 1/4 x 1	6

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Polished Aluminum Each
\$.70	\$.95	\$1.05	\$.75

Lifting Handle

CAST BRONZE AND ALUMINUM



Fig. 186

Length Overall Inches	Height Inches	Width Base Inches	Size Opening Inches	Weight Oz.
6 1/2	2	1 1/4	3 3/4 x 1 1/2	12

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Polished Aluminum Each
\$1.00	\$1.35	\$1.50	\$1.00

Bow Ring

CAST BRONZE

A dandy tie ring on rowboats, canoes, and outboard motor boats. Bolts through bow stem, cannot pull out, will take rope up to 3/8 inch.



Fig. 210

I. D. Ring Inches	Size Base Inches	Size Bolt Inches
1	2 1/4 x 1/2	4 x 1/8

Plain Each	Polished Each	Nickel Plated Each	Chromium Plated Each
\$.70	\$.85	\$1.00	\$1.15

Stanchion Posts

GALVANIZED CAST IRON AND BRONZE

Made for end or center of rail. Please specify by Fig. No. below when ordering.



Fig. 614—For End
Fig. 615—For Center

Extreme Height Size of Post No. Inches	Bored For	Galv. Each	Pol. Bronze Each	Nickel Plated Each	Chrom. Plated Each
1 2	5/8" Rod	\$.40	\$.70	\$1.00	\$1.20
1 1/2 2	1/4" Pipe	.40	.70	1.00	1.20
2 2 1/2	5/8" Rod	.50	.85	1.20	1.40
2 1/2 2 1/2	1/4" Pipe	.50	.85	1.20	1.40
3 3	5/8" Rod	.60	1.00	1.40	1.60
3 1/2 3	3/8" Pipe	.60	1.00	1.40	1.60
5 4	3/4" Rod	.75	1.75	2.20	2.40
5 1/2 4	1/2" Pipe	.75	1.75	2.20	2.40

Stanchion Posts

GALVANIZED CAST IRON AND BRONZE

Made for corner of rail or bow of boat. Specify by Fig. No. below when ordering.



Fig. 616—For Corner
Fig. 617—For Bow

Extreme Height Size of Post No. Inches	Bored For	Galv. Each	Pol. Bronze Each	Nickel Plated Each	Chrom. Plated Each
1 2	5/8" Rod	\$.40	\$.70	\$1.00	\$1.20
1 1/2 2	1/4" Pipe	.40	.70	1.00	1.20
2 2 1/2	5/8" Rod	.50	.85	1.20	1.40
2 1/2 2 1/2	1/4" Pipe	.50	.85	1.20	1.40
3 3	5/8" Rod	.60	1.00	1.40	1.60
3 1/2 3	3/8" Pipe	.60	1.00	1.40	1.60
5 4	3/4" Rod	.75	1.75	2.20	2.40
5 1/2 4	1/2" Pipe	.75	1.75	2.20	2.40

Hand Rail Sockets

FOR WOOD RAIL—CAST BRONZE



Fig. 215

Made for end or center of rail of high grade bronze. Base can very easily be shaped to fit the crown of the deck.

For Rail Diam. Inches	Extreme Height Inches	Size of Base Inches	Weight Each Ounces
1	1 3/4	3/8 x 3 1/2	5
1 1/4	2	3/4 x 3 3/4	9

Pol. Bronze		Nickel Plated		Chrom. Plated	
Center Each	End Each	Center Each	End Each	Center Each	End Each
1 \$.85	\$1.00	\$1.25	\$1.40	\$1.50	\$1.75
1 1/4 1.00	1.25	1.40	1.65	1.65	2.00

Please specify center or end and size when ordering.

Awning Sockets

CAST BRONZE—FOR ROD AND PIPE



Fig. 247

Diam. Rod Inches	For Pipe Inches	Plain Bronze Each	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
1/2		\$.50	\$.75	\$1.05	\$1.30
5/8	3/8	.55	.80	1.10	1.40
3/4	1/2	.60	.90	1.30	1.50
7/8		.65	.95	1.35	1.55
1	3/4	.70	1.15	1.65	1.90
	1	1.25	1.75	2.25	2.50

Floor Flanges

CAST BRONZE—FOR PIPE



Fig. 824

Pipe Size Inches	Plain Bronze Each	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	O. D. Flange Inches
3/8	\$.55	\$.85	\$1.15	\$1.35	2 1/4
1/2	.60	.90	1.20	1.40	2 1/2
3/4	.75	1.10	1.40	1.60	3
1	1.00	1.30	1.70	1.90	3 1/4
1 1/4	1.25	1.60	2.00	2.20	3 3/4
1 1/2	1.50	1.90	2.40	2.70	4
2	2.20	2.70	3.20	3.50	4 3/4

Rail Hinge

CAST BRONZE

Made to fit standard hand rail on high class yachts and cruisers.



Fig. 122

No.	Size Rail Inches	Length Inches	Weight Lbs.
1	1½ x 2½	5	1¾
2	1¾ x 3	3¾	1¾

No.	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
1	\$4.00	\$4.50	\$5.00
2	4.25	4.75	5.25

Grab Rails

Made of heavy brass tubing with cast bronze posts.

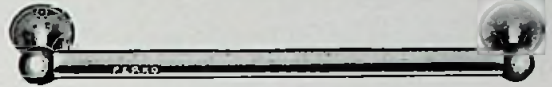


Fig. 379

Length Between Posts Inches	Diameter of Bar			
	1 Inch		1½ Inch	
	Polished Bronze Each	Chromium Plated Each	Polished Bronze Each	Chromium Plated Each
6	\$2.50	\$3.00	\$2.75	\$3.30
8	2.65	3.25	3.00	3.65
12	2.85	3.70	3.25	4.15
18	3.00	4.00	3.50	4.50
24	3.25	4.50	3.75	5.00
30	3.50	5.00	4.00	5.50
36	3.75	5.25	4.25	5.75
42	4.00	5.80	4.50	6.30

Can be furnished with middle post and in special lengths or nickel plated if desired. Price on application.

Flush Rail Lock

CAST BRONZE

Lies flush with top of rail when closed. Strong spring catch on bottom to hold rail end in position. A very practical fitting.



Fig. 123

No.	Size Rail Inches	Length Inches	Weight Lbs.
1	1½ x 2½	5	1¾
2	1¾ x 3	3¾	1¾

No.	Polished Bronze Per Set	Nickel Plated Per Set	Chromium Plated Per Set
1	\$4.25	\$4.75	\$5.25
2	4.50	5.00	5.50

Grab Rail Posts

CAST BRONZE—HOLLOW



Fig. 380

Diam. Base Inches	Height Overall Inches	Diam. Hole Inches	Weight Per Pair Pounds
2½	3¾	1 or 1½	1½
Polished Bronze Each		Nickel Plated Each	Chromium Plated Each
\$1.25		\$1.50	\$1.85

Furnished for center mounting when desired, please specify.

Letters and Figures

CAST BRONZE

GOthic PATTERN



Fig. 313

Height Inches	Plain Bronze Each	Polished Bronze Each	Chromium Plated Each	Weight Per 100 in Lbs.
3	\$.20	\$.30	\$.50	18

REGULAR PATTERN

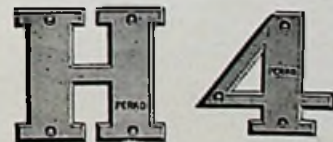


Fig. 348

Height Inches	Plain Bronze Each	Polished Bronze Each	Chromium Plated Each	Weight Per 100 in Lbs.
2	\$.15	\$.25	\$.45	6½
3	.20	.30	.50	24¼
4	.50	.75	1.00	36

Boat Hooks

GALVANIZED MALLEABLE IRON
CAST BRONZE
SHARP POINTS—SINGLE HOOK



Fig. 223

Size No.	For Diam. Pole Inches	Extreme Length Inches	Weight Each Ounces
0	1	7 1/4	7
1	1 1/4	8 1/4	8
2	1 1/2	9 3/8	16
3	2	9 3/4	23

Size No. Each	Galvanized Iron Each	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
0	\$.45	\$1.15	\$1.65	\$2.25
1	.55	1.30	1.80	2.40
2	.70	1.75	2.25	2.80
3	.85			

BALL POINTS—SINGLE HOOK

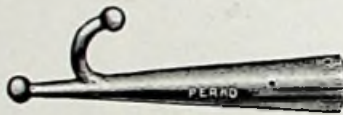


Fig. 224

Size No.	For Diam. Pole Inches	Extreme Length Inches	Weight Each Ounces
3 1/2	1	7 3/8	8
4	1 1/4	8 1/4	10
5	1 1/2	9 3/8	16
6	2	9 1/2	24

Size No. Each	Galvanized Iron Each	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
3 1/2	\$.50	\$1.15	\$1.65	\$2.25
4	.55	1.30	1.80	2.40
5	.70	1.75	2.25	2.80
6	.90			

Boat Hook Poles

SELECTED



Fig. 928

Diameter Inches	Lengths Feet	Price Per Foot
1 1/8	6 to 8	\$.10
1 1/4	6 to 8	.12
1 3/8	6 to 10	.15
1 1/2	8 to 12	.16

PRICE DOES NOT INCLUDE ATTACHING HOOKS TO POLES

NOTE

Have you noticed greatly reduced prices on chromium plated items?

Boat Hook Holders

SPRING BRASS

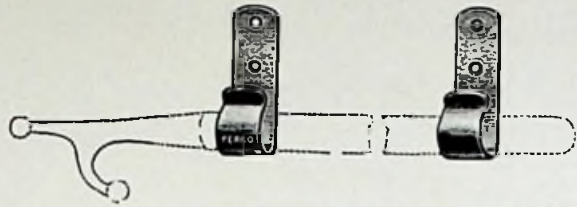


Fig. 490

Boat owners have been in need of a simple gadget like this for years, yet this is the first time boat hook holders have been put on the market.

Made of spring brass they will accommodate poles up to 1 1/2 inch in diameter, and hold them firmly in place.

Polished Brass Each	Chromium Plated Each	Length Inches	Width Inches	Weight Ounces
\$.45	\$.65	3 1/2	1	1 1/2

Ring Buoy Holders

CAST BRONZE



Fig. 1017

A substantial bronze hook or holder for all sizes of ring buoys. Especially designed for carrying ring buoys on outside of deck house or superstructure.

The natural spring tension of the hook holds the buoy fast but ready for instant use.

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Width Mounting Plate Inches	Height Overall Inches	Weight Each Pounds
\$1.20	\$1.40	\$1.60	3	4 1/2	1/2

Fender Hooks

CAST BRONZE



Fig. 547

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Length Overall Inches	Width Overall Inches
\$.40	\$.55	\$.70	1 3/4	1 1/4

Rope Swimming Ladders WITH ROUND WOOD RUNGS



Made of 5/8 inch best grade manila rope with hardwood rungs in mahogany finish. Rungs are 1 1/4 x 14 inches and spaced 12 inches apart.

Furnished complete with lanyards 6 feet long for fastening on board and thimbles with light lanyard on lower end for tying down.

Ladders	Each
2 rung	\$3.00
3 rung	3.50
4 rung	4.00
5 rung	4.50
6 rung	5.00

Additional rungs add \$.80 each.

Fig. 991

Ladder Locks CAST BRONZE

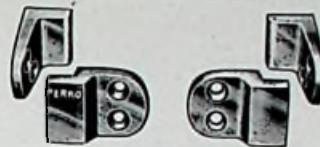
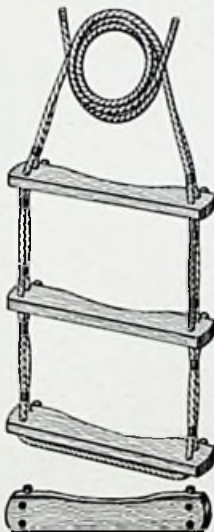


Fig. 669

Height Inches	Length Socket Inches	Length Bracket Inches	Weight Per Set Ounces
1 1/4	1	1 3/4	12
Polished Bronze Per Set	Nickel Plated Per Set	Chromium Plated Per Set	
\$1.75	\$2.50	\$3.10	

A set consists of four pieces illustrated

Rope Swimming Ladders



WITH FLAT WOOD STEPS CUT OUT FOR TOES AND HAND HOLD.

Steps are 3/4 x 3 3/4 x 20 inches and spaced 12 inches apart.

Made of 5/8 inch best grade manila rope with ash steps, varnished.

Furnished complete with lanyards 6 feet long for fastening on board.

Ladders	Each
2 step	\$4.00
3 step	5.00
4 step	6.00
5 step	7.00
6 step	8.00

Additional steps add \$1.30 each.

Fig. 992

Ladder Hooks CAST BRONZE

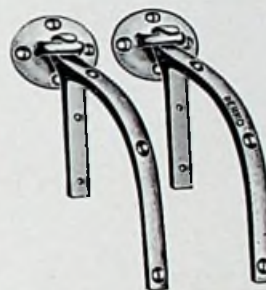
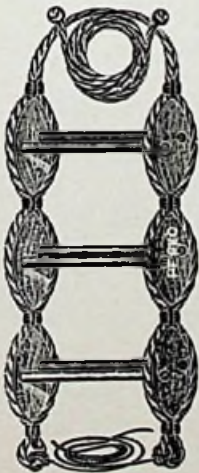


Fig. 670

Extreme Length Inches	Length Brace Inches	Size Plate Inches	Weight Per Set Pounds
12	4	2 1/2 x 3 3/4	4
Complete		Plates Only	
Pol. Bronze Per Set	Nickel Plated Per Set	Pol. Nickel Plated Per Pair	Chrom. Plated Per Pair
\$8.50	\$9.50	\$1.75	\$2.25
	\$10.50	\$2.75	

Rope Boarding Ladders

WITH OVAL SIDES AND DOUBLE RUNGS



Each rung is 1 1/2 x 14 inches and steps are spaced 12 inches apart.

The finest boarding ladder on the market. Made of first grade 5/8 manila rope. Selected ash sides and steps, varnished.

Furnished complete with lanyards 6 feet long for fastening on board, and thimbles with light lanyard on lower end for tying down.

Ladders	Each
2 step	\$ 7.50
3 step	10.00
4 step	12.50
5 step	15.00
6 step	17.50

Additional steps add \$2.50 each.

Fig. 993

Ladder Hooks CAST BRONZE WITH FLUSH PLATES FOR DECK

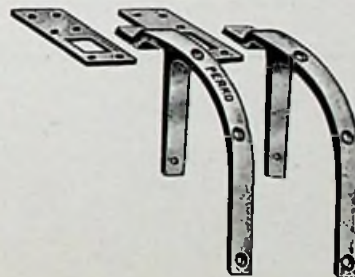


Fig. 994

Extreme Length Inches	Length Brace Inches	Size of Plate Inches	Weight Per Set Pounds
10	3 3/4	3 1/4 x 2	4
Complete		Plates Only	
Pol. Bronze Per Set	Nickel Plated Per Set	Pol. Nickel Plated Per Pair	Chrom. Plated Per Pair
\$8.50	\$9.50	\$1.40	\$1.90
	\$10.50	\$2.40	

Ribbed Socket Rowlocks

GALVANIZED—MALLEABLE AND CAST IRON



Fig. 638

GALVANIZED CAST IRON

Size No.	Complete Per Pair	Horns Only Per Pair	Sockets Only Per Pair	Opening Inches	Weight Per Pair Pounds
0	\$.25	\$.15	\$.15	1 3/4	1 1/8
1	.28	.18	.15	2	1 1/4
2	.40	.30	.20	2 1/4	1 3/4

GALVANIZED MALLEABLE IRON

1	.45	.30	.25	2	1 1/4
2	.60	.40	.35	2 1/4	1 3/4

Standard Socket Rowlocks

GALVANIZED MALLEABLE IRON



Fig. 639

Size No.	Complete Per Pair	Horns Only Per Pair	Sockets Only Per Pair	Opening Inches	Weight Per Pair Pounds
0	\$.50	\$.35	\$.25	1 3/4	1 1/8
1	.50	.35	.25	2	1 1/4
2	.70	.50	.35	2 1/4	1 3/4
3	1.00	.70	.50	2 1/2	2 3/8
4	1.25	.95	.50	3	3 3/8

Davis Pattern Rowlocks

GALVANIZED MALLEABLE IRON AND BRONZE

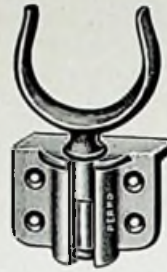


Fig. 641

Size No.	Galv. Per pair	Plain Bronze Per pair	Polished Bronze Per pair	Opening Inches	Weight Per Pair Pounds
0	\$.95			1 3/4	2
1	.95	\$1.50	\$2.50	2	2
2	1.25			2 1/4	2 3/4

Round Socket Rowlocks

GALVANIZED IRON AND BRONZE



Fig. 642

GALVANIZED MALLEABLE IRON

Size No.	Complete Per Pair	Horns Only Per Pair	Sockets Only Per Pair	Inside Diam. Inches	Weight Per Pair Pounds
0	\$.50	\$.35	\$.25	2	1 1/8
1	.50	.35	.25	2 1/4	1 1/4
2	.65	.50	.25	2 1/2	1 1/2

GALVANIZED CAST IRON

1	.36	.20	.20	2 1/4	1 1/4
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PLAIN BRONZE

1	.80	.60	.30	2 1/4	1 1/4
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POLISHED BRONZE

1	1.75	1.25	.60	2 1/4	1 1/4
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Swivel Rowlocks

GALVANIZED MALLEABLE IRON AND BRONZE



Fig. 640

GALVANIZED

Size No.	Complete Per Pair	Horns Only Per Pair	Plates Only Per Pair	Opening Inches	Weight Per Pair Pounds
1	\$1.25	\$.70	\$.70	2	2
2	1.50	.85	.85	2 1/4	2 1/2

CAST BRONZE

Size No.	Plain Complete Per Pr.	Polished Complete Per Pr.	Plain Per Pr.	Horns Only Pol. Per Pr.	Plates Only Plain Per Pr.	Pol. Per Pr.
1	2.00	3.00	1.15	1.65	1.15	1.65

North River Rowlocks

GALVANIZED MALLEABLE IRON AND BRONZE



Fig. 643

Opening Inches
2 1/8

Weight Per Pair Pounds
1 3/8

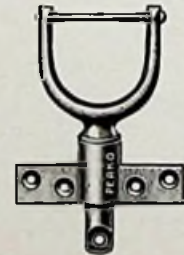


Fig. 644

	Complete Per Pair	Horns Only Per Pair	Per Pair Sockets Only
Galv., Fig. 643	\$.50	\$.35	\$.25
Pl. Bronze, Fig. 643	.80	.60	.30
Pol. Bronze, Fig. 643	1.75	1.25	.60
Galv. Fig. 644	.60	.35	.35

Above items desired CHROMIUM PLATED, add 50% to Polished Bronze Prices

Side Plate Rowlocks GALVANIZED MALLEABLE IRON



Fig. 645

Size No.	Complete Per Pair	Horns Only Per Pair	Sockets Only Per Pair	Opening Inches	Weight Per Pair Pounds
0	\$.75	\$.50	\$.35	1 3/4	1 3/8
1	.75	.50	.35	2	1 3/4

Boston Side Plate Rowlocks

GALVANIZED MALLEABLE IRON AND BRONZE

With Chain and Without Chair



Fig. 646

Size No.	Complete Per Pair	Horns Only Per Pair	Sockets Only Per Pair	Opening Inches	Weight Per Pair Pounds
1 Galv.	\$.70	\$.35	\$.45	2	1 1/2
0 Pl. Bronze	1.60	.80	.90	1 3/4	1 1/2
1 Pl. Bronze	1.60	.80	.90	2	1 1/4
0 Pol. Bronze	2.75	1.20	1.65	1 3/4	1 1/4
1 Pol. Bronze	2.75	1.20	1.65	2	1 1/2

With Chain for Galv. add 10c to above prices.
With Chain for Bronze add 20c to above prices.

Boston Socket Rowlocks

GALVANIZED MALLEABLE IRON AND BRONZE

With Chain and Without Chain



Fig. 545

Size No.	Complete Per Pair	Horns Only Per Pair	Sockets Only Per Pair	Opening Inches	Weight Per Pair Pounds
0 Galv.	\$.50	\$.35	\$.25	1 3/4	7/8
1 Galv.	.50	.35	.25	2	1
0 Pl. Bronze	1.20	.80	.50	1 3/4	7/8
1 Pl. Bronze	1.20	.80	.50	2	1
0 Pol. Bronze	2.00	1.20	.90	1 3/4	7/8
1 Pol. Bronze	2.00	1.20	.90	2	1

With Chain for Galv., add 10c to above prices.
With Chain for Bronze, add 20c to above prices.

Above Rowlocks desired CHROMIUM PLATED, add 50% to Polished Bronze Prices

Improved Oar Leathers TANNED LEATHER



Fig. 196

Oar leathers of an improved type, which will fit any oar and eliminate the old method of permanent fastening with nails.

Furnished complete with buttons and leather laces.

Per Pair	Length Inches	Width Inches
\$1.40	7	6

Oar Leathers and Buttons RUSSET LEATHER



Fig. 233

A high grade russet leather and button furnished complete with brass nails for attaching to oar.

	Per Pair
Complete, Leathers and Buttons	\$.85
Leathers Only—7x6 1/2 Inches	.60
Buttons Only—1/2x16 Inches	.30

Copper Oar and Paddle Tips



Fig. 794



Fig. 850

Made of soft sheet copper, will fit any oar and paddle.

Fig. 794 Oar Tips—Price per Pair	\$.025
Fig. 850 Paddle Tips—Price Each	.15

Outboard Motor Transom Plates CAST BRONZE—PLAIN



Fig. 814

Furnished complete with tanned leather inserts. Protects transom from wear and tear of motor clamp, and prevents loss of motor should motor clamp become loosened.

Made shallow as practicable to allow clearance of clamp when mounting or removing motor.

Plain Per Pair	Inside Diam. Inches	Outside Diam. Inches	Extreme Thickness Inches	Weight Per Pair Ounces
\$.80	1 3/4	3	3/16	6

Swivel Outrigger Pole Holders

EXTRA LONG SOCKET—REINFORCED
STRONG HEAVY BRONZE CASTINGS



Fig. 414

Pole can be set at any desired angle, has swivel base plate and hinged socket.

Cast bronze fittings are good and heavy to prevent breakage, socket is extra long and reinforced on the outer end to prevent splitting.

Per Pair	Inside Diam. Socket Inches	Length Socket Inches	Diam. Plate Inches	Weight Pair Pounds
\$10.00	1 3/4	10	3	6 3/4

Swivel Outrigger Pole Holders

MANGANESE BRONZE—PLAIN
LIGHT PATTERN



Fig. 415

For mounting on deck or side of deck house. The double hinged straps and swivel flange will allow the pole to be set at any desired angle.

The entire fitting being made of cast manganese bronze gives maximum strength and minimum weight.

No.	Per Pair	For Diam. Pole Inches	Length Straps Inches	Diam. Flange Inches	Weight Pair Pounds
1	\$6.00	1 1/4	4	2 1/4	1
2	7.00	1 1/2	5 3/4	2 3/4	2

Outrigger Pole Sockets

POLISHED BRASS

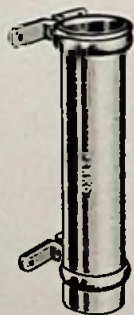


Fig. 1100

A well made heavily constructed socket of heavy brass with cast bronze brackets for mounting on rail or deck house.

Each	Inside Diam. Inches	Extreme Length Inches	Width Bracket Inches	Weight Pounds
\$5.00	2 3/8	12	4	3 1/4

Sword Fish Darts

PLAIN CAST BRONZE



Fig. 805

Price Each \$0.40

Length Inches 5

Weight Per 100 In Pounds 31

Dart Shank

IRON SHANK—CAST BRONZE SOCKET

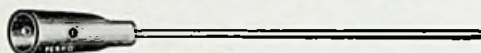


Fig. 655

Length overall, 24 inches; Weight, 1 1/4 pounds.

Price each \$1.50

Sail Makers Needles

FORGED CAST STEEL—POLISHED
LONG SQUARE



Fig. 410

No.	Price Per 100	Length Inches	No.	Price Per 100	Length Inches
17	\$2.10	2 1/4	12	\$ 3.75	3 1/4
16	2.10	2 1/2	11	5.00	3 3/8
15	2.10	2 1/2	10	6.20	3 3/4
15 1/2	2.10	2 5/8	9	7.40	4
14	2.25	2 5/8	8	9.95	4 1/2
14 1/2	2.50	2 3/4	7	12.40	4 3/4
13	2.95	3			

REDUCED EDGE

No.	Per 100	Length Inches	No.	Per 100	Length Inches
17	\$3.35	2 1/4	15	\$3.35	2 1/2
16 1/2	3.35	2 5/8	14 1/2	3.75	2 3/4
16	3.35	2 1/2	14	3.45	2 5/8
15 1/2	3.35	2 5/8	13	4.10	3

Packed 25 needles per package—only furnished in full packages.

Sailors Seaming Palms

FULL HIDE MOUNTED



Fig. 411

Right Hand, Per Dozen \$4.25
Left Hand, Per Dozen 4.70



Windshield Brackets

CAST BRONZE

Sturdy and attractive fittings for runabouts and out-board motor boats.

The end brackets have beveled bases that will fit the crown of most decks, all brackets are grooved for 1/4 inch glass, and are tilted at a 50 degree angle.

V TYPE

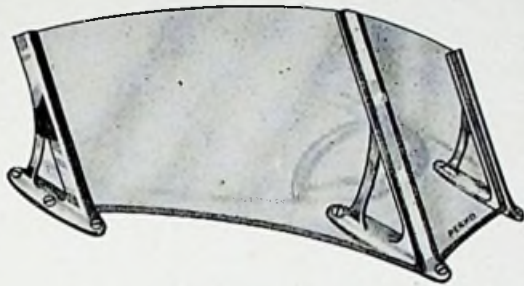


Fig. 665

Height of Center Brackets Inches	Height of End Brackets Inches	Length of Center Base Inches	Polished Bronze Per Set	Nickel Plated Per Set	Chromium Plated Per Set
9 1/2	7 1/2	7 3/8	\$9.00	\$10.50	\$11.50

Height of brackets is figured perpendicular to bases. Prices do not include glass.

STRAIGHT TYPE

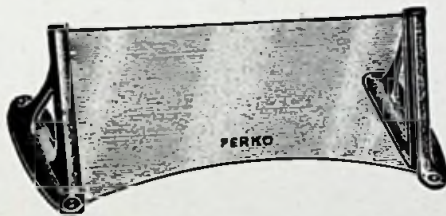


Fig. 666

Polished Bronze Per Set	Nickel Plated Per Set	Chromium Plated Per Set	Length Bases Inches	Height Inches
\$7.00	\$7.75	\$8.50	5 3/4	7

Rubber Insulation for Windshields

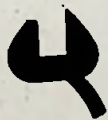


Fig. 667



Fig. 668

Fig. 667—For bottom of windshields—per foot \$.20
 Fig. 668—For windshield brackets—per foot.. .18

Windshield Adjusters

CAST BRONZE



Fig. 82

No.	Length Inches	Polished Bronze Per Pair	Nickel Plated Per Pair	Chromium Plated Per Pair
1	6 1/2	\$5.00	\$6.00	\$7.00
2	9	6.00	7.00	8.00

Heavy Windshield Adjusters

CAST BRONZE

Designed for large windshields on cruisers. Well constructed and permits windshield to be set at any angle desired.



Fig. 1003

No.	Length Inches	Polished Bronze Per Pair	Nickel Plated Per Pair	Chromium Plated Per Pair
3	6 1/2	\$5.40	\$6.00	\$7.40
4	10	7.20	8.00	9.20

Dock Roller

FOR CANOES AND BOATS

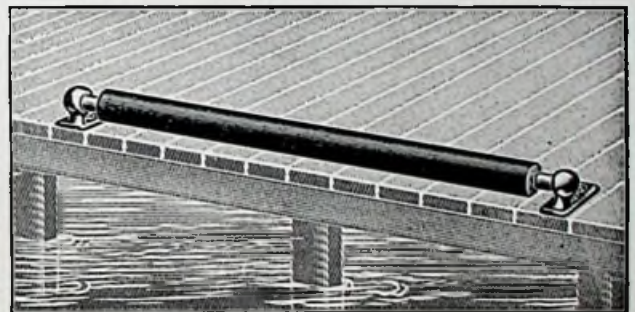


Fig. 400

An effective and simple means of rolling a canoe or boat from the water to the dock without damage. End posts are solid cast bronze.

HARD RUBBER ROLLER ON BRASS AXLE

Diam. Shaft Inches	Diam. Rubber Inches	Height Inches	Length Inches	Price
3/4	1 1/2	2	27	\$5.00
7/8	1 3/4	2 1/4	28	6.00
1	1 3/4	2 1/4	30	7.00
1	1 3/4	2 1/4	36	8.00

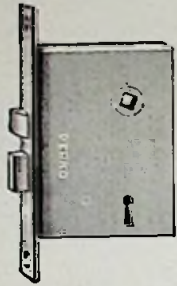
HARD WOOD ROLLER

Diam. Shaft Inches	Diam. Roller Inches	Height Inches	Length Inches	Price
3/4	1 1/2	2	27	\$3.00
7/8	1 1/2	2 1/8	28	3.50
1	1 1/2	2 1/4	31	4.00



Mortise Locks

CAST BRONZE—POLISHED



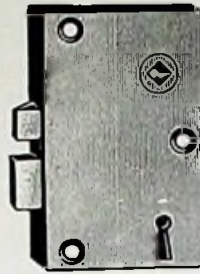
Cast bronze case with reversible latch bolt. Furnished with polished striking plate and one brass bit key.

Fig. 944

No.	Each	Case Inches	Facing Inches	Backset Inches	Spindle Hub Inches
1	\$3.00	2 3/4 x 2 x 1/2	4 1/8 x 1 1/4	1 1/2	1 1/8
2	3.80	3 1/2 x 2 3/4 x 1/2	5 x 3/4	2 1/4	1 1/8

Rim Locks

CAST BRONZE—POLISHED



All bronze, with reversible latch bolt for right and left hand doors.

Furnished with polished bronze nosings and one brass bit key.

Fig. 1045

No.	Each	Size Case Inches	Spindle Inches	Backset Inches
1	\$3.00	2 1/2 x 2	5/16	1 1/2
2	3.25	3 3/4 x 2 1/2	5/16	1 5/8

Mortise Lock Sets

CAST BRONZE—POLISHED

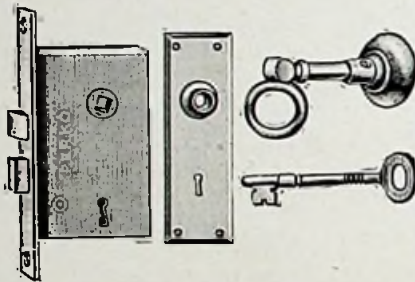


Fig. 945

The following shows mortise lock Fig. 944 numbers 1 and 2 made up in various sets.

SET A

With Combination Escutcheons, Round Knob and Drop Handle

Size No. 1, Price Per Set	\$6.80
Size No. 2, Price Per set	7.50

SET B

With Combination Escutcheons and Two Round Knobs

Size No. 1, Price Per Set	\$6.80
Size No. 2, Price Per Set	7.50

SET C

With Shield Escutcheons, Round Knob and Drop Handle

Size No. 1, Price Per Set	\$6.00
Size No. 2, Price Per Set	7.00

SET D

With Shield Escutcheons and Two Round Knobs

Size No. 1, Price Per Set	\$6.00
Size No. 2, Price Per Set	7.00

For Set No.	Combination Escutcheon Inches	Diameter Round Knob Inches	Shield Escutcheon Inches
1	4 3/8 x 1 1/8	1 3/4	1 1/2
2	6 x 1 1/2	2	1 3/4

All of the above sets can be furnished with oval knobs if desired—Price on application.

Extra keys for above locks furnished to order.

Above items desired CHROMIUM PLATED, add 40% to Polished Bronze Prices

Rim Lock Sets

CAST BRONZE—POLISHED

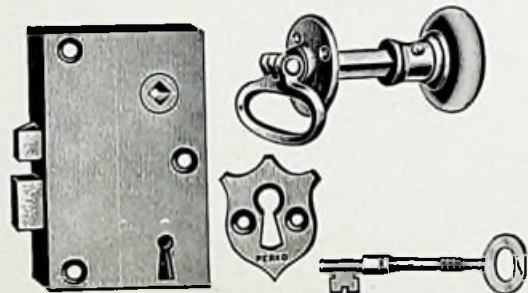


Fig. 1046

The following shows Rim Lock Fig. 1045, Numbers 1 and 2 made up in various sets.

SET A

With Combination Escutcheons, Round Knob and Drop Handle

Size No. 1, Price Per Set	\$6.00
Size No. 2, Price Per Set	7.00

SET B

With Shield Escutcheons, Round Knob and Drop Handle

Size No. 1, Price Per Set	\$5.80
Size No. 2, Price Per Set	6.80

SET C

With Shield Escutcheons and Two Round Knobs

Size No. 1, Price Per Set	\$5.60
Size No. 2, Price Per Set	6.60

For Set No.	Combination Escutcheon Inches	Diameter Round knob Inches	Shield Escutcheon Inches
1	4 3/8 x 1 1/8	2	1 1/2
2	6 x 1 1/2	2	1 3/4

All of the above sets can be furnished with oval knobs if desired—Price on Application.

Extra keys for above locks furnished to order.

Brass Rim Lock Set

FOR SMALL CABIN DOORS
POLISHED OR CHROMIUM PLATED

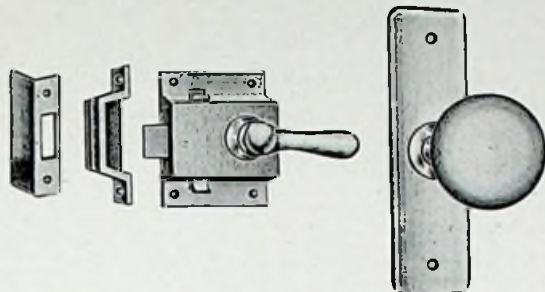


Fig. 1086

For cabin doors on small cruisers, inside and toilet doors on yachts, etc. Brass throughout. Reversible for right and left hand doors. Push type locking device. Round knob and lever handle. No keys.

No.	Size Case Inches	Size Escutcheons Inches	Size Knob Inches	Backset Inches	For Thickness of Doors Inches
1	2 1/4 x 1 1/8	4 1/2 x 1 1/2	1 3/4	1 1/2	7/8 to 1 3/8
2	3 x 2	4 x 1 3/8	1 3/4	1 1/2	7/8 to 1 3/8

No.	Polished Brass Each	Chromium Plated Each
1	\$3.30	\$4.95
2	3.50	5.25

Brass Mortise Lock Set

FOR SMALL CABIN DOORS
POLISHED OR CHROMIUM PLATED

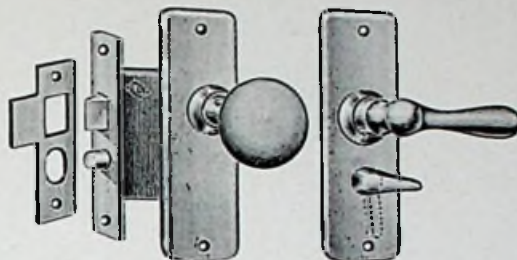


Fig. 1088

For small cabin and inside doors on all classes of cruisers and yachts. Brass throughout. Reversible for right and left hand doors. Lever type locking device. Round knob and lever handle. No keys.

No. 1 size for doors 5/8 to 1 3/8 inches thick.
No. 2 size for doors 7/8 to 1 1/2 inches thick.

No.	Size Case Inches	Size Face Inches	Size Escutcheons Inches	Size Knob Inches	Backset Inches
1	2 x 1 1/4 x 3/8	3 1/4 x 1 1/8	3 7/8 x 1 1/8	1 3/4	7/8
2	2 x 1 3/4 x 1/8	3 1/4 x 1 1/8	4 x 1 3/8	1 3/4	1 1/8

No.	Polished Brass Each	Chromium Plated Each
1	\$3.85	\$5.50
2	3.85	5.50

Brass Mortise Lock Set

WITH 2 KEYS
FOR SMALL CABIN DOORS
POLISHED OR CHROMIUM PLATED

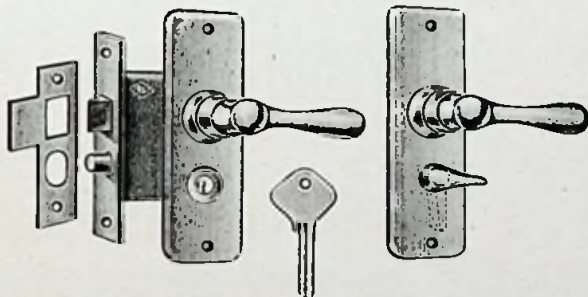


Fig. 1087

For inside and outside doors on cruisers and yachts. Brass throughout, reversible for right and left hand doors. With lever lock on one side and key lock on the other. With two lever handles.

For doors 7/8 to 1 1/2 inches thick.

Size Case Inches	Size Face Inches	Size Escutcheons Inches	Length Levers Inches	Backset Inches
2 x 1 7/8 x 1/8	3 1/4 x 1 1/8	4 x 1 3/8	2	1 1/8

Polished Brass Each	Chromium Plated Each
\$4.10	\$5.75

Tubular Lock Sets

FOR SMALL CABIN DOORS
POLISHED BRASS

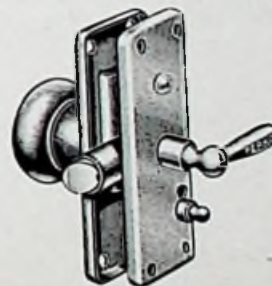


Fig. 567

Per Set Each	For Thickness of Doors Inches	Size Escutcheon Inches	Size Knob Inches	Backset Inches
\$2.25	7/8 to 1 3/8	4 3/8 x 1 5/8	1 3/4	1 3/8

Cylinder Rim Spring Latches

ALL BRONZE—REVERSIBLE

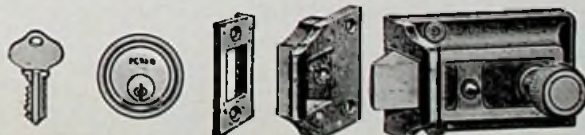


Fig. 1101

Raised parts and edges are polished, furnished with both strikes, three keys and screws. Meets U. S. Navy specifications 42-L-27.

Per Set	Size Case Inches	Thickness Inches	Backset Inches	For Thickness of Doors Inches
\$3.50	3 3/4 x 2 1/2	1	2 3/8	1 1/4 to 2 1/4

Door Knobs

CAST BRASS—POLISHED

Solid cast brass round knobs and rosettes. Wrought brass spindles.

Two Round Knobs



Fig. 1048

Diam. Knob Inches
1 3/4
2

Per set
\$2.25
2.25

Size Spindle Inches
1/8
5/16

Round Knob and Drop Handle

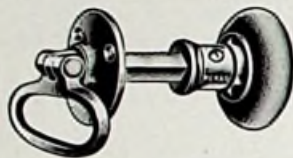


Fig. 1049

Diameter Knob Inches
1 3/4
2

Per Set
\$2.25
2.25

Size Spindle Inches
1/8
5/16

Knobs for Rim Locks have One Rosette
Knobs for Mortise Locks have Two Rosettes



Fig. 1050

Combination Escutcheons

CAST BRASS—POLISHED

With beveled edges, highly polished finish.

No.	Each	Size Inches	For Spindle Inches
1	\$.85	4 3/8 x 1 1/8	1/8
2	.85	6 x 1 1/2	1/8

Shield Escutcheons

CAST BRASS—POLISHED



Fig. 946

Showing the type of escutcheon furnished with lock sets C and D.

No.	Each	Size Inches
1	\$.20	1 1/2
2	.20	1 3/4

Flush Ring Catch

CAST BRASS—POLISHED

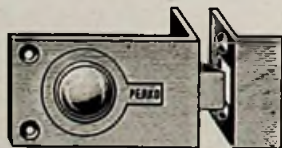


Fig. 1051

Size Inches
1 3/8 x 1 1/4

Each
\$.50

Cupboard Catches

CAST BRONZE—POLISHED

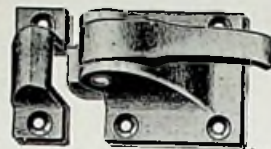


Fig. 1102

Furnished complete with screws.

No.	Each	Without Strike Inches	Weight Per Dozen Pounds
1	\$.85	1 1/2 x 1 1/2	1 1/2
2	.85	1 1/2 x 1 1/2	1 3/4

No. 2 has 3/8 inch offset.

Cupboard Turns

WROUGHT BRONZE—POLISHED

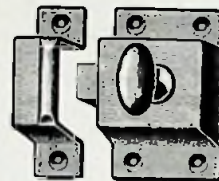


Fig. 1105

Furnished complete with screws.

No.	Each	Without Strike Inches	Weight Per Dozen Pounds
1	\$.50	1 7/8 x 1 3/16	2
2	.55	2 1/8 x 1 1/16	3

Cupboard Turns

CAST BRASS—POLISHED

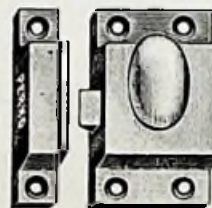


Fig. 949

Furnished complete with screws.

No.	Each	Without Strike Inches	Weight Per Dozen Pounds
1	\$.80	1 7/8 x 1 3/16	2 1/2
2	.80	2 1/8 x 1 1/16	3 3/4

Cupboard Catches

CAST BRASS—POLISHED

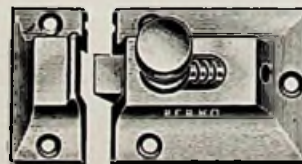


Fig. 950

Furnished complete with screws.

No.	Each	Size Inches
1	\$.45	1 1/8 x 1 1/8
2	.55	1 1/4 x 1 1/2
3	.60	1 1/8 x 1 3/8

Above items desired CHROMIUM PLATED, add 40% to Polished Bronze Prices

Barrel Bolts

CAST BRASS—POLISHED

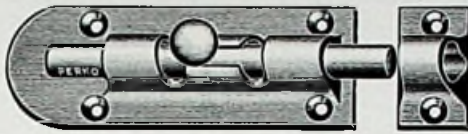


Fig. 947

No.	Each	Size Inches	Weight Per Dozen Pounds
1	\$.55	2 1/4 x 1 1/8	1 1/2
2	.75	3 x 1 1/4	2
3	.90	4 x 1 1/4	3

Elbow Catches

CAST BRASS—POLISHED

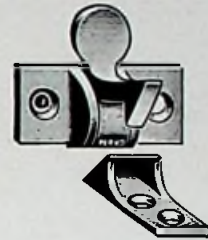


Fig. 1056

Small spiral brass spring in catch lever. For light cupboard doors, etc.

Size Base Inches	Each
1 1/8 x 3/8	\$.25

Flush Bolts

CAST BRONZE—POLISHED

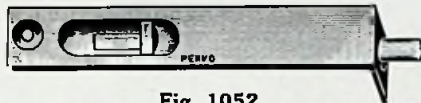


Fig. 1052

Size Inches	Each
5/8 x 2 1/2	\$.40
3/8 x 3	.45

Ship Bolts

HEAVY CAST BRONZE—POLISHED

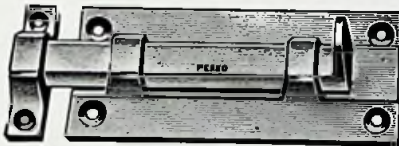


Fig. 1053

Size Inches	Each
3 x 1 1/8	\$.50
4 x 1 3/8	.66
5 x 1 5/8	.80

Square Neck Bolts

HEAVY CAST BRONZE—POLISHED

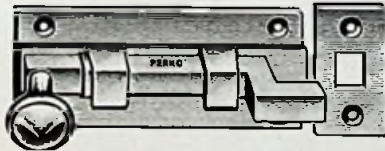


Fig. 1054

Size Inches	Each
3 x 1 1/4	\$.66
4 x 1 1/8	.88

Window Bolts

CAST BRONZE—POLISHED

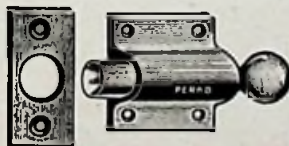


Fig. 1055

Base Inches	Each
1 1/8 x 1 1/4	\$.60

Casement Fasteners

CAST BRONZE—POLISHED

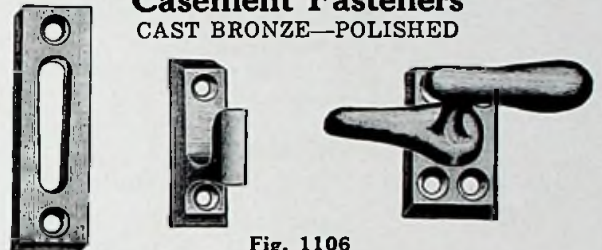


Fig. 1106

Furnished with screws and either type strike.

Each	Without Strike Inches	Extreme Projection Inches	Weight Per Dozen Pounds
\$.85	1 3/8 x 1 1/8	1 3/8	2 1/2

State type of strike when ordering.

Butterfly Hinges

WROUGHT BRASS—PLAIN



Fig. 1058

Size Open Inches	Per Pair
2 1/4	\$.10
3	.15

Spring Hinges

WROUGHT BRASS—PLAIN

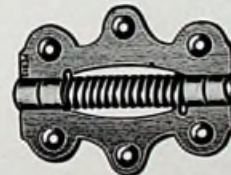


Fig. 1059

Length Inches	Per Pair
2 3/8	\$.50
3	.75

Spring Hinges

CAST BRONZE—POLISHED

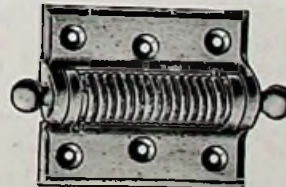


Fig. 1107

Furnished complete with screws.

Per Pair	Size	Weight Per Dozen Pounds
\$3.20	3 x 2 3/8	1 1/4

Strap Hinges

GALVANIZED MALLEABLE IRON AND BRONZE
BRASS PINS



Fig. 120

Length Opened Inches	Galv. Per Pair	Plain Bronze Per Pair	Polished Bronze Per Pair	Nickel Plated Per Pair	Chrom. Plated Per Pair	Weight Per Pair Pounds
4	\$.40	\$.75	\$ 1.15	\$ 1.65	\$ 2.15	$\frac{1}{8}$
6	.60	1.00	1.40	2.00	2.50	$\frac{3}{8}$
8	.95	1.25	1.85	2.60	3.10	$\frac{7}{8}$
10	1.20	1.65	2.40	3.40	3.80	$1\frac{1}{8}$
12	1.70	2.30	3.10	4.10	4.60	$1\frac{5}{8}$

Port Hinges

GALVANIZED MALLEABLE IRON AND BRONZE
BRASS PINS

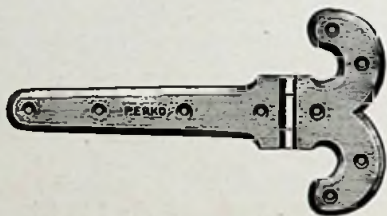


Fig. 109

Length Opened Inches	Galv. Per Pair	Plain Bronze Per Pair	Polished Bronze Per Pair	Nickel Plated Per Pair	Chrom. Plated Per Pair	Weight Per Pair Pounds
4	\$.60	\$ 1.00	\$ 1.70	\$ 2.20	\$ 2.70	$\frac{1}{2}$
6	.85	1.30	2.00	2.60	3.20	$\frac{1}{2}$
8	1.30	1.75	2.75	3.50	4.15	$1\frac{1}{2}$
10	2.00	2.60	3.60	4.35	5.10	2
12	2.60	4.65	5.50	6.35	7.10	$2\frac{5}{8}$

Cuddy Door Hinges

HEAVY CAST BRONZE



Fig. 951

Length Opened Inches	Plain Bronze Per Pair	Polished Bronze Per Pair	Chromium Plated Per Pair
3	\$.65	\$ 1.10	\$ 1.70
$3\frac{1}{2}$	.70	1.20	1.90
4	.75	1.25	2.10
5	.90	1.75	2.75

Fast Pin Butt Hinges

CAST BRASS—EMERY FINISH
BRASS PINS



Fig. 952

Size Open Inches	Per Doz. Pairs	Size Open Inches	Per Doz. Pairs
$1\frac{1}{2} \times 1\frac{1}{4}$	\$ 4.80	3 x $1\frac{1}{2}$	\$ 13.25
$1\frac{1}{2} \times 1\frac{1}{2}$	5.04	3 x 2	13.44
$1\frac{3}{4} \times 1\frac{1}{4}$	5.04	3 x $2\frac{1}{4}$	15.36
$1\frac{3}{4} \times 1\frac{1}{2}$	5.76	3 x $2\frac{1}{2}$	15.36
2 x $1\frac{1}{4}$	6.00	3 x 3	16.48
2 x $1\frac{1}{2}$	6.48	$3\frac{1}{2} \times 2\frac{1}{2}$	20.00
2 x $1\frac{3}{4}$	7.44	$3\frac{1}{2} \times 3$	21.60
2 x 2	7.92	$3\frac{1}{2} \times 3\frac{1}{2}$	24.00
$2\frac{1}{2} \times 1\frac{1}{2}$	9.36	4 x 3	28.16
$2\frac{1}{2} \times 1\frac{3}{4}$	10.56	4 x $3\frac{1}{2}$	31.44
$2\frac{1}{2} \times 2$	10.80	4 x 4	33.60
$2\frac{1}{2} \times 2\frac{1}{2}$	12.00		

Polished or Chromium Plated, Price on Application
Other Sizes Furnished to Order

Loose Pin Butt Hinges

CAST BRASS—POLISHED
BRASS PINS

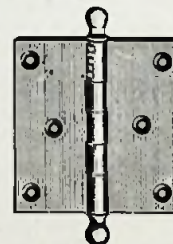


Fig. 953

Size Open Inches	Size Screw Inches	Per Pair	Size Open Inches	Size Screw Inches	Per Pair
2 x $1\frac{1}{2}$	$\frac{3}{4} \times 6$	\$ 1.15	3 x 3	1 x 8	\$ 2.30
2 x 2	$\frac{3}{4} \times 7$	1.40	$3\frac{1}{2} \times 3$	1 x 11	3.00
$2\frac{1}{2} \times 2$	$\frac{7}{8} \times 7$	1.65	$3\frac{1}{2} \times 3\frac{1}{2}$	1 x 11	3.30
$2\frac{1}{2} \times 2\frac{1}{2}$	$\frac{7}{8} \times 7$	1.80	4 x 3	1 x 11	4.50
3 x 2	1 x 8	2.00	4 x $3\frac{1}{2}$	1 x 11	5.00
3 x $2\frac{1}{2}$	1 x 8	2.20	4 x 4	1 x 11	6.00

Chromium Plated, add 50% to above Prices

Skylight or Hatch Hinges

CAST BRONZE



Fig. 376

Length Between Joints Inches	Plain Bronze Per Pair	Polished Bronze Per Pair	Nickel Plated Per Pair	Chromium Plated Per Pair	Length Open Inches
2	\$ 2.10	\$ 3.40	\$ 4.15	\$ 4.65	$11\frac{1}{4}$
3	2.40	3.75	4.60	5.05	$12\frac{1}{4}$
4	2.60	4.25	5.25	5.65	13
5	4.20	6.00	7.30	7.60	$16\frac{1}{4}$
6	4.50	6.50	8.00	8.25	17



Boston Hasp Hinges

GALVANIZED MALLEABLE IRON AND BRONZE

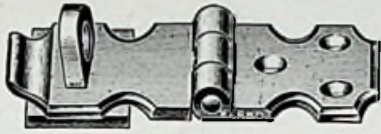


Fig. 954

Length
Opened
Inches
4
6

Galv. Each	Pl. Bronze Each
\$.40	\$.75
.55	1.00

Pol. Bronze
Each
\$1.10
1.65

Security Hasp Hinges
POLISHED BRONZE

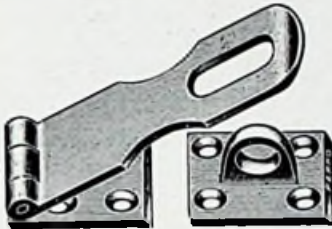


Fig. 955

Length
Closed
Inches
3
3 3/4

Pol. Bronze
Each
\$.85
1.00

Width
Inches
1
1 1/8

Cabin Door Hooks
CAST BRASS—POLISHED



Fig. 956

Size
Inches
1 1/2
2
2 1/2
3

Each
\$.40
.45
.55
.60

Size
Inches
3 1/2
4
5
6

Each
\$.70
.75
.90
1.20

Cabin Door Hooks
DOUBLE JOINTED
CAST BRASS—POLISHED



Fig. 957

Size
Inches
2
2 1/2
3

Each
\$1.50
1.50
1.55

Size
Inches
4
5
6

Each
\$1.70
1.85
2.00

Safety Hasps

EXTRA HEAVY CAST BRONZE—POLISHED

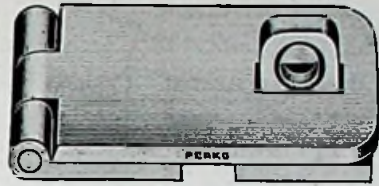


Fig. 1060

Length
Inches
4 1/2

Width
Inches
1 3/8

Each
\$1.75

Anti-Rattle Door Fastener
CAST BRONZE—POLISHED

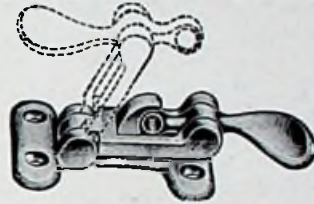


Fig. 1108

Furnished complete with screws. Has 1/4 inch hole in lever for padlock.

Each
\$1.25

Size Base
Inches
3x2

Weight
Ounces
6

Door Holders
SIDE PATTERN
CAST BRONZE—POLISHED



Fig. 1065

Projection
Inches
2

Price
Per set
\$.90

FLOOR PATTERN



Fig. 1066

Height
From floor
Inches
2

Price
Per set
\$1.00

Door Stops

CAST BRONZE—POLISHED
RUBBER TIP



Fig. 1109

Furnished complete with screws.

Each
\$.75

Diam. Base
Inches
2

Projection
Inches
1 1/8

Above items desired CHROMIUM PLATED, add 50% to Polished Brass and Bronze Prices

Refrigerator Hinges
CAST BRASS—POLISHED

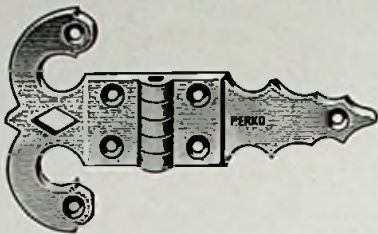


Fig. 1061

Length Overall Inches	Length Strap Inches	Flush Type Per pair	Offset Type Per pair
5	3	\$.70	\$.84
6 1/4	4	1.10	1.30
7 1/4	5	1.40	1.80
8 1/2	6	1.70	2.30

Offset Type has 3/8 inch offset
Be sure to Specify Flush or Offset Type

Cabinet Latches
CAST BRASS—POLISHED

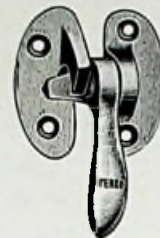


Fig. 1064

With flush striking plate and brass pin, spring closing.
Made either right or left hand.

Length Overall Inches	Length Lever Inches	Polished Brass Each	Chromium Plated Each
2 1/2	2	\$.50	\$.70

Refrigerator Levers
CAST BRASS—POLISHED

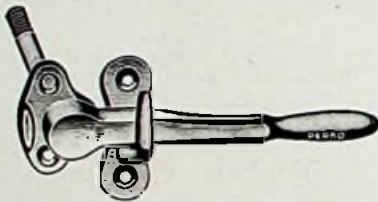


Fig. 1062

An integral stop on lever plate will keep lever in upright position when door is open.
Reversible for right or left hand.

Length lever Inches	Length bolt Inches	Price Each
5 1/2	5	\$1.20
6 1/2	7	1.70
9	7 1/2	3.00

Refrigerator Fasteners
CAST BRASS—POLISHED



Fig. 1063

Made either right or left hand with flush striking plate. Holds doors without strain on the rivet. Has brass pin.

Illustration shows right hand.

Length overall Inches	Size lever Inches	Price Each
5	4	\$.95
6 1/4	4 3/4	2.50

Above items desired CHROMIUM PLATED, add 50% to Polished Brass and Bronze Prices

Door Pulls
CAST BRONZE

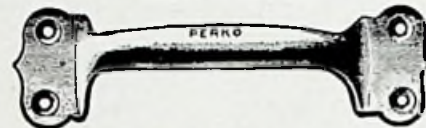


Fig. 775

Length Inches	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
4 1/4	\$.40	\$.55	\$.75
6	.50	.65	.85

Drawer Pulls
CAST BRASS—POLISHED

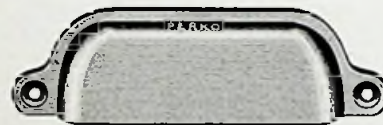


Fig. 958

Size Inches	Each
3	\$.40
4	.45

Flush Drawer Handle
CAST BRONZE—POLISHED

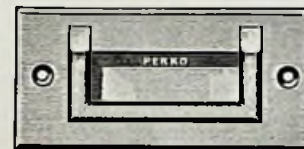


Fig. 1057

Size Inches	Each
1 3/8 x 3 1/4	\$.70

Flush Ring Pulls
CAST BRASS—POLISHED



Fig. 841

No.	Each	Size Plate Inches
1	\$.50	1 1/4 x 1 1/2
2	.65	1 1/2 x 1 7/8
3	.85	1 7/8 x 2 1/2
4	1.00	2 x 2 3/4

Hatch Adjusters

CAST BRONZE

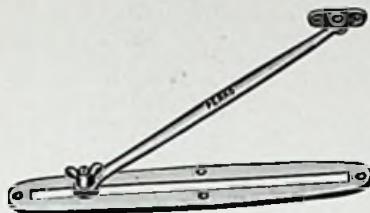


Fig. 797

No.	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Length Arm Inches	Length Plate Inches
1	\$2.25	\$2.75	\$3.25	8	8 1/2
2	2.75	3.25	3.75	10	10 3/4

Hatch Bracket

POLISHED BRASS

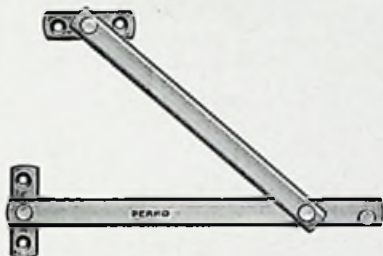


Fig. 406

Length Closed Inches	Polished Brass Per Pair	Nickel Plated Per Pair	Chromium Plated Per Pair	Size Brackets Inches	Weight Per Pair Pounds
10	\$3.00	\$4.00	\$4.60	2 3/8 x 3/4	2

Hatch Hinges

CAST BRONZE

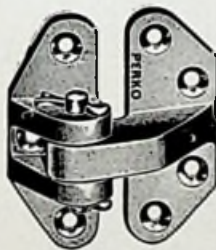


Fig. 773

A new type hatch hinge that will allow hatch cover to be laid flat on deck.

Size—2 1/2 x 3 1/4

Price Per Pair

Polished Bronze \$4.00
 Nickel Plated . . . 4.50
 Chromium Plated 5.25

Illustration shows one-half pair.

Door Buttons

CAST BRASS—POLISHED



Fig. 948

No.	Per Dozen Complete	Without Plate Per Dozen	Size Inches
1	\$3.50	\$1.40	1 1/2
2	4.00	2.00	1 3/4
3	5.00	2.25	2

Sash or Skylight Fastener

CAST BRONZE



Fig. 770

Size Inches	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
3/8 x 4	\$2.00	\$2.50	\$3.00

Skylight Hinge

CAST BRONZE—POLISHED



Fig. 771

Used with gutter made from 1/2 section of 3 inch brass tubing, cut shown one half pair, width of flange, 5 inches.

Polished, Per Pair	\$5.25
Chromium Plated, Per Pair	7.00

Skylight Raisers

ALL POLISHED BRASS



Fig. 772

Consists of two raisers and two tubing supports, tubing not furnished.

No.	Length of Arm Inches	For Tubing Diameter Inches	Polished Per Set	Chromium Plated Per Set
1	9 1/4	5/8	\$8.50	\$10.50
2	9 1/4	3/4	8.50	10.50
3	9 1/4	7/8	8.50	10.50

Skylight Quadrants

CAST BRONZE

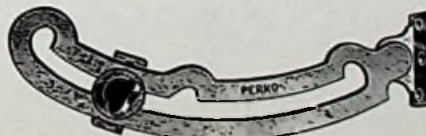


Fig. 449

CAST BRONZE

No.	Length Inches	Polished Bronze Per Pair	Nickel Plated Per Pair	Chromium Plated Per Pair
1	5	\$3.50	\$4.25	\$5.00
2	8	5.25	6.25	6.75
3	10	6.50	7.50	8.30
4	12	7.25	8.50	9.25

Sash Hinges CAST BRONZE

A set consists of two brackets with adjusting screws and two hinge plates, right and left hand.

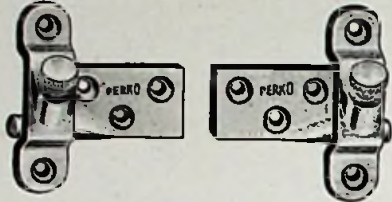


Fig. 418

No.	Size of Hinge Plates Inches	Size of Bracket Base Inches	Weight Per Set Ounces	Length of Pin Inches
1	1 1/8 x 3/8	2 1/2 x 1 1/4	6	7/8
2	1 1/8 x 3/8	3 1/4 x 1 1/4	7	7/8

No.	Polished Bronze Per Set	Nickel Plated Per Set	Chromium Plated Per Set
1	\$1.50	\$1.85	\$2.25
2	2.00	2.35	2.75

Combination Sash Hinges WITH CURTAIN ROD SOCKETS CAST BRONZE

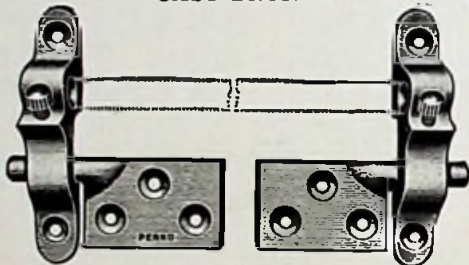


Fig. 960

Size of Hinge Plates Inches	Size of Bracket Base Inches	Weight Per Set Ounces	Length of Pin Inches
1 1/2 x 3/8	2 3/4 x 1 1/2	7	7/8

Polished Bronze Per Set	Nickel Plated Per Set	Chromium Plated Per Set
\$1.50	\$1.85	\$2.25

Wardrobe Hooks CAST BRONZE—POLISHED



Fig. 840

Width Inches	Projection Inches	Price Each
2 5/8	1 1/2	\$.30

Coat and Hat Hooks CAST BRASS—POLISHED



Fig. 959

Projection Inches	Each
2 1/4	\$.40

Sash Anti Rattlers CAST BRONZE—POLISHED

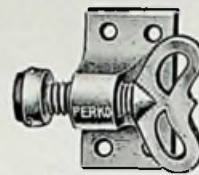


Fig. 839

Furnished with leather tip to prevent defacing of wood work. Size of base 1" x 1 3/4".

Polished Bronze, Each	\$1.25
Chromium Plated, Each	1.75

Sash Lifts CAST BRONZE



Fig. 776

No.	Size of Plate	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
1	1/2 x 1 1/2	\$.35	\$.50	\$.65
2	3/8 x 1 1/2	.35	.50	.65

Sash Fasteners LEFT OR RIGHT HAND CAST BRONZE—POLISHED



Fig. 777

Size—1 1/4 x 2 7/8 inches

Polished Bronze, Each	\$.60
Chromium Plated, Each	1.10

Please specify left or right hand

Flush Hatch Lifting Handle CAST BRONZE



Fig. 774

Designed especially for flush installation on boats, will not catch on table or chair legs or heels of shoes.

Size—3 x 2 3/8 inches

Price Each
Polished Bronze \$2.00
Nickel Plated 2.50
Chromium Plated 3.00



Fender Moulding

POLISHED BRASS

Hollow inside with flat face allowing screw heads to fit flush with surface, tapered edges to make neat fit.

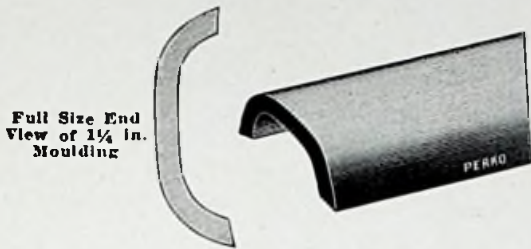


Fig. 227

Outside Width Inches	Projection Inches	Weight Per Foot Pounds	Polished Brass Per Foot	Chromium Plated Per Foot
3/8	3/8	1/4	\$.22	\$.42
1	3/8	1/2	.40	.65
1 1/4	3/8	3/4	.60	.90

Furnished with holes drilled and countersunk at 10c per hole. Send information as to size of holes spacing, etc.

Only furnished in standard mill lengths.

Moulding Ends

POLISHED CAST BRONZE

For finishing off ends of moulding, Fig. 227.

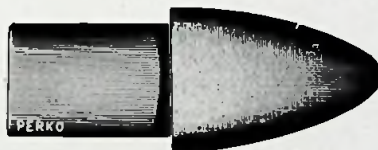


Fig. 228

For Moulding Inches	Length Overall Inches	Weight Each Ounces	Polished Bronze Each	Chromium Plated Each
1	2 1/2	1 1/2	\$.35	\$.55
1 1/4	3	2 1/2	.40	.60

Fender Moulding Couplings

CAST BRONZE

Fits inside moulding at joint, where two pieces are joined together.



Fig. 229

For Moulding Inches	Width Inches	Length Inches	Plain Bronze Each
1	3/4	2 1/2	\$.20
1 1/4	1	3	.30

Hatch Moulding

POLISHED BRASS

This type moulding insures a smooth and neat surface, as it is fastened to hatch on side, screw heads are invisible when hatch is closed.

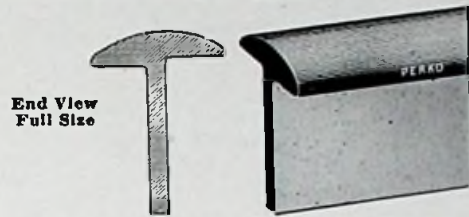


Fig. 232

Width Surface Inches	Depth Inches	Weight Per Foot Ounces	Polished Brass Per Foot	Chromium Plated Per Foot
3/4	1 1/8	10	\$.50	\$.80

Furnished with holes drilled and countersunk at 10c per hole. Send information as to size of holes spacing, etc.

Only furnished in 10 and 12 foot lengths, no cutting.

Flat Hatch Trim

POLISHED BRASS

For neat finishing around edge of hatch. Made of 18 B & S gauge metal in standard lengths.

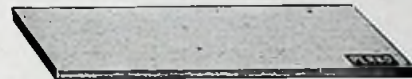


Fig. 243

Width Inches	Weight Per Foot Ounces	Polished Brass Per Foot	Chromium Plated Per Foot
1	2 3/4	\$.21	\$.38
1 1/4	3	.22	.39
1 1/2	3 1/2	.25	.42

Furnished with holes drilled and countersunk at 10c per hole. Send information as to size of holes spacing, etc.

Continuous Hinge

WROUGHT BRASS AND NICKEL SILVER

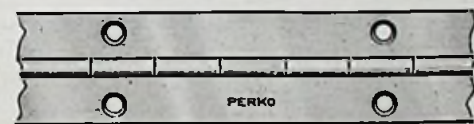


Fig. 211

The neatest and most practical hinge for use on hatch covers, locker doors, windshields, etc. Hinge has brass pin, and is drilled and countersunk. Holes are two inches apart, center to center.

Width Open Inches	Polished Brass Each	Nickel Plated Each	Chrom. Plated Each	Length Inches	Gauge
1 1/8	\$1.50	\$1.75	\$2.00	60	.045
1 1/4	1.65	1.90	2.25	60	.040
1 1/2	1.75	2.00	2.50	60	.040
1 1/2	2.10	2.35	3.00	72	.040
2	2.30	2.55	3.40	60	.040
2	2.75	3.00	3.85	72	.040

Special widths and lengths made to order. Price on application.

ANCHOR SHACKLES DROP FORGED STEEL AND BRONZE

SCREW PIN



Fig. 314

ROUND PIN



Fig. 315

Prices and Dimensions Below Apply to Both Figs. 314 and 315

Size Inches	Galvanized Each	Japanned Each	Plain Bronze Each	Polished Bronze Each	Length Inside Inches	Between Eyes Inches	Diameter Pin Inches	Weight Per 100 in Pounds
3/8	\$.28		\$.50	\$.70	7/8	1/8	1/4	7
1/4	.28	\$.25	.50	.70	1 1/8	1/2	3/8	12
5/16	.30	.28	.65	.85	1 1/4	5/8	1/2	21
3/8	.35	.33	1.00	1.25	1 5/8	3/4	5/8	32
7/16	.45	.40	1.25	1.50	2	7/8	3/4	49
1/2	.50	.45	2.00	2.35	2 1/4	1	7/8	73
5/8	.80	.70	3.00	3.50	2 7/8	1 1/8	1	151
3/4	.90	.75			3	1 1/4	1 1/8	226
7/8	1.40	1.10			3 1/4	1 5/8	1 1/4	340
1	1.80	1.45			3 3/4	2	1 1/2	495
1 1/8	2.60	2.10			4 1/4	2 1/4	1 3/8	691
1 1/4	3.20	2.60			4 1/2	2 3/8	1 3/4	899
1 3/8	4.40	3.60			5 1/4	2 7/8	1 7/8	1219
1 1/2	5.25	4.20			5 3/4	3 1/8	2	1595
1 3/4	10.00	8.00			7	3 3/8	2 1/4	2750
2	15.00	12.00			7 3/4	3 7/8	2 1/2	3900
2 1/4	40.00	34.00			8 3/4	4 1/8	2 3/4	5650
2 1/2	49.00	43.00			10			8350

Bronze Shackles Are Only Furnished with Screw Pins

CHAIN SHACKLES DROP FORGED STEEL

SCREW PIN

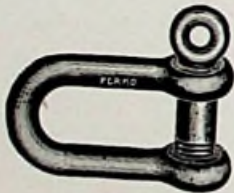


Fig. 338

ROUND PIN

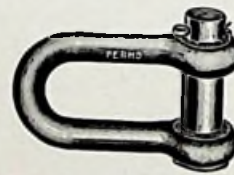


Fig. 339

Prices and Dimensions Below Apply to Both Figs. 338 and 339

Size Inches	Galvanized Each	Japanned Each	Length Inside Inches	Between Eyes Inches	Diameter Pin Inches	Weight Per 100 in Pounds
1/4	\$.28	\$.25	3/8	1/2	1/8	12
5/16	.30	.28	1	5/8	3/8	18
3/8	.35	.33	1 1/4	3/4	1/2	28
7/16	.45	.40	1 1/2	7/8	5/8	44
1/2	.50	.45	1 5/8	1	3/4	68
5/8	.80	.70	2	1 1/8	7/8	130
3/4	.90	.75	2 1/8	1 1/4	1	201
7/8	1.40	1.10	2 3/8	1 5/8	1 1/8	288
1	1.80	1.45	3 1/4	2	1 1/4	441
1 1/8	2.60	2.10	3 1/2	2 1/4	1 3/8	625
1 1/4	3.20	2.60	3 5/8	2 3/8	1 1/2	800
1 3/8	4.40	3.60	4 1/2	2 7/8	1 3/4	1110
1 1/2	5.25	4.20	5	3 1/8	1 7/8	1372
1 3/4	10.00	8.00	5 3/8	3 3/8	2	2600
2	15.00	12.00	6 3/4	3 7/8	2 1/4	3600
2 1/4	40.00	34.00	7 1/4	4 1/8	2 1/2	5000
2 1/2	49.00	43.00	8 1/4		2 3/4	7400



Wire Rope Thimbles

GALVANIZED FORGED STEEL

REGULAR PATTERN



Fig. 466

For Size Rope Inches	Price Per 100	Dimensions in Inches					Est. Wt. Per 100 in Lbs.
		A	B	C	D	E	
1/8	\$ 4.40	1 1/2	1 1/8	1 1/8	5/8	7/8	2
1/8	4.40	1 1/2	1 1/8	1 1/8	5/8	7/8	2 1/2
1/4	4.40	1 1/2	1 1/8	1 1/4	3/4	7/8	3 1/2
1/4	5.25	2 1/8	1 3/8	1 1/8	1 1/8	1 1/8	5 5/8
3/8	6.00	2 3/8	1 3/8	1 1/2	1	1 1/8	7 1/2
1/2	7.00	2 3/8	1 3/4	1 3/8	1 1/8	1 1/8	9 1/4
1/2	8.00	2 3/4	1 1/2	1 3/4	1 1/8	1 1/8	13 1/4
3/8	11.00	3 3/8	2 1/2	2 1/4	1 3/8	1 1/8	22 1/2
3/4	13.00	3 1/2	2 3/4	2 3/8	1 1/8	1	26
3/8	16.00	4	3	2 1/2	1 3/4	1 1/8	49
1	21.00	4 3/4	3 1/4	3	2	1 1/8	61
1 1/8	38.00	5 1/4	3 1/2	3 3/8	2 1/8	1 1/8	65
1 1/4	44.00	6	4 1/4	3 3/4	2 3/8	1 1/8	103
1 1/2	120.00	6 7/8	4 3/4	4	2 7/8	1 1/8	163
1 3/4	160.00	7 1/2	5 1/4	4 3/4	3 1/8	1 1/8	255
2	200.00	8 3/4	6	5	3 3/8	2 1/8	380

Open type made up to 1 1/8 inches.

A—Overall Length; B—Overall Width; C—Length Inside; D—Width Inside; E—Width of Score.

Manila Rope Thimbles

GALVANIZED DROP FORGED STEEL



Fig. 468

For Dia. Rope Inches	Galvanized Per 100	I. D. Hole	O. D. Edge to Edge	Weight Per 100 in Lbs.
1/8	\$ 5.00	3/8	3/4	1 1/2
3/8	5.00	1/2	7/8	2 1/4
1/2	6.00	3/4	1	3 1/8
1/2	8.00	3/4	1 1/4	6 1/2
5/8	10.00	1 1/8	1 1/2	9 3/8
3/4	12.00	1 1/8	1 3/4	16 1/2
3/8	15.00	1 1/8	2	20 1/4
1	18.00	1 1/2	2 1/4	33 3/4
1 1/8	20.00	1 3/8	2 1/2	39 1/2
1 1/4	30.00	1 1/2	2 3/4	52
1 3/8	40.00	1 3/4	3	62
1 1/2	50.00	2	3 1/2	112
1 3/4	100.00	2 3/8	4	146
2	200.00	2 3/4	4 1/2	206

Sail Thimbles

GALVANIZED MALLEABLE IRON AND BRASS



Fig. 469

LIGHT

*Size Ins.	Galv. Iron Per Doz.	Spun Brass Per Doz.	Cast Brass Per Doz.	Weight Per Doz.	For Diam. Rope Inches
1/8		\$.35			1/8
1/8		.50			1/4
3/8	\$.45	.55	\$.84		1/4
1/4		.75	.98		1/8
1	.60	.85	1.12		5/8
1 1/4	.80	1.50	1.50		3/8
1 1/2	1.00		1.86		1/8
1 3/4	1.25		2.40		1/2
2	1.50		2.80		5/8
2 1/4	1.85		3.20		3/8
2 1/2	2.25		3.60		3/4
2 3/4	2.50		3.95		3/4
3	3.00		4.90		1/8

HEAVY

2	2.00	2 1/8 lbs.	3/8
2 1/4	2.50	2 7/8 lbs.	3/8
2 1/2	3.00	3 1/8 lbs.	3/4
2 3/4	3.50	4 3/8 lbs.	7/8
3	4.00	6 lbs.	7/8
3 1/2	5.00	7 7/8 lbs.	1
4	6.00	10 3/4 lbs.	1 1/8
4 1/2	10.00	16 lbs.	1 1/4
5	15.00	20 lbs.	1 1/2

*Diameter outside from edge to edge. Specify light or heavy.

Bronze Wire Rope Thimbles

WROUGHT BRONZE—DIPPED



Fig. 930

For dimensions refer to Fig. 466.

For Size Rope Inches	Price Each
1/8	\$.15
1/8	.15
1/4	.20
1/4	.25
3/8	.35
3/8	.45
1/2	.50
1/2	.70

Solid Wire Rope Thimbles

MANGANESE BRONZE—POLISHED



Fig. 929

For Size Rope Inches	Price Each	Thick-ness Inches	For Turnbuckle Inches
1/8	\$.30	7/32	1/4
1/8	.35	1/8	1/8
1/4	.40	1/4	3/8
1/4	.45	1/4	1/2
3/8	.55	1/2	3/8
3/8	.80	1/2	3/8

OPEN TURNBUCKLES

DROP FORGED STEEL
GALVANIZED AND SELF COLORED

HOOK AND EYE

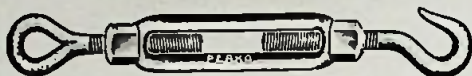


Fig. 390

EYE AND EYE



Fig. 391

HOOK AND HOOK

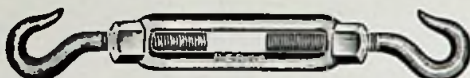


Fig. 392

JAW AND EYE

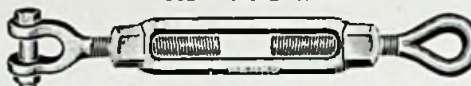


Fig. 393

JAW AND JAW

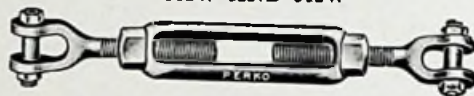


Fig. 394

All Turnbuckles Have Right and Left Hand Threads—Threads Are All Hot Galvanized.
All Turnbuckle Jaws $\frac{3}{8}$ and Smaller Have Hex. Head Bolt and Nut.
All Turnbuckle Jaws $\frac{3}{4}$ and Larger Have Pin and Cotter.
 $\frac{3}{4}$ and Larger Furnished with Bolt and Nut To Order.

Diameter & Takeup	Eye & Eye		Jaw & Eye		Jaw & Jaw		Diameter & Takeup	Eye & Eye		Jaw & Eye		Jaw & Jaw	
	Hook & Hook Galv. Each	Hook & Hook S. C. Each	Galv. Each	S. C. Each	Galv. Each	S. C. Each		Hook & Hook Galv. Each	Hook & Hook S. C. Each	Galv. Each	S. C. Each	Galv. Each	S. C. Each
* $\frac{1}{16}$ x 3	\$.40	\$.36	\$.50	\$.45	\$.60	\$.55	* $1\frac{1}{4}$ x 12	\$ 7.25	\$ 6.00	\$ 9.00	\$ 7.50	\$ 11.00	\$ 9.00
* $\frac{1}{4}$ x 4	.40	.36	.50	.45	.60	.55	18	9.00	7.50	11.00	9.00	13.00	10.50
* $\frac{3}{8}$ x 6	.60	.52	.74	.64	.88	.78	24	11.50	9.50	13.00	11.00	15.00	12.50
* $\frac{1}{2}$ x 6	.90	.80	1.10	.95	1.30	1.15	36	16.00	13.00	17.00	14.00	18.00	15.00
9	1.45	1.20	1.70	1.40	1.90	1.55	* $1\frac{1}{2}$ x 12	11.00	9.00	13.00	10.50	15.00	12.00
12	1.70	1.40	2.00	1.60	2.30	1.85	18	13.50	11.00	15.75	13.00	18.00	15.00
* $\frac{3}{8}$ x 6	1.15	.95	1.30	1.10	1.50	1.25	24	17.00	14.00	20.00	16.50	23.00	19.00
9	1.75	1.45	2.00	1.70	2.30	1.90	36	22.00	18.00	26.00	21.00	30.00	24.00
12	2.10	1.70	2.40	2.00	2.70	2.20	48	28.00	23.00	33.00	27.00	38.00	30.00
18	2.60	2.20	3.10	2.60	3.50	2.90	* $1\frac{3}{4}$ x 18	22.00	18.00	28.00	22.50	33.00	27.00
* $\frac{3}{4}$ x 6	1.50	1.25	1.75	1.45	2.00	1.65	24	28.00	23.00	34.00	28.00	39.00	32.00
9	2.30	1.90	2.70	2.20	3.00	2.50	36	36.00	30.00	42.00	35.00	48.00	39.00
12	2.70	2.20	3.10	2.60	3.50	2.90	48	47.00	38.00	55.00	44.00	62.00	50.00
18	3.60	3.00	4.20	3.50	4.70	3.90	* 2 x 24	42.00	35.00	50.00	41.00	58.00	47.00
24	4.20	3.50	4.90	4.10	5.50	4.60	36	50.00	40.00	59.00	48.00	68.00	55.00
* $\frac{7}{8}$ x 12	3.40	2.80	3.90	3.20	4.50	3.70	48	62.00	50.00	74.00	60.00	85.00	70.00
18	4.30	3.60	5.00	4.20	5.75	4.70	* $2\frac{1}{4}$ x 24	60.00	50.00	74.00	60.00	85.00	70.00
24	5.25	4.40	6.25	5.10	7.00	5.75	36	68.00	55.00	84.00	69.00	100.00	82.00
* 1 x 12	4.20	3.50	4.80	4.00	5.50	4.60	48	86.00	70.00	105.00	84.00	125.00	98.00
18	5.50	4.50	6.50	5.25	7.25	6.00	* $2\frac{1}{2}$ x 24	80.00	65.00	100.00	78.00	120.00	91.00
24	6.75	5.50	8.00	6.50	8.75	7.25	36	93.00	75.00	117.00	94.00	141.00	112.00
36	8.50	7.00	10.00	8.25	11.50	9.25	48	110.00	90.00	138.00	108.00	166.00	126.00
* $1\frac{1}{8}$ x 12	5.25	4.20	6.00	4.90	6.75	5.50							
18	6.75	5.50	8.00	6.50	8.75	7.25							
24	8.25	6.75	9.50	8.00	10.50	8.75							
36	10.50	8.50	12.00	9.75	13.50	11.00							

For One Lock Nut Add 5% to List. For Two Lock Nuts Add 10% to List.

*Indicates standard marine lengths.

Improved Pipe Turnbuckles

GALVANIZED DROP FORGED STEEL
WITH LOCK NUTS

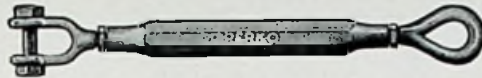


Fig. 398

Diam. Thread Inches	Eye and Eye Each	Jaw and Eye Each	Jaw and Jaw Each	Length of Pipe Inches	Weight Per 100 in Lbs.
1/4	\$.85	\$.95	\$1.05	5 1/2	47 1/2
5/16	1.00	1.10	1.20	5 3/4	62 1/2
3/8	1.15	1.25	1.35	6 1/2	102
1/2	1.55	1.75	1.95	8	178
5/8	2.20	2.45	2.70	10 3/4	369
3/4	3.00	3.35	3.70	12	500
7/8	4.00	4.50	5.00	15	775
1	5.00	5.60	6.20	15	1025
1 1/4	8.00	9.00	10.00	16	2050
1 1/2	15.00	16.50	18.00	21	3200
1 3/4	25.00	28.00	31.00	21	4500
2	40.00	43.00	47.00	24	7500
2 1/4	65.00	70.00	75.00	24	
2 1/2	80.00	90.00	100.00		

Sizes larger than 1 1/4 inches are furnished in the round type.

Jaws 5/8 and smaller have hex. head bolt and nut.

Jaws 3/4 and larger have pin and cotter, furnished with bolt and nut to order.

Petite Brass Turnbuckles

RIGHT AND LEFT HAND THREADS



Fig. 396

Size No.	Thrd. Diam. Inches	Lgth. Takeup Inches	Overall Lgth. Closed Inches	Inside Diam. Eye Inches	Plain Brass Each
1	1/8	3/8	2 1/8	1/8	\$.20
2	3/16	1/2	3 1/8	1/4	.25
3	1/4	3/4	3 1/4	3/8	.30
4	5/16	1 1/4	5 1/8	1/2	.35
5	3/8	1 3/4	6	5/8	.40

Swivels

GALVANIZED MALLEABLE IRON AND BRONZE



Fig. 624

Size No.	Galvanized Each	Plain Bronze Each	Length Inches	Weight Per 100 in Lbs.
1	\$.05	\$.15	1 3/4	4
2	.09	.20	2 1/8	7 1/2
3	.14	.30	2 1/2	11 1/4
4	.20		3 1/4	19 1/2
5	.25		3 1/2	24 1/2
6	.40		4 3/8	41

Swivels

WELDLESS DROP FORGED STEEL



Fig. 622

Size Inches	Galv. Each	Overall Length Inches	Width Inside Inches	Est. Weight Each in Lbs.	Est. Ult. T. S. Tons
1/4	\$.75	3 1/4	3/4	1/8	2 1/2
5/16	.90	4 1/8	1	3/16	4 1/4
3/8	1.00	5	1 1/4	5/8	5 1/2
1/2	1.50	6	1 1/2	1 1/4	9 1/2
5/8	2.50	7 1/2	1 3/4	2 1/4	14 3/4
3/4	3.50	9	2	3 1/2	18 1/2
7/8	4.50	9 1/2	2 1/4	5 3/8	22 1/4
1	5.50	11 1/2	2 1/2	8 3/4	27 1/2
1 1/4	11.00	14	3	16	37 1/2

Deduct 10% for Self Colored Finish.

Swivels with Jaw End

DROP FORGED STEEL



Fig. 623

Size Inches	Galv. Each	Overall Length Inches	Width Between Jaws Inches	Size of Bow in Clear Inches	Est. Wt. Each in Lbs.
1/4	\$1.00	3 1/4	1/2	3/4 x 3/4	7/16
5/16	1.15	4 1/8	1/2	1 x 1	1/8
3/8	1.25	4 1/2	5/8	1 1/4 x 1	1 1/8
1/2	2.00	5 5/8	3/4	1 1/2 x 1 1/4	1 1/4
5/8	2.80	7	1	1 3/4 x 1 1/2	2 1/8
3/4	3.90	8	1 1/8	2 x 1 3/4	3 1/2
7/8	5.00	9	1 1/4	2 1/4 x 2	5 1/4
1	6.00	11	1 1/2	2 1/2 x 2 1/2	9 3/4
1 1/4	12.00	13 1/2	1 3/4	3 x 2 3/4	16 3/4

Deduct 10% for Self Colored Finish.

Note—Jaw End Swivels have same approximate tensile strength as Swivels, Fig. 622.

Jaw and Jaw Swivels

DROP FORGED STEEL



Fig. 481

Size Inches	Galv. Each	Overall Length Inches	Dimensions of Jaws Inside		Est. Wt. Each in Lbs.
			Width Inches	Length Inches	
3/8	\$1.40	4 3/4	1 1/8	5/8	1
1/2	2.25	6 1/8	1 3/8	3/4	1 3/4
5/8	3.00	7 1/2	1 1/4	1	3
3/4	4.25	8 3/8	1 3/8	1 1/8	5

For Self Colored Finish, Deduct 10%

Hooks and Thimbles

DROP FORGED STEEL
FOR MANILA ROPE



Fig. 609

Size Inches	Galv. Each	Length Overall Inches	For Diam. Rope Inches	Weight Per 100 in Lbs.
1/4	\$.22	2	3/8	6
5/16	.22	2 3/8	1/4	10 1/2
3/8	.25	2 7/8	1/2	18
1/2	.30	3 5/8	5/8	37 1/2
5/8	.50	4 5/8	3/4	80
3/4	.60	5 3/8	7/8	150
7/8	.80	6 1/4	1	212
1	1.00	7	1 1/8	300
1 1/8	1.35	7 1/2	1 1/4	350
1 1/4	1.65	8 3/8	1 3/8	450

Deduct 5% for Self Colored Finish.

Hooks and Thimbles

DROP FORGED STEEL
FOR WIRE ROPE



Fig. 610

Size Inches	Galv. Each	Length Overall Inches	Score of Thimble Inches	Weight Per 100 in Lbs.
1/4	\$.22	2	1/4	8
5/16	.22	2 3/8	1/4	11
3/8	.25	2 3/4	1/4	24
1/2	.30	3 1/4	3/8	32
5/8	.50	4	1/2	62
3/4	.60	4 7/8	1/2	103
7/8	.80	5 3/8	3/8	142
1	1.00	6 1/4	3/4	225
1 1/8	1.35	7	3/8	293
1 1/4	1.65	7 1/4	1	400

Deduct 5% for Self Colored Finish.

Small Eye Hooks FOR BLOCKS—DROP FORGED STEEL



Fig. 656

Size Inches	Galv. Each	Length Overall Inches	Throat Opening Inches	Est. Wt. Per 100 in Lbs.
1/4	\$.15	2	1 1/2	7
5/16	.15	2 3/8	1 1/2	10
3/8	.18	2 1/2	1 1/2	21
1/2	.20	3 1/4	1 1/2	26
5/8	.35	4	1 1/2	50
3/4	.45	4 7/8	1 1/2	92
7/8	.60	5 3/8	1 1/2	128
1	.75	6 1/4	1 1/4	200
1 1/8	1.05	7	1 1/8	255
1 1/4	1.30	7 3/8	1 1/2	375

"S" Hooks

WROUGHT STEEL GALVANIZED



Fig. 680

Size Inches	Price Per Doz.	Length Overall Inches	Est. Wt. Per Doz. in Lbs.
1/4	\$.36	1 1/2	1/4
5/16	.48	2	1/2
3/8	.96	2 1/2	1
1/2	1.20	3	1 3/4
5/8	1.80	3 3/4	2 3/4
3/4	2.40	3 3/4	4

Screw Hooks

STEEL—GALVANIZED

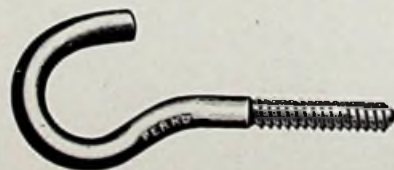


Fig. 779

Size Inches	Galvanized Per Doz.	Length Overall Inches	Est. Wt. Per Doz. in Lbs.
1/4	\$.95	3 1/2	3/4
5/16	1.10	4	1
3/8	1.20	4 3/4	2 1/8
1/2	2.20	5 3/8	4 3/4



Small Eye Match Hooks

DROP FORGED



Fig. 439

Diameter Hook Inches	Galv. List Each	Length Hook Inches	Inside Diam. of Eye Inches	Inside Diam. of Hook Inches	Weight Per 100 in Lbs.
1/4	\$.30	2 1/8	1/2	5/8	8
5/16	.30	2 1/2	3/8	3/4	12 1/2
3/8	.35	2 7/8	1/4	7/8	22
1/2	.40	3 1/2	7/8	1	38
5/8	.70	4 1/8	1	1 1/4	78
3/4	.90	5 1/8	1 1/8	1 3/8	113
7/8	1.20	5 7/8	1 1/4	1 1/2	175
1	1.50	6 1/4	1 3/8	1 3/4	281

Mooring or Towing Hooks

DROP FORGED STEEL WITH SAFETY LATCH



Fig. 611

Size No.	Galv. Each	Inside Diam. Eye Inches	Outside Diam. Eye Inches	Extreme Length Inches	Extreme Width Inches	Throat Opening Inches
2	\$.75	3/4	1 1/2	4 7/8	2 1/4	3/8
3	.90	7/8	1 3/4	5	3 1/8	1/2
4	1.10	1	2	5 1/2	3 1/4	3/4

Match Hooks and Wire Rope Thimbles



Fig. 539

Size Inches	Galv. List Each	Score of Thimble Inches	Length Hook Inches	Inside Diam. of Eye Inches	Inside Diam. of Hook Inches	Approx. Weight Per 100 in Lbs.
1/4	\$.40	7/8	2 1/8	1/2	3/8	11
5/16	.40	1/4	2 1/2	3/8	3/4	17
3/8	.45	7/8	2 7/8	1/2	7/8	27
1/2	.55	1 1/8	3 1/2	3/8	1	51
5/8	.90	1/2	4 1/8	1	1 1/4	95
3/4	1.10	3/8	5 1/8	1 1/8	1 3/8	141
7/8	1.50	3/4	5 7/8	1 1/4	1 1/2	207
1	1.85	3/8	6 1/4	1 3/8	1 3/4	334

Wire Rope Clips

MALLEABLE IRON SADDLE STEEL U-BOLT AND NUTS GALVANIZED



Fig. 333

Size Wire Rope Inches	Galvanized Per 100	Est. Wt. Per 100 in Lbs.
1/8	\$ 8.00	8 1/2
1/4	8.00	16 1/2
5/16	9.00	19
3/8	12.00	25
7/16	15.50	32
1/2	18.50	40
5/8	24.50	62
3/4	35.00	101
7/8	50.00	149
1	60.00	190
1 1/8	95.00	310
1 1/4	112.00	375
1 3/8	130.00	560
1 1/2	150.00	645
1 3/4	415.00	1085
2	550.00	1620

Match Hooks and Manila Rope Thimbles



Fig. 540

Size Inches	Galv. List Each	Thimble Scored For Rope Diam. Inches	Length Hook Inches	Inside Diam. of Eye Inches	Inside Diam. of Hook Inches	Approx. Weight Per 100 in Lbs.
1/4	\$.40	3/8	2 1/4	5/8	3/4	10
5/16	.40	7/16	2 1/2	3/4	3/4	17
3/8	.45	1/2	3 1/8	7/8	7/8	25
1/2	.55	3/8	3 3/8	1 1/8	1	49
5/8	.90	3/8	4 1/2	1 1/4	1 1/4	107
3/4	1.10	1	5 1/8	1 1/2	1 3/8	166
7/8	1.50	1 1/8	6 1/8	1 3/4	1 1/2	254
1	1.85	1 1/4	7	2	1 3/4	377

DEDUCT 5% FOR SELF COLORED



Screw Eye Bolts

WELDLESS DROP FORGED STEEL
LARGE EYE



Fig. 500

Size Inches	Galv. Each	Inside Diam. Eye Inches	Weight Per 100 in Lbs.
1/4 x 2	\$.10	1/2	6
5/16 x 2 1/4	.12	5/8	12 3/4
3/8 x 2 1/2	.14	3/4	17
1/2 x 3 1/4	.20	1	43
5/8 x 4	.35	1 1/4	92
3/4 x 4 1/2	.60	1 1/2	146
7/8 x 5	.85	1 3/4	221
1 x 6	1.25	2	325
1 1/4 x 8	2.25	2 1/2	575

Sizes are: 1st, Diameter Screw.
2nd, Length under Eye.

Shoulder Screw Eye Bolts

WELDLESS DROP FORGED STEEL AND BRONZE
LARGE EYE



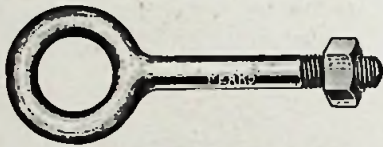
Fig. 501

Size Inches	Galv. Each	Polished Manganese Bronze Each	Inside Diam. Eye Inches	Weight Per 100 in Lbs.
1/4 x 2	\$.10	\$.50	1/2	4 1/2
5/16 x 2 1/4	.12	.60	5/8	9
3/8 x 2 1/2	.14	.70	3/4	17
1/2 x 3 1/4	.20	1.00	1	33
5/8 x 4	.35	1.75	1 1/4	70
3/4 x 4 1/2	.60		1 1/2	117
7/8 x 5	.85		1 3/4	194
1 x 6	1.25		2	288
1 1/4 x 8	2.25		2 1/2	500

Sizes are: 1st, Diameter Screw.
2nd, Length under Shoulder.

Nut Eye Bolts

DROP FORGED STEEL—LARGE EYE
BRONZE ONLY WITH SHOULDER



Without Shoulder—Fig. 522
REGULAR

Size Inches	Galv. Each	Plain Bronze Each	Polished Bronze Each
1/4 x 2	\$.14	\$.45	\$.50
5/16 x 2 1/4	.16	.50	.60
3/8 x 2 1/2	.18	.60	.70
1/2 x 3 1/4	.25	.90	1.00
5/8 x 4	.45	1.50	1.75
3/4 x 4 1/2	.70		
7/8 x 5	1.00		
1 x 6	1.50		
1 1/4 x 8	2.50		



With Shoulder—Fig. 523
EXTRA LONG

Size Inches	Galv. Each	Plain Bronze Each	Polished Bronze Each	Inside Diam. Eye Inches	Regular Weight Per 100 in Lbs.	Extra Long Weight Per 100 in Lbs.
1/4 x 4	\$.20	\$.55	\$.60	1/2	7	10
5/16 x 4 1/4	.24	.65	.75	5/8	11	16
3/8 x 4 1/2	.28	.75	.85	3/4	20	27
1/2 x 6	.40	1.15	1.25	1	44	56
5/8 x 6	.60	1.75	2.00	1 1/4	86	104
3/4 x 6	.95			1 1/2	124	150
7/8 x 8	1.35			1 3/4	270	323
1 x 9	1.90			2	329	398
1 1/4 x 11	3.25			2 1/2	688	835

ADDITIONAL LENGTHS—GALVANIZED

Length of Shank Inches	Diameter of Bolts							
	1/4	5/16	3/8	1/2	5/8	3/4	7/8	1
3	\$.20	\$.24	\$.28					
4	.20	.24	.28	\$.40				
5	.21	.25	.30	.40	\$.60			
6	.22	.26	.32	.40	.60	.95		
7			.34	.42	.63	.99	\$1.35	
8			.36	.44	.66	1.03	1.35	\$1.90
10				.48	.72	1.11	1.45	1.96
12					.78	1.19	1.55	2.08
15					.87	1.31	1.70	2.26
18					.96	1.43	1.85	2.44
20						1.51	1.95	2.56

DEDUCT 5% FOR SELF COLORED FINISH—ALL BRONZE BOLTS FURNISHED ONLY WITH SHOULDER.

If bolts are ordered with shank lengths other than catalogue listed dimensions, the price for the next longer listed length will apply, plus a \$2.00 charge per diameter for machine set-up.

Bolts with shanks longer than listed lengths can be supplied in all diameters and styles. Prices on application.

Screw Ring Bolts

DROP FORGED STEEL



Fig. 618

Shoulder Screw Ring Bolts

DROP FORGED STEEL AND CAST BRONZE

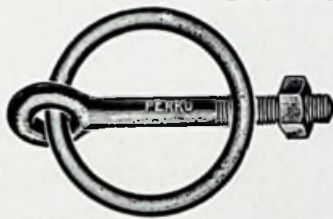


Fig. 619

Size Inches	Galv. Each	I. D. Ring Inches	Weight Per 100 in Lbs.	Size Inches	Galv. Each	Pollished Bronze Each	Weight Per 100 in Lbs.
1/4 x 2	\$.25	1 3/4	14	1/4 x 2	\$.25	\$1.00	14
5/16 x 2 1/4	.30	2	25	5/16 x 2 1/4	.30	1.15	24
3/8 x 2 1/2	.35	2	40	3/8 x 2 1/2	.35	1.30	39
1/2 x 3 1/4	.50	2 1/2	90	1/2 x 3 1/4	.50	2.25	82
5/8 x 4	.85	2 3/4	167	5/8 x 4	.85	3.50	154
3/4 x 4 1/2	1.35	3	254	3/4 x 4 1/2	1.35		256
7/8 x 5	2.00	3 1/4	408	7/8 x 5	2.00		380
1 x 6	2.90	3 3/4	596	1 x 6	2.90		550
1 1/4 x 8	5.75	5	1125	1 1/4 x 8	5.75		1100

Nut Ring Bolts

DROP FORGED STEEL AND CAST BRONZE



Without Shoulder—Fig. 620



With Shoulder—Fig. 621

REGULAR			EXTRA LONG		Diam. Stock Inside Diam. Rings Inches	Regular Weight Per 100 in Lbs.	Extra Long Weight Per 100 in Lbs.
Size Inches	Galv. Each	Pollished Bronze Each	Size Inches	Galv. Each			
1/4 x 2	\$.30	\$1.00	1/4 x 4	\$.35	1/4 x 1 3/4	15	18
5/16 x 2 1/4	.35	1.15	5/16 x 4 1/4	.40	5/16 x 2	27	32
3/8 x 2 1/2	.40	1.30	3/8 x 4 1/2	.50	3/8 x 2	44	51
1/2 x 3 1/4	.55	2.25	1/2 x 6	.70	1/2 x 2 1/2	97	109
5/8 x 4	.85	3.50	5/8 x 6	1.00	5/8 x 2 3/4	178	196
3/4 x 4 1/2	1.35		3/4 x 6	1.60	3/4 x 3	271	297
7/8 x 5	2.00		7/8 x 8	2.35	7/8 x 3 1/4	491	544
1 x 6	2.90		1 x 9	3.30	1 x 3 3/4	659	728
1 1/4 x 8	5.75		1 1/4 x 11	6.50	1 1/4 x 5	1375	1522

ADDITIONAL LENGTHS—GALVANIZED

Length of Shank Inches	Diameter of Bolts							
	1/4	5/16	3/8	1/2	5/8	3/4	7/8	1
3	\$.35	\$.40	\$.50					
4	.35	.40	.50	\$.70				
5	.36	.41	.52	.70	\$1.00			
6	.37	.42	.54	.70	1.00	\$1.60		
7			.56	.72	1.03	1.64		
8			.58	.74	1.06	1.68	\$2.35	
10				.78	1.12	1.76	2.45	\$3.36
12					1.18	1.84	2.55	3.48

DEDUCT 5% FOR SELF COLORED FINISH—ALL BRONZE BOLTS FURNISHED ONLY WITH SHOULDER

If bolts are ordered with shank lengths other than catalogue listed dimensions, the price for the next longer listed length will apply, plus a \$2.00 charge per diameter for machine set-up.

Bolts with shanks longer than listed lengths can be supplied in all diameters and styles. Prices on application.

Rivet Eye Bolts

WELDLESS DROP FORGED STEEL
LARGE EYE

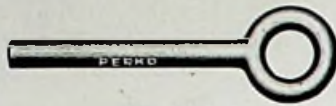


Fig. 914

Shoulder Rivet Eye Bolts

WELDLESS DROP FORGED STEEL
LARGE EYE

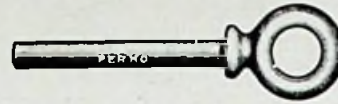


Fig. 916

Size Inches	Galv. Each	Inside Diam. Eye Inches	Weight Per 100 in Lbs.
1/4 x 4	\$.14	1/2	9 3/4
5/16 x 4 1/4	.16	5/8	15 1/4
3/8 x 4 1/2	.18	3/4	25
1/2 x 6	.25	1	61
5/8 x 6	.45	1 1/4	95
3/4 x 6	.70	1 1/2	145
7/8 x 8	1.00	1 3/4	255
1 x 9	1.50	2	370
1 1/4 x 11	2.50	2 1/2	709

Size Inches	Galv. Each	Inside Diam. Eye Inches	Weight Per 100 in Lbs.
1/4 x 4	\$.14	1/2	10 1/2
5/16 x 4 1/4	.16	5/8	16 1/2
3/8 x 4 1/2	.18	3/4	25
1/2 x 6	.25	1	68 1/2
5/8 x 6	.45	1 1/4	95
3/4 x 6	.70	1 1/2	165
7/8 x 8	1.00	1 3/4	231
1 x 9	1.50	2	380
1 1/4 x 11	2.50	2 1/2	750

Sizes are 1st, diameter shank; 2nd, length under eye.

Sizes are 1st, diameter shank; 2nd, length under shoulder.

Rivet Ring Bolts

WELDLESS DROP FORGED STEEL

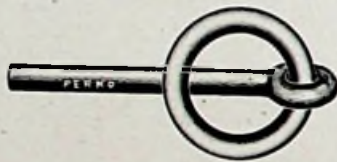


Fig. 915

Shoulder Rivet Ring Bolts

WELDLESS DROP FORGED STEEL

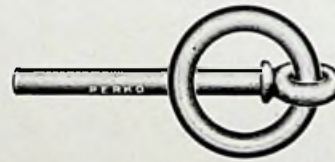


Fig. 917

Size Inches	Galv. Each	Inside Diam. Ring Inches	Weight Per 100 in Lbs.
1/4 x 4	\$.30	1 3/4	19
5/16 x 4 1/4	.35	2	31
3/8 x 4 1/2	.40	2	45
1/2 x 6	.55	2 1/2	113
5/8 x 6	.85	2 3/4	183
3/4 x 6	1.35	3	279
7/8 x 8	2.00	3 1/4	432
1 x 9	2.90	3 3/4	645
1 1/4 x 11	5.75	5	1331

Size Inches	Galv. Each	Inside Diam. Ring Inches	Weight Per 100 in Lbs.
1/4 x 4	\$.30	1 3/4	19
5/16 x 4 1/4	.35	2	32
3/8 x 4 1/2	.40	2	47 1/2
1/2 x 6	.55	2 1/2	113
5/8 x 6	.85	2 3/4	200
3/4 x 6	1.35	3	293
7/8 x 8	2.00	3 1/4	462
1 x 9	2.90	3 3/4	670
1 1/4 x 11	5.75	5	1375

Sizes are 1st, diameter shank; 2nd, length under eye.

Sizes are 1st, diameter shank; 2nd, length under shoulder.

DEDUCT 5% FOR SELF COLORED FINISH

If bolts are ordered with shank lengths other than catalogue listed dimensions, the price for the next longer listed length will apply, plus a \$2.00 charge per diameter for machine set-up.

Bolts with shanks longer than listed lengths can be supplied in all diameters and styles. Prices on application.



Connecting Links

DROP FORGED STEEL



Fig. 319

Size Inches	Galv. Per Dozen	S. C. Per Dozen	Overall Dimensions Inches	Est. Wt. Per Doz. Pounds
1/8	\$1.50	\$1.15	1 1/8 x 3/4	3/8
1/4	1.50	1.15	1 1/2 x 1	3/4
3/8	1.65	1.20	1 1/4 x 1 1/8	1
1/2	2.00	1.50	2 1/8 x 1 3/8	2
5/8	2.40	1.80	2 3/8 x 1 1/2	3 1/8
3/4	2.90	2.00	2 5/8 x 1 3/4	4 1/2
7/8	3.90	2.70	3 x 1 1/2	6 5/8
1	4.50	3.20	3 1/8 x 2 1/8	9
1 1/8	5.50	4.10	3 1/2 x 2 1/8	11
1 1/4	6.00	4.50	3 3/8 x 2 1/2	14 1/4
1 1/2	9.25	6.75	4 1/2 x 2 1/2	20 1/4
1 3/8	14.00	11.00	5 x 3 1/4	29
1 1/2	16.50	13.50	5 3/8 x 3 1/2	40
1 3/4	21.50	17.50	6 1/8 x 4	53 1/2
1 7/8	27.00	24.50	6 3/4 x 4 3/4	75
1 1/2	34.00	30.00	7 1/4 x 5 1/8	103
1 3/4	41.00	37.00	8 x 5 1/2	131
1 7/8	92.00	59.00	9 x 6 1/4	216

Lap Links

GALVANIZED WROUGHT STEEL



Fig. 785

Size Inches	Price Per Doz.	Inside Dimensions of Link Inches	Size Inches	Price Per Doz.	Inside Dimensions of Link Inches
1/8	\$.40	1 x 1/2	3/8	\$1.35	1 1/8 x 1 1/8
1/4	.47	1 1/2 x 1 1/2	1/2	1.85	2 x 1 3/8
3/8	.94	1 1/2 x 3/8	1/2	2.10	2 x 1

Brass Stove Bolts

ROUND HEAD AND FLAT HEAD



Fig. 709



Fig. 1091

PER HUNDRED, WITH NUTS

Length Inches	Diameter Inches			
	3/16	1/4	5/16	3/8
1 1/2	\$3.50	\$ 6.25	\$ 7.75	\$14.00
2	4.25	6.50	12.75	16.25
2 1/2	5.00	7.50	13.50	18.50
3	5.75	8.50	15.25	21.50
3 1/2		12.00	16.60	23.00
4		16.80	19.80	24.00
5		20.00	25.40	28.00
6		27.00	30.00	34.00

Chromium Plated Wood Screws

BRASS—FLAT HEAD

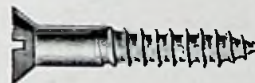


Fig. 1110

PER GROSS

No.	Length Inches					
	1/2	3/4	1	1 1/4	1 1/2	
4	\$1.80					
5	1.90	\$2.00	\$2.10	\$2.30	\$2.40	
6	2.00	2.20	2.30	2.40	2.60	\$2.80
7	2.20	2.40	2.40	2.60	2.80	3.00
8	2.40	2.60	2.60	2.80	3.00	3.20
9			2.80	3.00	3.20	3.60
10			3.00	3.20	3.50	4.00
11					3.80	4.20
12					4.00	4.70
14						5.80

No.	Length Inches					
	1 1/2	1 3/4	2	2 1/2	3	3 1/2
6	\$3.00					
7	3.30					
8	3.60	\$4.40	\$4.80			
9	4.00	4.80	5.40			
10	4.40	5.20	5.80	\$7.20		
11	4.70	6.00	6.40	7.80		
12	5.20	6.60	7.00	8.60	\$9.60	\$11.40
14	6.20	8.20	8.80	10.20	11.40	13.20
16			10.60	12.60	14.00	16.00
18				14.60	16.80	19.00

Only the above sizes are carried in stock, all other sizes—price on application.

Swing Links

DROP FORGED STEEL WITH INTERLOCKING LUGS



Fig. 784

Size Inches	Galvanized Per Dozen	Self Colored Per Dozen	Outside Dimensions Inches	Wt. Per Dozen in Lbs.
1/4	\$ 2.40	\$ 2.20	7/8 x 1 1/8	3/4
3/8	2.90	2.40	1 1/8 x 2 1/8	1 1/2
1/2	3.40	2.70	1 1/4 x 2 1/2	2 1/4
5/8	4.60	3.50	1 3/8 x 2 1/2	3 1/4
3/4	5.75	4.30	1 3/8 x 3 1/8	5 1/4
7/8	9.00	7.50	1 3/4 x 3 1/4	7 3/4
1	9.75	8.00	2 1/8 x 4 1/8	11
1 1/4	13.00	11.00	2 3/8 x 4 3/8	19 1/4
1 1/2	20.50	17.00	2 3/8 x 5 3/4	30 1/2
1 3/4	24.50	20.50	3 1/4 x 6 1/8	43 1/2

Machine Bolts
HOT FORGED BRONZE
HEX HEAD—HEX NUT

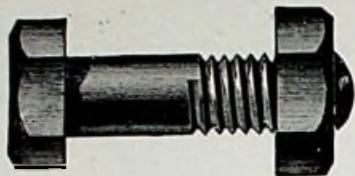


Fig. 726

PRICE PER HUNDRED

Length Under Head	Diameter of Bolts						
	¼"	5/16"	¾"	7/16"	½"	¾"	1"
1"	\$12.50*	\$14.50*	\$16.25*	—	\$21.90*	\$31.50	—
1½"	12.50	14.50	16.65*	—	22.50	33.80	—
1¾"	12.75	14.90	17.05	—	22.60	33.90	—
2"	13.00*	15.30*	17.45*	\$20.50*	23.10*	33.80	\$49.00
2½"	13.25	15.70	17.85	21.00	23.70	34.80	—
2¾"	13.50*	16.10*	18.25*	21.50*	24.30*	35.80	51.85
3"	13.75	16.50	18.65	22.00	24.90	36.80	—
3½"	14.00*	16.90*	19.05*	22.50*	25.50*	37.80*	54.70
3¾"	14.25	17.30	19.45	23.00	26.10	38.80	—
4"	14.50*	17.70*	19.85*	23.50*	26.70*	39.80	57.55
4½"	14.75	18.10	20.25	24.00	27.30	40.80	—
5"	15.00*	18.50*	20.65*	24.50*	27.90*	41.80*	60.40
5½"	15.50	19.30*	21.45*	25.50*	29.10*	43.80	63.29
6"	16.00*	20.10*	22.25*	26.50*	30.30*	45.80*	66.10
6½"	16.50	20.90*	23.05*	27.50	31.50*	47.80	68.95
7"	17.00	21.70*	23.85*	28.50*	32.70*	49.80*	71.80
7½"	18.00	23.30	25.45	30.50	35.10	53.80	77.50
8"	19.00	24.90	27.05	32.50	37.50*	57.80*	83.20
9"	20.00	26.50	28.65	34.50	39.90	61.80	88.90
10"	21.00	28.10	30.25	36.50	42.30	65.80	94.60

Larger Sizes — Price on application.

* STAR ALONGSIDE PRICE INDICATES SIZE CARRIED IN STOCK

Lag Screws
HOT FORGED BRONZE
SQUARE HEAD—GIMLET POINT

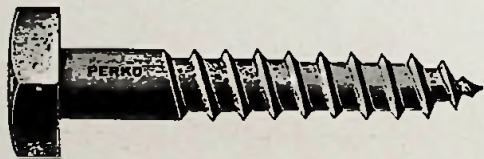


Fig. 727

PRICE PER HUNDRED

Length Under Head	Diameter of Screw						
	¼"	5/16"	¾"	7/16"	½"	¾"	1"
1½"	\$11.00*	\$12.00*	\$12.90*	—	—	—	—
2"	11.50*	12.50*	13.25*	\$16.20*	\$17.75*	\$26.00	\$38.50
2½"	12.00*	13.15*	14.20*	17.05*	18.85*	28.00	40.75
3"	12.50*	13.80*	15.00*	17.90*	20.00*	30.00*	43.00
3½"	13.00*	14.45*	15.80*	18.75*	21.20*	32.00	45.85
4"	13.50*	15.10*	16.60*	19.60*	22.40*	34.00*	48.70
4½"	14.00	15.75*	17.40*	20.50*	23.60*	36.00	51.55
5"	14.50*	16.40*	18.20*	21.50*	24.80*	38.00*	54.40
5½"	15.00	17.05	19.00*	22.50*	26.10*	40.00	57.25
6"	15.50*	17.70*	19.80*	23.50*	27.40*	42.00*	60.10
7"	16.50	19.00	21.40*	25.50*	30.00*	45.00*	65.85
8"	17.50	20.30	23.00*	27.50*	32.60*	50.00*	71.55
9"	18.50	21.60	24.60	29.50	35.20*	54.00*	77.25
10"	19.50	22.90	26.20*	31.50	37.80*	58.00*	82.95
11"	20.50	24.20	27.80	33.50	40.40	62.00	88.65
12"	21.50	25.50	29.40	35.50	43.00	66.00	94.35

Larger Sizes — Price on application.

* STAR ALONGSIDE PRICE INDICATES SIZE CARRIED IN STOCK

Carriage Bolts
HOT FORGED BRONZE
ROUND HEAD—HEX NUT



Fig. 728

PRICE PER HUNDRED

Length Under Head	Diameter of Bolts					
	¼"	5/16"	¾"	7/16"	½"	¾"
1½"	\$12.00*	\$14.50*	\$16.00	\$20.00	—	—
2"	12.50*	15.30*	16.80*	21.00*	\$23.00*	—
2½"	13.00*	16.10*	17.60*	22.00	24.30*	\$42.50
3"	13.50*	16.90*	18.40*	23.00*	25.60*	44.50*
3½"	14.00*	17.20*	19.20*	24.00	26.90*	46.50
4"	14.50*	18.00*	20.00*	25.00*	28.20*	48.50*
4½"	15.00*	18.80*	21.80*	26.00	29.50*	50.50
5"	15.50*	19.60*	22.60*	27.00*	30.80*	52.50*
5½"	16.00*	20.40*	23.40*	28.00	32.10*	54.50
6"	16.50*	21.20*	24.20*	29.00*	33.40*	56.50*
7"	18.00	23.20*	26.20*	31.50	36.40*	61.50
8"	19.50	25.20*	28.20*	34.00	39.40*	66.50*
9"	21.00	27.20	30.20	36.50	42.40	71.50
10"	22.50	29.20	32.20*	39.00	46.40*	76.50*

Larger Sizes — Price on application.

* STAR ALONGSIDE PRICES INDICATES SIZE CARRIED IN STOCK

Hanger Bolts
HOT FORGED BRONZE
HEX NUT—GIMLET POINT



Fig. 729

PRICE PER HUNDRED

Length Over All	Diameter of Screws					
	¼" & 5/16"	¾"	7/16"	½"	¾"	1"
2"	\$16.00*	—	—	—	—	—
2½"	16.50*	\$17.00*	—	\$23.20*	—	—
3"	17.00*	17.00*	\$20.00*	23.20*	\$32.00*	\$44.00
3½"	17.80*	17.80*	21.00*	24.40*	34.00	46.85
4"	18.60*	18.60*	22.00*	25.60*	36.00*	49.70
5"	—	20.20*	24.00*	28.00*	40.00*	56.40
6"	—	21.80*	26.00*	30.40*	44.00*	62.20
7"	—	23.40*	28.00*	32.80*	48.00*	67.70
8"	—	25.00*	30.00	35.20*	52.00*	73.40
9"	—	26.60	32.00	37.60	56.00	79.10
10"	—	28.20*	34.00	40.00*	60.00*	84.80
11"	—	29.80	36.00	42.40	64.00	90.50
12"	—	31.40	38.00	44.80	68.00	96.20

Larger Sizes — Price on application.

* STAR ALONGSIDE PRICES INDICATES SIZE CARRIED IN STOCK



Machine Bolts

HOT GALVANIZED AND PLAIN



Fig. 1078

Cut Thread—Square Head and Square Nut

PRICE PER 100 PIECES

Length in In.	Diameter in Inches					
	$\frac{3}{8}$ & $\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$ & $\frac{1}{2}$	$\frac{1}{2}$
1	\$1.10	\$1.15*	\$1.70	\$2.25	\$2.35*	\$3.95
1 1/4	1.25*	1.80*	2.35*	2.45*	4.10	4.80
1 1/2	1.30*	1.95*	2.60*	2.60*	4.25	5.00*
2	1.50*	2.20*	2.90*	3.20*	4.55*	5.35*
2 1/4	1.70*	2.45*	3.20*	3.50*	4.85*	5.75*
2 1/2	1.85*	2.70*	3.50*	3.80*	5.20*	6.15*
3	2.05*	2.95*	3.80*	4.10*	5.50*	6.50*
3 1/2	2.50*	3.15*	4.10*	4.40*	5.85*	6.85*
4	2.65*	3.60*	4.40*	4.70*	6.15*	7.25*
4 1/2	2.80*	3.80*	4.80*	5.10*	6.50*	7.65*
5	2.95*	4.00*	5.10*	5.40*	6.85*	8.05*
5 1/2	3.10*	4.20*	5.40*	5.70*	7.15*	8.45*
6	3.80*	5.10*	6.50*	6.80*	9.20	10.15
7	4.00*	5.35*	6.85*	7.15*	9.65	10.60*
7 1/2	4.15*	5.55*	7.15*	7.45*	10.10	11.05
8	4.35*	5.80*	7.50*	7.80*	10.55*	11.60*
8 1/2	4.50	6.00	7.80*	8.10*	11.00	11.95
9	4.70	6.25	8.15*	8.45*	11.45	12.40*
9 1/2	4.85	6.45	8.45	8.75	11.95	12.85
10	5.05	6.70	8.80*	9.10*	12.35	13.30*
11	5.40	7.15	9.50	9.80	13.20	14.70
12	5.75	7.60	10.20*	10.50*	14.05	15.60*
13	6.30	8.25	11.30	11.60	15.35	16.50
14	6.60	8.70	11.95	12.20	16.20	17.40*
15	6.95	9.15	12.60	12.80	17.15	18.30
16	7.25	9.60	13.25	13.40	18.05	19.20*
17	7.60	10.05	13.90	14.00	18.95	20.10
18	7.90	10.50	14.55	14.60	19.85	21.00*
19	8.25	10.95	15.20	15.20	20.75	21.90
20	8.60	11.40	15.85	15.80	21.65	22.80*
21						23.70
22						24.60
23						25.50
24						26.40

Carriage Bolts

HOT GALVANIZED AND PLAIN

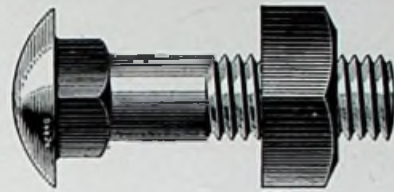


Fig. 1079

Cut Thread—Square Nut

PRICE PER 100 PIECES

Length in Inches	Diameter in Inches					
	$\frac{1}{8}$ and $\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$ and $\frac{1}{2}$
1/4	\$1.05	\$1.60	\$2.00	\$3.50	\$4.25*	\$8.35
1	1.10*	1.65*	2.10*	3.60	4.40	8.60
1 1/4	1.15*	1.70*	2.20*	3.75	4.60*	9.10
1 1/2	1.20*	1.80*	2.35*	4.05*	4.95*	9.60
2	1.35*	2.00*	2.60*	4.40*	5.35*	10.10
2 1/4	1.55*	2.25*	2.90*	4.75*	5.75*	10.60*
2 1/2	1.70*	2.50*	3.20*	5.10*	6.15*	11.10*
2 3/4	1.85*	2.75*	3.50*	5.40*	6.55*	11.60*
3	2.30*	2.95*	3.80*	5.75*	6.95*	12.10*
3 1/2	2.45*	3.40*	4.10*	6.10*	7.35*	12.60*
4	2.60*	3.60*	4.50*	6.45*	7.75*	13.10*
4 1/2	2.75*	3.85*	4.80*	6.80*	8.15*	13.60*
5	2.90*	4.10*	5.10*	7.15*	8.55*	14.10*
5 1/2	3.05*	4.35*	5.40*	7.50*	8.95*	14.60*
6	3.20*	4.60*	5.70*	7.85*	9.35*	15.10*
6 1/2	3.35*	4.85*	6.00*	8.20*	9.75*	15.60*
7	3.50*	5.10*	6.30*	8.55*	10.15*	16.10*
7 1/2	3.65*	5.35*	6.60*	8.90*	10.55*	16.60*
8	3.80*	5.60*	6.90*	9.25*	10.95*	17.10*
8 1/2	3.95*	5.85*	7.20*	9.60*	11.35*	17.60*
9	4.10*	6.10*	7.50*	9.95*	11.75*	18.10*
9 1/2	4.25*	6.35*	7.80*	10.30*	12.15*	18.60*
10	4.40*	6.60*	8.10*	10.65*	12.55*	19.10*
11	4.55*	6.85*	8.40*	11.00*	12.95*	19.60*
12	4.70*	7.10*	8.70*	11.35*	13.35*	20.10*
13	4.85*	7.35*	9.00*	11.70*	13.75*	20.60*
14	4.95*	7.55*	9.30*	12.05*	14.15*	21.10*
15	5.10*	7.80*	9.60*	12.40*	14.55*	21.60*
16	5.25*	8.05*	9.90*	12.75*	14.95*	22.10*
17	5.40*	8.30*	10.20*	13.10*	15.35*	22.60*
18	5.55*	8.55*	10.50*	13.45*	15.75*	23.10*
19	5.70*	8.80*	10.80*	13.80*	16.15*	23.60*
20	5.85*	9.05*	11.10*	14.15*	16.55*	24.10*

Intermediate lengths take next higher list.

Lag Screws

HOT GALVANIZED AND PLAIN



Fig. 1080

Cut Thread—Square Head—Gimlet Point

PRICE PER 100 PIECES

Lgth. in.	Diameter Inches					
	$\frac{1}{4}$ & $\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{2}$
1	\$2.35	\$2.85	\$4.25	\$5.25	\$7.95	\$12.50
1 1/2	2.15	2.60	3.90	4.85	7.40	11.75
2	2.35*	2.85*	3.55*	4.45*	6.85	11.00
2 1/2	2.55*	3.10*	3.90*	4.85*	7.50	11.90
3	2.80*	3.40*	4.30*	5.30*	8.15	12.80
3 1/2	3.05*	3.70*	4.70*	5.75*	8.80	13.70
4	3.30*	4.00*	5.10*	6.20*	9.45	14.60
4 1/2	3.55*	4.30*	5.50*	6.65*	10.10*	15.50
5	3.80*	4.60*	5.90*	7.10*	10.75	16.40
5 1/2	4.05*	5.00*	6.30*	7.55*	11.40*	17.30
6	4.35*	5.35*	6.70*	8.00*	12.05	18.20
6 1/2	4.65	5.70	7.10	8.45*	12.70*	19.10
7	4.95	6.05*	7.50*	8.90*	13.35*	20.00
7 1/2	5.25	6.40	7.90	9.35	14.00*	20.90
8	5.55	6.75*	8.30*	9.80*	14.65*	21.80
9	6.15	7.45	9.10	10.70	15.30*	22.70
10	6.75	8.15	9.90	11.60	16.00*	23.60
11		8.90	10.80	12.60	17.00*	24.50
12		9.65	11.70	13.60	18.00*	25.40
13					19.00*	26.30
14					20.00*	27.20
15					21.00*	28.10
16					22.00*	29.00

Intermediate lengths take next higher list.

We stock Galvanized Bolts only. Plain Bolts (not Galvanized) furnished to order.

$\frac{1}{4}$ inch Machine and Carriage Bolts carried in stock up to 6 inches long.

$\frac{1}{2}$ inch Machine and Carriage Bolts not carried in stock.

Diameters and lengths not listed can be furnished—Price on Application.



Hexagon Brass Nuts TAPPED U. S. STANDARD THREADS

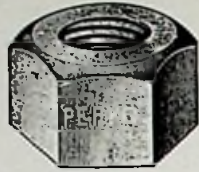


Fig. 730

Bolt Diameter	U. S. S. Standard			List Price Per Hundred	
	Threads Per Inch	Width (Inches)	Thickness (Inches)	Milled Semi-Finished	Cast
1/4	20	1/2	1/4	\$2.40	....
1/4	18	3/8	1/4	3.20	....
1/4	16	1/2	1/4	5.20	....
3/8	14	3/8	1/4	7.20	....
3/8	13	7/8	1/4	9.60	\$5.00
3/8	12	1 1/8	1/4	15.00	7.00
1/2	11	1 1/4	3/8	17.00	8.75
1/2	10	1 1/2	3/8	27.00	12.00
1/2	9	1 7/8	3/8	45.00	18.00
1/2	8	1 5/8	1	68.00	25.00
1 1/8	7	1 3/4	1 1/8	....	37.50
1 1/8	7	2	1 1/4	....	50.00
1 1/8	6	2 1/8	1 3/8	....	65.00
1 1/8	6	2 3/8	1 1/2	....	75.00
1 1/8	5 1/2	2 7/8	1 5/8	....	125.00
1 3/4	5	2 3/4	1 3/4	....	150.00
1 3/4	5	2 1 1/8	1 7/8	....	175.00
2	4 1/2	3 1/8	2	....	250.00

Square Iron Nuts HOT GALVANIZED AND PLAIN TAPPED U. S. STANDARD THREAD



Fig. 1084

Bolt Diam. Inches	Weight Per M In Lbs.	Price Per 100	Bolt Diam. Inches	Weight Per M In Lbs.	Price Per 100
1/4*	13.8	\$.55	3/4*	237.1	\$ 4.60
5/16*	22.8	.75	7/8	371.0	7.20
3/8*	37.4	1.05	1	518.1	10.00
7/16*	55.7	1.50	1 1/8	725.4	14.00
1/2*	78.6	2.00	1 1/4	957.0	19.60
5/8*	109.8	2.80	1 3/8	1257.6	33.50
3/4*	147.0	3.25	1 1/2	1604.9	45.20

Hexagon Iron Nuts HOT GALVANIZED AND PLAIN TAPPED U. S. STANDARD THREAD



Fig. 1085

Bolt Diam. Inches	Weight Per M In Lbs.	Price Per 100	Bolt Diam. Inches	Weight Per M In Lbs.	Price Per 100
1/4*	12.2	\$.65	3/4*	202.3	\$ 5.10
5/16*	19.9	.90	7/8	314.1	8.00
3/8*	32.7	1.20	1	441.4	11.15
7/16*	48.4	1.75	1 1/8	617.2	15.55
1/2*	68.4	2.25	1 1/4	819.3	21.40
5/8*	97.2	3.10	1 3/8	1077.5	28.80
3/4*	122.3	3.60	1 1/2	1371.0	38.70

Brass Washers



Fig. 731

Bolt Size	Outside Diameter	Inside Diameter	Thickness	Price Per Pound	Bolt Size
1/8	1/2	.195	.040	\$.80	1/8
1/4	1 1/8	1/8	.051	.75	1/4
3/8	1 1/4	3/8	.064	.75	3/8
1/2	1 3/8	1/2	.081	.70	1/2
5/8	1 7/8	5/8	.091	.70	5/8
3/4	2 1/8	3/4	.102	.70	3/4
7/8	2 3/8	7/8	.114	.70	7/8
1	2 7/8	1	.128	.70	1
1 1/8	3 1/8	1 1/8	.144	.70	1 1/8

Brass Spring Cotter Pins



Fig. 703

Length Inches	PRICE PER 100 Diameter Inches		
	3/32	1/8	5/32
1	\$.60	\$.75	\$ 1.15
1 1/2	.75	1.00	1.50
2	.90	1.30	1.80
2 1/2		1.60	2.35

Wrought Steel Washers

HOT GALVANIZED—U. S. STANDARD SIZES



Fig. 1083

For Bolts Inches	Outside Diam. Inches	Size Hole Inches	Thickness Gauge Nos.	Thickness Inches	Number in 100 Pounds	Per Pound
3/16	9/16	1/4	18	3/64	30200	.38
1/4	1 1/8	5/16	16	1/16	14900	.33
5/16	7/8	3/8	16	1/10	11100	.33
3/8	1	7/16	14	5/64	8700	.21
7/16	1 1/4	1/2	14	5/64	4100	.20
1/2	1 3/8	9/16	12	7/64	2600	.19
9/16	1 1/2	5/8	12	7/64	2200	.19
5/8	1 3/4	11/16	10	1/8	1300	.18
3/4	2	13/16	10	1/8	1000	.18
7/8	2 1/4	15/16	9	5/32	728	.18
1	2 1/2	1 1/16	9	5/32	595	.18

Standard Packages Machine, Carriage and Lag Bolts

The bolts are packed in cartons or paper packages depending on length, shorter lengths are packed in cartons.

Diam. Inches	Machine Bolts		Carriage Bolts		Lag Bolts	
	Number Per Pkg.	Extreme Length Inches	Number Per Pkg.	Extreme Length Inches	Number Per Pkg.	Extreme Length Inches
1/8	100	8	100	8	100	10
1/4	50	10	50	10	100	10
3/8	50	12	50	12	50	12
1/2	50	12	50	12	50	12
5/8	50	10	50	8	50	12
3/4	25	12	25	12		
7/8	25	8	25	8		
1	25	8	25	8	25	8

Longer lengths and larger diameters packed according to the discretion of the manufacturer.



"KORODLESS" STAINLESS STEEL WIRE RIGGING

The greater strength of Korodless permits the use of smaller diameters, thus very materially cutting down both weight and wind resistance.

KORODLESS RIGGING IS: Over three times as strong as bronze or galvanized iron.
Over two times as strong as phosphor bronze or monel metal.
Over 1½ times as strong as cast steel.

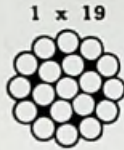


Fig. 1022



Fig. 1023



Fig. 1024

Diam. Inches	Approx. Breaking Strength Pounds	Price Per foot	Approx. Breaking Strength Pounds	Price Per foot	Approx. Breaking Strength Pounds	Price Per foot
1/16	550	\$.05	385	\$.05		
3/32	1,200	.09	800	.09		
1/8	2,100	.11	1,400	.11	1,500	\$.17
5/32	3,300	.14	2,100	.13	2,300	.20
3/16	4,700	.18	3,000	.15	3,200	.22
7/32	6,300	.22½	4,000	.19½	4,300	.26
1/4	8,200	.29	5,200	.25½	5,600	.33
9/32	10,300	.35	6,600	.29½	7,000	.36
5/16	12,500	.39	8,000	.33	8,600	.45½
3/8	17,600	.52	11,500	.47	12,200	.55
7/16	23,400	.68	15,400	.59½	16,400	.74
1/2	29,700	.82½	19,800	.71½	21,200	.92½
5/8	44,000	1.20	30,300	.99	32,600	1.30½

For 0 x 37 construction, add 20% to 6 x 19 list prices. For 8 x 19 construction, add 20% to 6 x 19 list prices.

1 x 19 STANDING RIGGING—This construction has the greatest strength—least stretch—and is the stiffest type of rigging. It is more difficult to splice than 6 x 7 but an experienced rigger can make satisfactory splices.

6 x 7 STANDING RIGGING—This is the most commonly used type. It is more easily spliced than any other type but this construction is not as strong as other types of Korodless standing rigging.

6 x 19 RUNNING RIGGING—This is the most generally used construction where flexibility is desired (halyards, tiller ropes, etc). While not so flexible as the ropes having a multiplicity of very fine wires it is much stronger and more durable.

Galvanized Iron Rigging FOR GUY ROPES

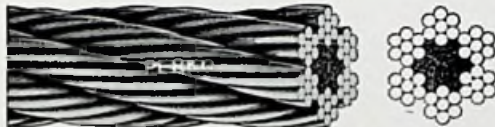


Fig. 759

Composed of six strands and a hemp center, 7 wires to the strand.

Diam. Inches	Circumference Inches	Price per ft.
1/8	1/2	\$.03½
3/16	3/4	.04
1/4	1	.06
5/16	1 1/8	.08

Stainless Steel Shackles

DROP FORGED

SCREW PIN ANCHOR TYPE

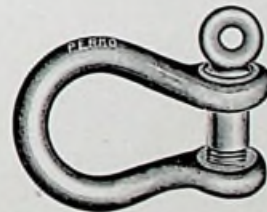


Fig. 1027

Stainless Steel Thimbles POLISHED



Fig. 1025

For diam. Rope Inches	Price Each	Length Overall Inches	Width Inside Inches	Size Inches	Pickled Finish (Not polished) Each	Polished Each	Length Inside Inches	Between Eyes Inches
1/8	\$.25	1 1/2	3/8	1/8				
1/16	.25	1 1/2	3/8	1/8	\$1.00	\$1.50	7/8	1 1/8
1/4	.30	1 1/2	3/4	1/4	1.00	1.50	1 1/8	1/2
5/16	.35	2 1/8	1 1/8					
3/8	.45	2 3/8	1	5/16	1.25	1.85	1 1/4	1 1/8
7/16	.70	2 7/8	1 1/8	3/8	2.00	2.65	1 7/8	1 1/2
1/2	.85	2 7/8	1 1/8	1/2	3.25	4.50	1 1/2	1 1/2



Flexible Wire Tiller Rope

GALVANIZED AND BRONZE

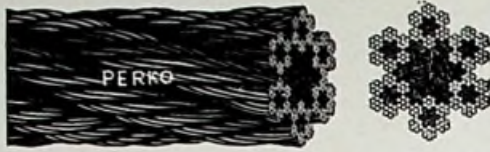


Fig. 760

Composed of 6 ropes and a hemp center. Each rope has 6 strands of 7 wires each and a cotton center.

Diam. Inches	Galvanized Price Per Foot	Bronze Price Per Foot
1/8	\$.04	\$.06
3/16	.12	.15
1/4	.13	.17
5/16	.14	.20
3/8	.15	.28
1/2	.20	.40

Braided Tiller Rope

WITH BRONZE CENTER



Fig. 761

Diam. Inches	Price Per Foot
1/8	\$.05
1/4	.06
5/16	.08
3/8	.11

All above rigging and tiller rope can be furnished in 250 and 500 foot reels.

Tiller Rope Sheaves

GALVANIZED IRON AND BRASS
COMMON BUSHED



Fig. 806

Size Sheave Inches	Size Pin Inches	Galvanized Iron Each	Plain Brass Each	Size of Rope Inches
1 7/8 x 1 7/8	1/4 or 5/8	\$.30	\$.60	1/4
2 x 1 7/8	1/4 or 5/8	.30	.65	5/16
2 1/2 x 3/8	1/4 or 5/8	.35	.70	5/16
2 1/2 x 1 1/4	1/4 or 5/8	.35	.70	5/16
3 x 1 7/8	5/8 or 3/4	.45	.90	3/8
3 x 1 1/4	5/8 or 3/4	.45	1.00	1/4
3 3/4 x 1 1/2	5/8 or 3/4	.50	1.00	1/4
4 x 1 1/2	3/4 or 7/8	.60	1.40	3/8
4 x 3/8	3/4 or 7/8	.75	1.50	3/8
4 1/2 x 1 7/8	7/8 or 1/2	.75	1.50	7/8
4 1/2 x 3/4	7/8 or 1/2	.80	1.75	1/2
5 x 3/8	7/8 or 1/2	1.25	2.75	1/2
5 x 1	1/2 or 5/8	1.40	4.00	5/8
6 x 1 1/4	1/2 or 5/8	1.60	4.00	7/8
6 x 1	5/8 or 3/4	2.00	4.50	5/8

Tiller Rope Clamps

GALVANIZED IRON AND CAST BRONZE



Fig. 358

GALVANIZED

For Rope Diameter Inches	Each	Width Inches	Length Inches	Weight Ounces
1/8	\$.12	3/4	1 5/8	1 3/4
3/16	.15	3/4	1 3/4	2
1/4	.20	1	1 3/4	3
5/16	.25	1	2	3 1/2
3/8	.30	1 1/8	2 1/4	5

BRONZE

For Rope Diameter Inches	Plain Each	Width Inches	Length Inches	Weight Ounces
1/8	\$.17	3/4	1 5/8	2
3/16	.20	3/4	1 3/4	2 1/4
1/4	.25	1	1 3/4	3 1/4
5/16	.35	1	2	3 3/4
3/8	.50	1 1/8	2 1/4	5

Both galvanized and bronze are same pattern as illustrated.

Manila Rope Sheaves

JAPANNED AND GALVANIZED



Fig. 807

Size Sheave Inches	Size Block Inches	Common Jap'd Each	Bushed Galv. Each	Roller Jap'd Each	Bushed Galv. Each
1 3/4 x 1 1/2 x 3/8	3	\$0.12	\$0.13	\$0.40	\$0.43
2 x 1 1/2 x 3/8	3 1/2	.13	.14	.42	.45
2 1/4 x 1 1/2 x 3/8	4	.15	.16	.45	.48
2 1/2 x 1 1/2 x 3/8	4 1/2	.18	.20	.50	.55
3 x 1 1/2 x 3/8	5	.25	.30	.55	.62
3 1/2 x 1 1/2 x 3/8	6	.30	.35	.65	.72
4 1/4 x 1 1/2 x 3/8	7	.38	.45	.75	.85
4 3/4 x 1 1/2 x 3/8	8	.45	.55	1.00	1.15
5 1/2 x 1 1/2 x 3/8	9	.55	.65	1.10	1.30
6 1/4 x 1 1/2 x 3/8	10	.65	.80	1.35	1.60
7 1/4 x 1 1/2 x 3/8	11	.85	1.00	1.65	1.90
8 x 1 1/2 x 3/8	12	1.10	1.30	1.90	2.15
9 x 1 1/2 x 3/8	13	1.65	2.40	2.50	3.25
9 1/2 x 1 1/2 x 3/8	14	2.00	2.80	2.75	3.50
10 x 1 1/2 x 3/8	15	2.20	3.00	3.00	3.85
11 x 1 1/2 x 3/8	16	2.50	3.40	3.25	4.25

Other sizes on application, give size of sheave and diameter of rope.



Tiller Rope Pulley

SWIVEL EYE AND STRAP
CAST BRONZE—PLAIN



Fig. 585

Plain Bronze Each	For Rope Diam. Inches	Length Overall Inches	Diam. Wheel Inches	Length Strap Inches	Weight Ounces
\$1.15	$\frac{1}{8}$	$3\frac{1}{2}$	$1\frac{1}{4}$	2	6

Tiller Rope Pulley

WITH STRAP—CAST BRONZE



Fig. 579

For Rope Diam. Inches	Length Pulley Inches	Size Wheel Inches	Length Strap Inches
$\frac{5}{16}$	$1\frac{3}{4}$	$1x\frac{1}{2}$	2

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
\$.75	\$1.15	\$1.75

Tiller Rope Guides

UPRIGHT PATTERN—CAST BRONZE



Fig. 593

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	For Rope Diam. Inches	Size Base Inches	Weight Ounces
\$.65	\$.95	\$1.20	$\frac{1}{8}$	$\frac{7}{8}x1\frac{1}{2}$	2

Tiller Rope Guides

SIDE PATTERN—CAST BRONZE

Cast bronze base, brass wheel turned from rod.



Fig. 594

For Rope Diam. Inches	Size Base Inches	Weight Oz.
$\frac{1}{8}$	$\frac{3}{4}x1\frac{1}{8}$	1 $\frac{1}{2}$

Polished Bronze Each	Nickel Plated Each	Chromium Plated Each
\$.60	\$.95	\$1.40

Tiller Rope Guides

GALVANIZED CAST IRON AND BRONZE

Round Plate



Fig. 102

Size No.	For Diam. Rope Inches	Diameter Base Inches
1	$\frac{1}{4}$	$1\frac{3}{8}$
2	$\frac{3}{8}$	$1\frac{1}{2}$
3	$\frac{1}{2}$	$1\frac{3}{4}$

Size No.	Galvanized Iron Each	Plain Bronze Each	Polished Bronze Each	Chromium Plated Each
1	\$.15	\$.30	\$.55	\$1.55
2	.25	.40	.65	1.65
3	.35	.50	.80	1.80

Tiller Rope Guides

CAST BRONZE



Fig. 359

Size Hole Inches	Size Base Inches	Plain Bronze Each	Polished Bronze Each	Nickel Plated Each	Chrom. Plated Each
$\frac{3}{8}$	$1\frac{1}{2}x1$	\$.14	\$.25	\$.35	\$.70
$\frac{1}{2}$	$1\frac{3}{4}x1\frac{1}{8}$	.16	.30	.40	.75
$\frac{5}{8}$	$1\frac{7}{8}x1\frac{1}{4}$	.18	.35	.45	.85

Tiller Rope Guides

GALVANIZED CAST IRON AND BRONZE
OVAL PLATE



Fig. 599

Size No.	Size Hole Inches	Size Base Inches	Galv. Iron Each	Plain Bronze Each	Pol. Bronze Each	Chrom. Plated Each
1	$\frac{3}{8}$	$\frac{1}{2}x1\frac{1}{2}$	\$.08	\$.14	\$.25	\$.70
2	$\frac{1}{2}$	$1\frac{1}{4}x1\frac{3}{4}$	.10	.16	.30	.75
3	$\frac{5}{8}$	$1\frac{1}{4}x1\frac{7}{8}$	.12	.18	.35	.85

Fast Eye Blocks

GALVANIZED MALLEABLE IRON AND BRONZE
SINGLE

Without Becket



Fig. 43

With Becket



Fig. 54

Size No.	Galv. Each	Plain Bronze Each	Pol. Bronze Each	For Rope Diam. Inches	Size Sheaves Inches	Weight Each Pounds
1	\$.12	\$.25	\$.45	$\frac{1}{8}$	$\frac{3}{4} \times \frac{1}{8}$	$\frac{3}{32}$
3	.18	.30	.55	$\frac{1}{4}$	$1 \times \frac{3}{8}$	$\frac{3}{16}$
5	.28	.45	.75	$\frac{1}{2}$	$1\frac{1}{4} \times \frac{1}{2}$	$\frac{1}{4}$
7	.35	.55	.90	$\frac{3}{8}$	$1\frac{1}{2} \times \frac{1}{2}$	$\frac{3}{8}$
9	.50			$\frac{1}{2}$	$1\frac{3}{4} \times \frac{1}{2}$	$\frac{1}{2}$
11	.70			$\frac{1}{2}$	$2 \times \frac{3}{8}$	$\frac{3}{8}$
13	1.00			$\frac{5}{8}$	$2\frac{1}{2} \times \frac{3}{4}$	$1\frac{1}{8}$
15	1.50			$\frac{3}{4}$	$3 \times \frac{3}{8}$	$1\frac{1}{8}$

Loose Hook Blocks

GALVANIZED MALLEABLE IRON BODY
FORGED STEEL HOOKS
SINGLE

Without Becket



Fig. 52

With Becket



Fig. 56

Size No.	Galvanized Each	Length of Shell Inches	For Rope Diameter Inches	Weight Each Pounds
1	\$.65	$1\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{16}$
3	.70	$1\frac{5}{8}$	$\frac{1}{4}$	$\frac{1}{4}$
5	.80	2	$\frac{1}{2}$	$\frac{3}{16}$
7	.90	$2\frac{3}{8}$	$\frac{3}{8}$	$\frac{2}{8}$
9	1.15	3	$\frac{1}{2}$	$\frac{3}{8}$
11	1.50	$3\frac{1}{4}$	$\frac{1}{2}$	1
13	2.00	4	$\frac{5}{8}$	$2\frac{1}{4}$
15	2.75	$4\frac{3}{8}$	$\frac{3}{4}$	$2\frac{1}{2}$

Fast Eye Blocks

GALVANIZED MALLEABLE IRON
DOUBLE

Without Becket



Fig. 51

With Becket



Fig. 55

Size No.	Galv. Each	Plain Bronze Each	Pol. Bronze Each	For Rope Diam. Inches	Size Sheave Inches	Weight Each Pounds
2	\$.20	\$.45	\$.65	$\frac{1}{8}$	$\frac{3}{4} \times \frac{1}{8}$	$\frac{3}{16}$
4	.30	.60	.90	$\frac{1}{4}$	$1 \times \frac{3}{8}$	$\frac{1}{4}$
6	.45	.80	1.20	$\frac{1}{2}$	$1\frac{1}{4} \times \frac{1}{2}$	$\frac{3}{8}$
8	.55	1.00	1.50	$\frac{3}{8}$	$1\frac{1}{2} \times \frac{1}{2}$	$\frac{5}{8}$
10	.80			$\frac{1}{2}$	$1\frac{3}{4} \times \frac{1}{2}$	$\frac{3}{4}$
12	1.05			$\frac{1}{2}$	$2 \times \frac{3}{8}$	$1\frac{1}{4}$
14	1.65			$\frac{5}{8}$	$2\frac{1}{2} \times \frac{3}{4}$	$2\frac{1}{8}$
16	2.50			$\frac{3}{4}$	$3 \times \frac{3}{8}$	$2\frac{3}{4}$

Loose Hook Blocks

GALVANIZED MALLEABLE IRON
DOUBLE

Without Becket



Fig. 53

With Becket



Fig. 58

Size No.	Galvanized Each	Length of Shell Inches	For Rope Diam. Inches	Weight Each Pounds
2	\$.75	$1\frac{1}{2}$	$\frac{1}{8}$	$\frac{1}{4}$
4	.85	$1\frac{3}{8}$	$\frac{1}{4}$	$\frac{3}{8}$
6	1.00	2	$\frac{1}{2}$	$\frac{1}{2}$
8	1.10	$2\frac{3}{8}$	$\frac{3}{8}$	$\frac{7}{8}$
10	1.45	3	$\frac{1}{2}$	1
12	1.85	$3\frac{1}{4}$	$\frac{1}{2}$	$1\frac{1}{2}$
14	2.65	4	$\frac{5}{8}$	$2\frac{1}{2}$
16	3.75	$4\frac{3}{8}$	$\frac{3}{4}$	$3\frac{3}{4}$

Swivel Eye Blocks

GALVANIZED MALLEABLE IRON AND BRONZE

Single



Fig. 100

Size No.	For Diam. Rope Inches	Length Shell Inches	Diameter Sheave Inches	Weight Per Doz. in Lbs.
0	$\frac{1}{8}$	1	$\frac{1}{2}$	$\frac{1}{2}$
1	$\frac{1}{8}$	$1\frac{1}{4}$	$\frac{3}{4}$	$1\frac{1}{4}$
3	$\frac{1}{4}$	$1\frac{3}{4}$	1	2
5	$\frac{3}{8}$	2	$1\frac{1}{4}$	$2\frac{7}{8}$
7	$\frac{3}{8}$	$2\frac{1}{4}$	$1\frac{1}{2}$	$4\frac{7}{8}$

Size No.	Galvanized Iron Each	Plain Bronze Each	Polished Bronze Each
0	\$.13	\$.45	\$.65
1	.15	.45	.65
3	.25	.50	.75
5	.35	.70	1.00
7	.50	.80	1.25

Heavy Steering Rope Pulleys

CAST BRONZE—PLAIN FOR WIRE ROPE

The sturdy construction answers the demand for a larger and stronger tiller rope pulley. The sheave pin is $\frac{3}{4}$ inch diameter bronze rod.

SIDE PATTERN



Fig. 962

Plain Bronze Each	For Wire Rope Diameter Inches	Diameter Sheave Inches	Length of Plate Inches
\$8.00	$\frac{1}{2}$	$6\frac{3}{4}$	9

UPRIGHT PATTERN

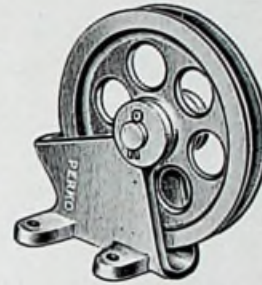


Fig. 963

Plain Bronze Each	For Wire Rope Diameter Inches	Diameter Sheave Inches	Height Overall Inches
\$8.00	$\frac{1}{2}$	$6\frac{3}{4}$	$7\frac{1}{2}$

Swivel Eye Blocks

GALVANIZED MALLEABLE IRON AND BRONZE

Double



Fig. 101

Size No.	For Diam. Rope Inches	Length Shell Inches	Diameter Sheave Inches	Weight Per Doz. in Lbs.
00	$\frac{1}{8}$	1	$\frac{1}{2}$	$1\frac{1}{8}$
2	$\frac{1}{8}$	$1\frac{1}{4}$	$\frac{3}{4}$	$2\frac{1}{4}$
4	$\frac{1}{4}$	$1\frac{3}{4}$	1	$3\frac{3}{8}$
6	$\frac{3}{8}$	2	$1\frac{1}{4}$	$4\frac{1}{2}$
8	$\frac{3}{8}$	$2\frac{1}{4}$	$1\frac{1}{2}$	7

Size No.	Galvanized Iron Each	Plain Bronze Each	Polished Bronze Each
00	\$.20	\$.55	\$.75
2	.25	.60	.80
4	.35	.80	1.10
6	.50	1.65	1.90
8	.70	.....	.....

Side Pulleys

GALVANIZED CAST IRON AND BRONZE



Fig. 97

Size No.	Galv. Each	Pol. Each	Size Base Inches	Diam. Rope Inches	Weight Per Doz. in Lbs.
1	\$.25	\$.60	$\frac{3}{4} \times 2$	$\frac{1}{4}$	$1\frac{3}{8}$
2	.35	.70	$\frac{7}{8} \times 2$	$\frac{1}{4}$	2
3	.45	.90	$1 \times 3\frac{3}{8}$	$\frac{3}{8}$	$3\frac{1}{4}$

Blocks on Plates

GALVANIZED MALLEABLE IRON AND BRONZE



Fig. 107

Size No.	Galv. Each	Plain Brass Each	Pol. Brass Each	For Rope Diam. Inches	Style Block	Weight Per 100 in Lbs.
3	\$.55	\$1.20	\$1.75	$\frac{1}{4}$	Swivel Eye	20
5	.65	1.40	2.00	$\frac{1}{8}$	Swivel Eye	35
7	1.00	1.60	2.35	$\frac{3}{8}$	Swivel Eye	66
9	1.10	.....	.....	$\frac{1}{4}$	Fast Eye	72

Deck Blocks

OPEN PATTERN
GALVANIZED IRON AND BRONZE
SINGLE

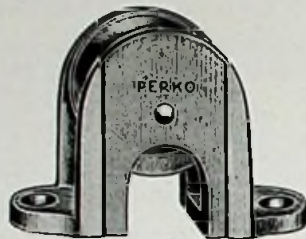


Fig. 87

Size No.	Mall. Iron Each	Cast Iron Each	Plain Bronze Each	Pol. Bronze Each	For Diam. Rope Inches	Size Sheave Inches
0	\$.30	\$.20	\$.60	\$.90	$\frac{1}{8}$	$1\frac{1}{4} \times \frac{3}{8}$
1	.40	.25	.75	1.00	$\frac{3}{8}$	$1\frac{1}{2} \times \frac{1}{2}$
3	.65	.50	1.10	1.75	$\frac{1}{2}$	$2 \times \frac{5}{8}$
5	1.20	.95	2.25	2.75	$\frac{5}{8}$	$2\frac{1}{2} \times \frac{3}{4}$
7	1.90	1.50	3.25	4.00	$\frac{3}{4}$	$3 \times \frac{1}{2}$

Deck Blocks

OPEN PATTERN
GALVANIZED IRON AND BRONZE
DOUBLE

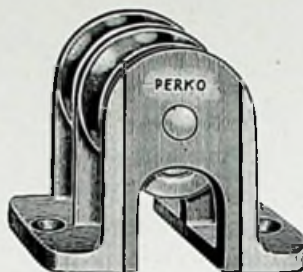


Fig. 88

Size No.	Mall. Iron Each	Cast Iron Each	Plain Bronze Each	Pol. Bronze Each	For Diam. Rope Inches	Size Sheave Inches
2	\$.70	\$.50	\$1.25	\$1.75	$\frac{3}{8}$	$1\frac{1}{2} \times \frac{1}{2}$
4	1.25	1.00	1.90	2.75	$\frac{1}{2}$	$2 \times \frac{3}{8}$
8	3.00	2.50			$\frac{3}{4}$	$3 \times \frac{1}{2}$

Deck Blocks

CLOSED PATTERN
GALVANIZED MALLEABLE AND CAST IRON
SINGLE



Fig. 93

Size No.	Mall. Iron Each	Cast Iron Each	For Dia. Rope Inches	Weight Each Pounds	Size Sheave Inches
000		\$.18	$\frac{1}{4}$	$\frac{1}{16}$	$1 \times \frac{1}{8}$
0	\$.30	.20	$\frac{1}{8}$	$\frac{1}{4}$	$1\frac{1}{4} \times \frac{3}{8}$
1	.40	.25	$\frac{3}{8}$	$\frac{1}{2}$	$1\frac{1}{2} \times \frac{1}{2}$
3	.65	.50	$\frac{1}{2}$	1	$2 \times \frac{5}{8}$
5	1.20	.95	$\frac{5}{8}$	$1\frac{3}{4}$	$2\frac{1}{2} \times \frac{3}{4}$
7	1.90	1.50	$\frac{3}{4}$	$2\frac{1}{4}$	$3 \times \frac{1}{2}$

Deck Blocks

CLOSED PATTERN
GALVANIZED MALLEABLE AND CAST IRON
DOUBLE

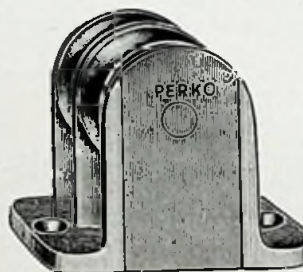


Fig. 94

Size No.	Mall. Iron Each	Cast Iron Each	For Dia. Rope Inches	Weight Each Pounds	Size Sheave Inches
2	\$.70	\$.50	$\frac{3}{8}$	$\frac{7}{8}$	$1\frac{1}{2} \times \frac{1}{2}$
4	1.25	1.00	$\frac{1}{2}$	$1\frac{1}{2}$	$2 \times \frac{3}{8}$

Cheek Blocks

GALVANIZED MALLEABLE IRON AND BRONZE
SINGLE



Fig. 95

Size No.	Galv. Each	Plain Bronze Each	Polished Bronze Each	For Diam. Rope Inches	Size Sheave Inches
0	\$.30	\$.60	\$.85	$\frac{1}{4}$	$1 \times \frac{3}{8}$
1	.35	.75	1.00	$\frac{3}{8}$	$1\frac{3}{8} \times \frac{1}{4}$
2	.45	.85	1.25	$\frac{1}{2}$	$1\frac{1}{2} \times \frac{1}{2}$
3	.90	1.35	1.90	$\frac{5}{8}$	$2 \times \frac{3}{8}$
4	1.50	1.90	2.65	$\frac{3}{4}$	$2\frac{1}{2} \times \frac{3}{4}$
5	2.00			$\frac{3}{4}$	$3 \times \frac{1}{2}$
6	3.50			$\frac{7}{8}$	$3\frac{1}{2} \times 1$

Cheek Blocks

GALVANIZED MALLEABLE IRON AND BRONZE
DOUBLE



Fig. 96

Size No.	Galv. Each	Plain Bronze Each	Polished Bronze Each	For Diam. Rope Inches	Size Sheave Inches
11	\$.75	\$1.20	\$1.60	$\frac{1}{8}$	$1\frac{3}{8} \times \frac{1}{4}$
12	1.10	1.75	2.00	$\frac{3}{8}$	$1\frac{1}{2} \times \frac{1}{2}$
13	1.65	2.60	3.25	$\frac{1}{2}$	$2 \times \frac{3}{8}$



Deck Blocks

FOR WIRE ROPE
GALVANIZED MALLEABLE IRON AND BRONZE

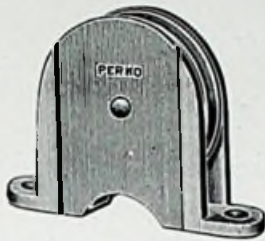


Fig. 139

Size No.	Galv. Each	Plain Bronze Each	Polished Bronze Each	For Diam. Rope Inches	Size Sheave Inches	Weight Each Pounds
1	\$.60	\$1.25	\$2.00	$\frac{1}{4}$ - $\frac{3}{8}$	$1\frac{1}{8}$ x $\frac{1}{8}$	$\frac{5}{8}$
2	1.10	2.25	3.00	$\frac{3}{8}$	3 x $\frac{1}{8}$	$1\frac{3}{8}$
3	2.00	4.00	5.25	$\frac{1}{2}$	4 x $\frac{5}{8}$	$2\frac{3}{4}$
3½	3.00			$\frac{1}{2}$	$4\frac{1}{2}$ x $\frac{3}{4}$	$4\frac{1}{4}$
4	3.50			$\frac{5}{8}$	5 x $\frac{7}{8}$	$5\frac{1}{4}$
5	5.25			$\frac{3}{4}$	6 x 1	11

Cheek Blocks

FOR WIRE ROPE
GALVANIZED CAST IRON AND BRONZE



Fig. 140

Size No.	Galv. Each	Plain Bronze Each	Polished Bronze Each	For Diam. Rope Inches	Size Sheave Inches	Weight Each Pounds
1	\$.60	\$1.25	\$2.00	$\frac{1}{4}$ - $\frac{3}{8}$	$1\frac{1}{8}$ x $\frac{1}{8}$	$\frac{5}{8}$
2	.95	2.25	3.00	$\frac{3}{8}$	3 x $\frac{1}{8}$	$1\frac{3}{8}$
3	1.75	4.00	5.25	$\frac{1}{2}$	4 x $\frac{5}{8}$	$2\frac{3}{4}$
3½	2.25			$\frac{1}{2}$	$4\frac{1}{2}$ x $\frac{3}{4}$	$4\frac{1}{4}$
4	2.75			$\frac{5}{8}$	5 x $\frac{7}{8}$	$5\frac{1}{4}$
5	4.75			$\frac{3}{4}$	6 x 1	11

Wire Rope Pulleys

GALVANIZED MALLEABLE IRON AND BRONZE
SINGLE—SIDE PATTERN

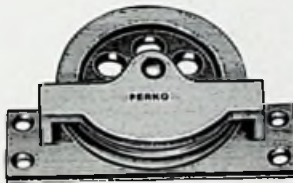


Fig. 194

Size No.	Galv. Each	Plain Bronze Each	For Diam. Rope Inches	Size Sheave Inches	Weight Each Pounds
1	\$.70	\$1.50	$\frac{3}{8}$	$2\frac{1}{2}$ x $\frac{3}{8}$	$\frac{1}{2}$
2	1.00	2.00	$\frac{1}{4}$	$3\frac{1}{4}$ x $\frac{1}{2}$	$1\frac{1}{4}$
3	2.00	3.00	$\frac{1}{2}$ - $\frac{3}{8}$	$4\frac{1}{2}$ x $\frac{1}{2}$	$2\frac{3}{8}$

Wire Rope Pulleys

GALVANIZED MALLEABLE IRON AND BRONZE
DOUBLE—SIDE PATTERN



Fig. 195

Size No.	Galv. Each	Plain Bronze Each	For Diam. Rope Inches	Size Sheave Inches	Weight Each Pounds
11	\$1.15	\$2.25	$\frac{1}{8}$	$2\frac{1}{2}$ x $\frac{3}{8}$	$1\frac{1}{8}$
12	1.75	3.00	$\frac{1}{4}$	$3\frac{1}{4}$ x $\frac{1}{2}$	2
13	3.25	4.25	$\frac{1}{2}$ - $\frac{3}{8}$	$4\frac{1}{2}$ x $\frac{1}{2}$	$4\frac{1}{4}$

Wire Rope Pulleys

GALVANIZED MALLEABLE IRON AND BRONZE
SINGLE—UPRIGHT PATTERN



Fig. 279

Size No.	Galv. Each	Plain Bronze Each	For Diam. Rope Inches	Size Sheave Inches	Weight Each Pounds
10	\$.70	\$1.50	$\frac{3}{8}$	$2\frac{1}{2}$ x $\frac{3}{8}$	$\frac{3}{8}$
20	1.00	2.00	$\frac{1}{4}$	$3\frac{1}{4}$ x $\frac{1}{2}$	$1\frac{1}{2}$
30	2.00	3.00	$\frac{1}{2}$ - $\frac{3}{8}$	$4\frac{1}{2}$ x $\frac{1}{2}$	$2\frac{1}{2}$

Wire Rope Pulleys

GALVANIZED MALLEABLE IRON AND BRONZE
DOUBLE—UPRIGHT PATTERN



Fig. 280

Size No.	Galv. Each	Plain Bronze Each	For Diam. Rope Inches	Size Sheave Inches	Weight Each Pounds
110	\$1.15	\$2.25	$\frac{1}{8}$	$2\frac{1}{2}$ x $\frac{3}{8}$	$1\frac{1}{8}$
120	1.75	3.00	$\frac{1}{4}$	$3\frac{1}{4}$ x $\frac{1}{2}$	2
130	3.25	4.25	$\frac{1}{2}$ - $\frac{3}{8}$	$4\frac{1}{2}$ x $\frac{1}{2}$	$4\frac{1}{4}$

Polished Bronze Yacht Blocks

MANGANESE BRONZE—PLAIN OR ROLLER BUSHED

Made of high grade manganese bronze, of great tensile strength, yet as light in weight as practicable to insure that strength.

Shells and sheaves are smooth and edges rounded, will not wear or cut rope.

All are furnished with or without becket, and in polished or nickel plated.



Without Becket



With Becket

Size No.	Size of Sheave Inches	For Rope Diam. Inches
0	1 1/8 x 1 1/8	1/16
1	1 3/8 x 1 1/2	3/8
2	1 7/8 x 5/8	1/2

Front Shackle Block

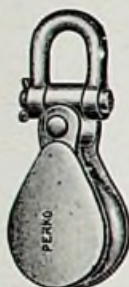


Fig. 851

No.	SINGLE	
	Plain Bushed Each	Roller Bushed Each
0	\$1.50	\$2.00
1	1.75	2.40
2	2.50	3.15
No.	DOUBLE	
	Plain Bushed Each	Roller Bushed Each
0	\$2.40	\$3.40
1	3.15	4.35
2	4.50	5.75

Side Shackle Block



Fig. 854

No.	SINGLE	
	Plain Bushed Each	Roller Bushed Each
0	\$1.50	\$2.00
1	1.75	2.40
2	2.50	3.15
No.	DOUBLE	
	Plain Bushed Each	Roller Bushed Each
0	\$2.40	\$3.40
1	3.15	4.35
2	4.50	5.75

Upset Front Shackle Block



Fig. 852

No.	SINGLE	
	Plain Bushed Each	Roller Bushed Each
0	\$1.50	\$2.00
1	1.75	2.40
2	2.50	3.15
No.	DOUBLE	
	Plain Bushed Each	Roller Bushed Each
0	\$2.40	\$3.40
1	3.15	4.35
2	4.50	5.75

Upset Side Shackle Block



Fig. 855

No.	SINGLE	
	Plain Bushed Each	Roller Bushed Each
0	\$1.50	\$2.00
1	1.75	2.40
2	2.50	3.15
No.	DOUBLE	
	Plain Bushed Each	Roller Bushed Each
0	\$2.40	\$3.40
1	3.15	4.35
2	4.50	5.75

Loose Side or Front Hook Block



Fig. 853

No.	SINGLE	
	Plain Bushed Each	Roller Bushed Each
0	\$1.50	\$2.00
1	1.75	2.40
2	2.50	3.15
No.	DOUBLE	
	Plain Bushed Each	Roller Bushed Each
0	\$2.40	\$3.40
1	3.15	4.35
2	4.50	5.75

State whether Side or Front Hook is desired.

Open Snatch Block



Fig. 856

No.	SINGLE ONLY	
	Plain Bushed Each	Roller Bushed Each
0	\$1.50	\$2.00
1	1.75	2.40
2	2.50	3.15

FOR SIZE OF SHEAVE AND ROPE, REFER TO TOP OF PAGE SPECIFY SINGLE OR DOUBLE, WITH OR WITHOUT BECKET. DEDUCT 10% FOR PLAIN FINISH.

CHROMIUM PLATED Yacht Blocks — Price on Application

POLISHED BRONZE YACHT BLOCKS

Snap Shackle Block
SIDE OR FRONT TYPE



Fig. 857

		SINGLE	
No.	Plain Bushed Each	Roller Bushed Each	
0	\$2.60	\$3.10	
1	3.10	3.75	
2	4.25	4.90	
		DOUBLE	
No.	Plain Bushed Each	Roller Bushed Each	
0	\$3.50	\$4.50	
1	4.50	5.70	
2	6.25	7.50	

Block With Eye Strap



Fig. 861

		SINGLE	
No.	Plain Bushed Each	Roller Bushed Each	
0	\$1.50	\$2.00	
1	1.75	2.40	
2	2.50	3.15	
		DOUBLE	
No.	Plain Bushed Each	Roller Bushed Each	
0	\$2.40	\$3.40	
1	3.15	4.35	
2	4.50	5.75	

Self Locking Bridle Block
FOR PEAK HALYARD



Fig. 858

		SINGLE ONLY	
No.	Plain Bushed Each	Roller Bushed Each	
1	\$3.40	\$4.00	
2	4.50	5.25	

Bridle Only see Fig. 877

Link Deck Leader



Fig. 862

		SINGLE	
No.	Plain Bushed Each	Roller Bushed Each	
0	\$1.85	\$2.35	
1	2.25	2.90	
2	3.25	3.90	
		DOUBLE	
No.	Plain Bushed Each	Roller Bushed Each	
0	\$2.80	\$3.80	
1	3.65	4.85	
2	5.25	6.50	

Main Sheet Bridle Block

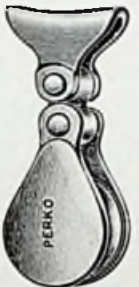


Fig. 859

		SINGLE ONLY	
No.	Plain Bushed Each	Roller Bushed Each	
0	\$1.85	\$2.35	
1	2.25	2.90	
2	3.25	3.90	

Halyard Deck Leader



Fig. 863

		SINGLE	
No.	Plain Bushed Each	Roller Bushed Each	
0	\$1.75	\$2.25	
1	2.10	2.75	
2	3.00	3.65	
		DOUBLE	
No.	Plain Bushed Each	Roller Bushed Each	
0	\$2.65	\$3.65	
1	3.50	4.70	
2	5.00	6.25	

Peak Halyard Bridle Block



Fig. 860

		SINGLE ONLY	
No.	Plain Bushed Each	Roller Bushed Each	
1	\$3.40	\$4.00	
2	4.50	5.15	
		BRIDLE ONLY WITH EYE	
No.	Plain Bronze Each	Polished Bronze Each	
1	\$1.65	\$2.10	
2	1.90	2.35	

Swivel Deck Leader

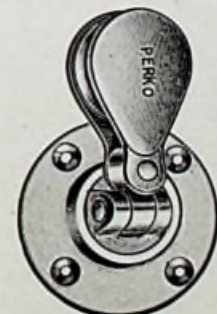


Fig. 864

		SINGLE	
No.	Plain Bushed Each	Roller Bushed Each	
0	\$2.75	\$3.25	
1	3.25	3.90	
2	4.25	4.90	
		DOUBLE	
No.	Plain Bushed Each	Roller Bushed Each	
0	\$3.65	\$4.65	
1	4.65	5.85	
2	6.25	7.50	

DEDUCT 10% FOR PLAIN FINISH
CHROMIUM PLATED Yacht Blocks—Price on Application
SIZES AND OTHER INFORMATION ON PAGE 170

BRONZE YACHT BLOCKS AND FITTINGS

Lightweight Main Sheet Blocks BRONZE



Fig. 432

Lightweight combined with ample strength and low price.

No.	Plain Each	Polished Each	For Diam. Rope Inches	Size Sheave Inches	Weight Ounces
0	\$1.00	\$1.50	$\frac{1}{8}$	$1\frac{1}{8} \times \frac{1}{8}$	3½
1	1.15	1.65	$\frac{3}{8}$	$1\frac{3}{8} \times \frac{1}{2}$	4

Cheek Block POLISHED



Fig. 866

No.	SINGLE		Roller Bushed Each
	Plain Each	Bushed Each	
0	\$1.50	\$2.00	
1	1.75	2.40	
2	2.50	3.15	
No.	DOUBLE		Roller Bushed Each
	Plain Each	Bushed Each	
0	\$2.40	\$3.40	
1	3.15	4.35	
2	4.50	5.75	

Deduct 10% for Plain Finish.

Improved Centerboard Block POLISHED



Fig. 867

SINGLE ONLY

No.	Plain Bushed Each
0	\$1.50
1	1.75
2	2.50

Deduct 10% for Plain Finish.

Centerboard Blocks

GALV. MALLEABLE IRON AND BRONZE



Fig. 827

No.	Galvanized Each	Plain Bronze Each	Polished Bronze Each	Size Rope Inches	Size Sheave Inches
1	\$.80	\$1.50	\$2.00	$\frac{3}{8}$	$1\frac{1}{2} \times \frac{1}{2}$
2	1.50	2.50	3.00	$\frac{1}{2}$	$2 \times \frac{3}{8}$

All above items furnished CHROMIUM PLATED if desired—Price on Application

Bullet Blocks

FOR JIB SHEETS AND LEADERS
SINGLE ONLY

No.	For Rope Diam. Inches	Size Sheave Inches
0	$\frac{1}{8}$	$\frac{3}{4} \times \frac{1}{8}$
1	$\frac{3}{8}$	$\frac{7}{8} \times \frac{1}{2}$
2	$\frac{1}{2}$	$1\frac{1}{8} \times \frac{3}{8}$
3	$\frac{1}{2}$	$1\frac{1}{4} \times \frac{3}{8}$



Fig. 869

No.	Polished Bronze Each
0	\$.65
1	.80
2	1.00
3	1.25

Deduct 10% for Plain Finish.

Bullet Blocks On Snap Shackle

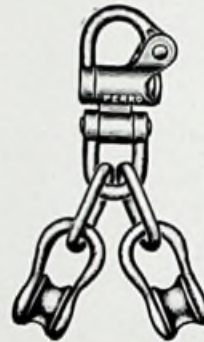


Fig. 870

FOR JIB SHEETS

No.	For Rope Diam. Inches	Lgth. Snap Shackle Inches
0	$\frac{1}{8}$	2¾
1	$\frac{3}{8}$	3¼

No.	Polished Bronze Per Set
0	\$3.75
1	4.50

Deduct 10% for Plain Finish.

Open Lead Blocks



Fig. 868

FOR GENOA JIB SHEETS

No.	For Rope Diam. Inches	Size Sheave Inches
1	$\frac{3}{8}$	$\frac{7}{8} \times \frac{1}{2}$
2	$\frac{1}{2}$	$1\frac{1}{4} \times \frac{3}{8}$

No.	Polished Bronze Each
1	\$2.00
2	3.00

Deduct 10% for Plain Finish.

Wide Mortise Blocks POLISHED

FOR JIB SHEETS AND LAZY JACKS

A short block with thick sheave for large rope.

SINGLE ONLY

No.	For Rope Diam. Inches	Diam. Sheave Inches
1	$\frac{1}{2}$	1½
2	$\frac{3}{8}$	1¾



Fig. 865

No.	Plain Bushed Each
1	\$3.50
2	4.50

Deduct 10% for Plain Finish.



BRONZE YACHT FITTINGS

Swivel Eye Bullet Blocks

CAST BRONZE



Fig. 934

For jib sheets or halyards on small sail boats.

Plain Each	Polished Each	Length Shell Inches	Size Sheave Inches	For Diam. Rope Inches	Weight Ounces
\$.85	\$1.25	1 3/8	3/4 x 3/8	1/8	2 1/2

Swivel Eye Block on Plate

CAST BRONZE

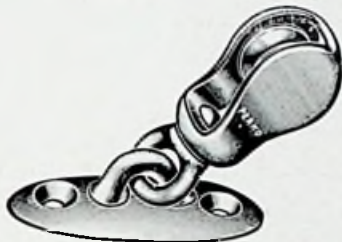


Fig. 935

This is our swivel eye bullet block mounted on cast bronze plate for deck leads.

Plain Each	Polished Each	Length Plate Inches	Width Plate Inches	Weight Complete Ounces
\$1.40	\$1.90	2 1/4	3/4	3 1/2

Swivel Eye Block on Slide

CAST BRONZE

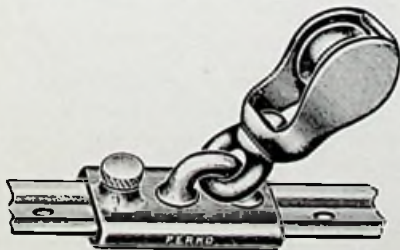


Fig. 936

Our swivel eye bullet block mounted on cast bronze slide for quick and easy adjustment of jib sheet lead. Slide has large head thumb screw for fastening in position with fingers.

Furnished complete with 24 inches of 3/8 inch nickel silver track.

Plain Each	Polished Each	Length Slide Inches	Width Slide Inches	Weight Complete Ounces
\$2.25	\$2.75	1 3/4	1	7 1/2

Fast Eye Snap Shackle

MANGANESE BRONZE—PLAIN

For Balloon Jib, Spinnaker, Halyards and Sheets.



Fig. 873

No.	Price Each	For Rope Diam. Inches	Lgth. Over-all Inches	Width Opening Inches
0	\$1.00	1/4	2 1/8	5/8
1	1.25	5/16-3/8	2 3/8	3/4
2	1.75	3/8-1/2	3 1/8	7/8

No.	Approx. Strength Pounds	Recommended Working Load Pounds
0	800	550
1	1500	1000
2	2500	1650

Swivel Eye Snap Shackle

MANGANESE BRONZE—PLAIN

For Ballon Jib, Spinnaker, Halyards and Sheets.

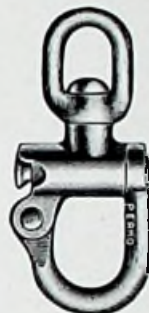


Fig. 874

No.	Price Each	For Rope Diam. Inches	Lgth. Over-all Inches	Width Opening Inches
0	\$1.60	1/4	2 3/8	3/8
1	2.00	5/16-3/8	3 3/4	3/4
2	2.75	3/8-1/2	4 1/2	7/8

No.	Approx. Strength Pounds	Recommended Working Load Pounds
0	800	550
1	1500	1000
2	2500	1650

Headboard Snap Shackle

MANGANESE BRONZE—PLAIN

For attaching Main Halyards to Headboard.

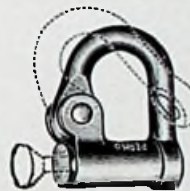


Fig. 875

No.	Price Each	Length Overall Inches	Width Opening Inches
1	\$1.25	2	3/4
2	1.55	2 1/2	7/8

Improved Headboard Snap Shackle

MANGANESE BRONZE—PLAIN

For attaching Main Halyards to Headboard.



Fig. 876

No.	Price Each	Length Overall Inches	Width Opening Inches
1	\$1.50	2 1/4	3/4
2	2.00	3	7/8

Self Locking Bridles

MANGANESE BRONZE—PLAIN

FOR PEAK HALYARD BLOCKS



Fig. 877

No.	Price Each	For Size Wire Inches	Size Opening For Block Inches
1	\$1.25	1/4	3/8
2	1.50	5/16	1/2
3	1.80	3/8	3/8

All above items furnished CHROMIUM PLATED if desired—Price on Application

Automatic Jam Cleats

CAST BRONZE—POLISHED

OPEN EYE

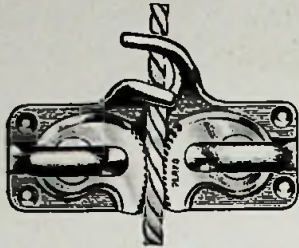


Fig. 895

An exceptionally strong and positive grip, can be operated at some distance from cleat, a jerk on the rope releases it. Open guide for leading rope, takes rope from $\frac{1}{8}$ to $\frac{1}{2}$ inch diameter inclusive.

Price Each \$4.75

Automatic Jam Cleats

CAST BRONZE—POLISHED

CLOSED EYE



Fig. 1093

Same cleat as Fig. 895 above except the eye which is closed for use with jib sheets, etc.

Price Each \$4.75

Racing Jam Cleats

CAST BRONZE



Fig. 762

Length Inches	For Size Rope Inches	Pollshed Bronze Each
3 1/2	1/4	\$1.80
4	3/8	2.00
6	1/2	2.50

Double Jam Cleats

CAST BRONZE—POLISHED

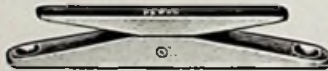


Fig. 1030

No.	Price Each	Length Inches	Width Inches
1	\$.75	4	1/2
2	1.00	5	3/8

Roller Jam Cleats

CAST BRONZE

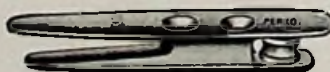


Fig. 894

No. 1 Size is ideal for Snipes, Moths, Comets, etc.
No. 2 Size for Star Class and other Sail Boats of like size.

No.	Pollshed Bronze Each	For diam. Rope Inches	Extreme Length Inches	Diam. Inches	Price Each	For Diam. Rope Inches	Thickness Inches	Bearing Inches
1	\$1.40	1/8 to 1/4	4	1 3/4	.50	1/4	3/8	1/4
2	1.60	1/4 to 3/8	5 1/4	2 1/4	.80	1/4	1/2	3/8

All above items furnished CHROMIUM PLATED if desired—Price on Application

Single Flare Lip Leaders

CAST BRONZE



Fig. 764

No.	Plain Each	Pollshed Each	Small Opening Inches
1	\$.15	\$.30	1/2
2	.20	.40	3/8

Double Flare Lip Leaders

CAST BRONZE



Fig. 889

No.	Plain Each	Pollshed Each	Opening Inches
0	\$.15	\$.40	3/8
1	.20	.50	1/2
2	.25	.60	5/8

Masthead Trucks

LIGNUMVITAE



Fig. 891

Diam. Inches	Two Holes Each	One Sheave Each	Two Sheaves Each
2	\$.70	\$.70	\$1.00
2 1/2	.85	.85	1.10
3	1.10	1.10	1.50
3 1/2	1.40	1.40	1.80
4	1.65	1.65	2.15
4 1/2	2.00	2.00	2.50
5	2.35	2.35	3.20
5 1/2	2.75	2.75	3.70
6	3.50	3.50	4.00

Masthead Sheaves

FOR MANILA ROPE
CAST BRONZE—PLAIN BEARING



Fig. 892

Head and Jibstay Fittings

CAST BRONZE—PLAIN



Fig. 1032

For allowing various adjustments of head and jibstays, has an angular hole for lag screw in forward end for fastening to stem.

No.	Price Each	Length Inches	Width Inches	Number of Holes	Weight Each Ounces
1	\$1.75	5	1 1/2	5	12
2	2.00	7 3/4	1 3/4	8	28

Tubular Spreaders

BRASS TUBE—BRONZE FITTINGS

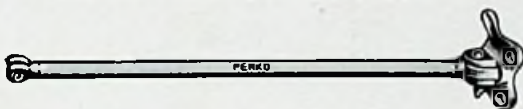


Fig. 1031

Made of seamless brass tubing with cast bronze fittings both ends, the mast plate has an integral projecting lip serving the purpose of a shoulder cleat for stays. Very strong but light in weight.

No.	Plain Per Pair	Length Inches	Diam. Inches	Size of Mast Plate Inches	Weight Per Pair Pounds
1	\$4.50	17 1/2	1/2	1 3/4 x 1 3/4	3/4
2	5.50	21 1/2	3/8	1 3/4 x 1 3/4	1
3	6.50	28	3/8	1 3/4 x 1 3/4	1 1/4

Snap Action Clew Outhaul

MANGANESE BRONZE—PLAIN



Fig. 871

With spring pin so sail can be put on or taken off easily.

No.	Price Each	For Width Rolled Track Inches	Length Overall Inches
1	\$2.00	3/8	3 3/4
2	3.50	3/8	5 1/2

Clew Outhaul Slides

MANGANESE BRONZE—PLAIN



Fig. 872

No. 1 size is furnished with nickel silver rolled track like Fig. 99.

No. 2 and 3 sizes are furnished with heavy cast bronze track as illustrated.

No. 3 size has a sheave for wire instead of groove.

No.	Plain Bronze Each	Width Track Inches	Lgth. Track Inches
1	\$2.25	3/8	15
2	4.25	3/4	13
3	6.50	3/8	15

Stemhead Plate

CAST BRONZE—STREAMLINED



Fig. 343

A fitting designed for appearance as well as practicability.

Forward hole for painter, center hole for jib stay, rear hole for jib tack.

Angle is 70 degrees.

Length Straps Inches	Extreme Width Inches	Diam. Center Hole Inches	Diam. Forward Hole Inches	Weight Ounces
3 5/8	1	1/10	3/4	8
Plain Bronze Each	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	
\$.90	\$1.40	\$1.75	\$2.10	

Marconi Headboards

ALUMINUM ALLOY



Fig. 462

Headboards improve the set of the sail and are almost indispensable on Marconi Rigs.

No.	Each	Measurements Inches	Weight Ounces	For Class Boat
0	\$1.00	3 7/8 x 3 3/8	3	Star
1	1.25	4 1/4 x 3 3/8	5	Atlantic
2	1.75	5 1/2 x 5 1/4	7	6 Meter

Clew Outhaul

CAST BRONZE—PLAIN

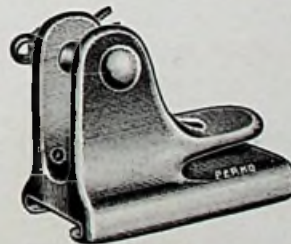


Fig. 1047

Designed for small sail boats. A good low priced light weight fitting.

Each	For Track Inches	Jaw Opening Inches	Length Inches	Height Inches	Weight Ounces
\$1.00	3/8	3/8	1 3/4	1 1/2	3 1/2

Bronze Gooseneck Bands
MANGANESE BRONZE—PLAIN

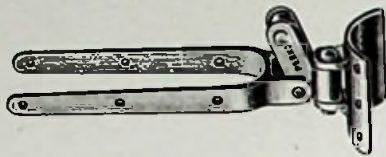


Fig. 883



Fig. 884

Boom straps are measured from outside to outside of straps, as they are mortised into the side of the boom so as to be flush with the boom surface.

No.	Mast Diam. Inches	Diam. Boom End Inches	Fig. 883 Each	Fig. 884 Each
1	3 to 3½	1¾	\$4.00	\$5.50
2	4 to 4½	2¼	4.00	5.50

Bronze Goosenecks

WITH FLAT PLATE FOR SQUARE OR T MASTS
MANGANESE BRONZE—PLAIN

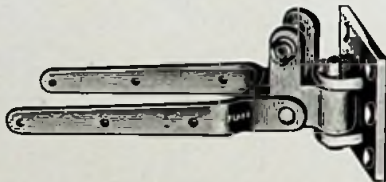


Fig. 1034

The trend in design for masts is changing from the old style round mast to the modern square, rectangular or T shaped mast, hence a gooseneck with a flat plate is necessary.

No.	Price Each	Width of Plate Inches	Length of Plate Inches	Diameter Boom end Inches
1	\$4.00	2	3	1¾
2	4.00	3	4	2¼

Gooseneck Bands

GALVANIZED DROP FORGED STEEL

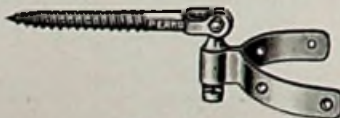


Fig. 886

For Size Mast Inches	Each	Weight Each Pounds	For Size Mast Inches	Each	Weight Each Lbs.
2½	\$2.70	¾	3½	\$2.90	1¾
3	2.70	¾	4	3.50	1¾

Adjustable Gooseneck Bands
GALVANIZED DROP FORGED STEEL



Fig. 885

Inside Diam. of Band Inches	Without Belaying Pin Holes Each	With Four Belaying Pin Holes Each	Diam. of Screw Inches
3	\$2.90	\$ 8.00	1/8
3½	3.25	8.75	1/8
4	3.85	9.80	1/2
4½	4.20	11.00	1/2

Larger sizes made to order.
Prices do not include belaying pins. Furnished without belaying pin holes unless otherwise specified.

Socket Gooseneck Bands
GALVANIZED FORGED STEEL BANDS
WITH MALLEABLE IRON BOOM SOCKET
OR FORGED STEEL STRAPS

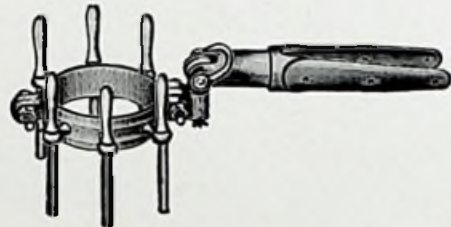


Fig. 758

*In- side Dia. of Band Inches	Without Belaying Pin Holes Each	With Four Belaying Pin Holes Each	With Six Belaying Pin Holes Each	Boom Diam. at outer end of Sockets Inches	For Belay- ing Pin Dia. Inches
3	\$ 7.00	\$12.00		1¾	¾
3½	8.00	13.00		2	¾
4	9.00	14.00		2¼	¾
4½	9.50	16.00		2¼	¾
5	10.00	18.00	\$20.00	2½	¾
6	12.50	20.00	21.00	3	1/8
7	14.50	21.00	23.00	3½ to 4½	1/2
8	18.00	22.00	26.00	5	5/8

†Belaying Pins are not sent unless specifically ordered and are then charged extra. Larger sizes made to order.

Jib Club Fittings

MANGANESE BRONZE—PLAIN



Fig. 887

Allows club to be easily removed from jib stay.

No.	For Diam. Club Inches	Price Each
1	1½	\$3.75
2	1¾	4.25
3	2	4.75

Sliding Gooseneck

NATIONAL ONE DESIGN CLASS
BRONZE

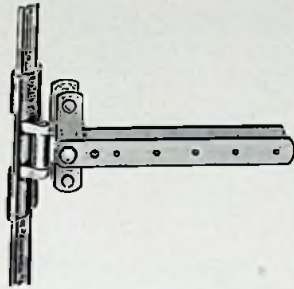


Fig. 452

Furnished without track.

Slide is cast bronze, boom straps are wrought brass. This fitting is as light in weight as possible while retaining all necessary strength.

Plain Each	Width Between Straps Inches	Length Inside Straps Inches	For Mast Track Inches	Weight Each Pounds
\$2.50	3/4	6	5/8	3/4

Sliding Gooseneck

BRONZE

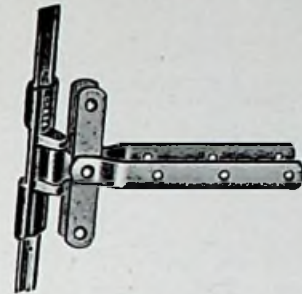


Fig. 592

Furnished without track.

Slide is cast bronze, boom straps are wrought brass. Straps can be adjusted for booms smaller than 2 inch diameter.

Plain Each	Width Between Straps Inches	Length Inside Straps Inches	For Mast Track Inches	Weight Each Pounds
\$4.00	1 3/4	6	5/8	1

Small Boat Gooseneck Bands

CAST BRONZE



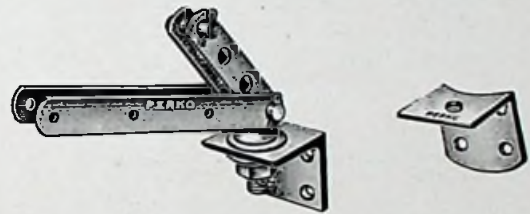
Fig. 658

A good strong fitting made of high grade bronze but low priced for the pocketbook of the small boat owner.

Plain Each	For Diam. Mast Inches	Length of Screw Inches	Diam. of Screw Inches	Weight Ounces
\$1.00	2 3/4	3 3/4	3/8	6

"Snipe" Boom Fittings

BRASS STRAPS—BRONZE MAST PLATE



With Plate for Square Mast Plate for Round Mast
Fig. 888

Plain Brass Each	Polished Brass Each	Width Plate Inches	For Boom Inches	Weight Each Pounds
\$2.25	\$3.00	2	1 to 1 1/2	1 1/2

When ordering, specify whether for square or round mast.

Spinnaker Pole Fittings

CAST BRONZE—PLAIN

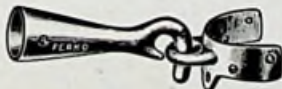


Fig. 587

The America's Cup Races proved the value of parachute spinnakers and resulted in an increasing demand for spinnaker pole fittings.

These are made of cast bronze and in two sizes for the largest variety of small boats.

No.	Complete Each	For Diam. Pole Inches	For Diam. Mast Inches	Length Hook Inches	Weight Pounds
1	\$3.00	1 1/8	2 1/2	5	
2	4.50	1 1/2	4	6	1 1/2

As the mast band is made of high grade bronze it can easily be bent for smaller or larger masts.

Belaying Pins

GALVANIZED MALLEABLE IRON AND BRONZE

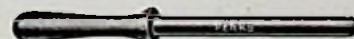


Fig. 366

Diam. Shank Inches	Galv. Each	Polished Bronze Each	Length Head Inches	Extreme Length Inches	Weight Each Pounds
3/8	\$.40	\$1.60	3	8	3/8
1/2	.60	1.95	3 3/8	9 1/2	3/4
3/8	.80	2.70	3 3/4	10 1/4	1
3/4	1.00	3.40	4 1/4	11	1 3/4
1	1.40		6 1/2	15	2 1/4
1 1/8	1.70		7	16	3
1 1/4	2.00		8	19	3 1/2



Wind Pennants

ADJUSTABLE COUNTERBALANCE
ALUMINUM PENNANT—BRASS STANDARD

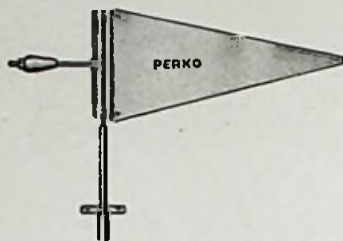


Fig. 435

Pennant swings on a needle point pivot and has an adjustable counterbalance should the weight of the pennant change from application of paint or attachments of any kind.

Perfect balance and needle point bearing makes this pennant instantly responsive to the lightest of winds.

FURNISHED IN PAINTED FINISH,
EITHER RED, BLUE OR WHITE

For Mast 1 Inch Diam. at Top, $\frac{1}{8}$ Hole

No.	Painted Each	Size of Pennant Inches	Height Overall Inches	Weight Ounces
1	\$2.00	6 1/2 x 3	6 1/2	2 1/2
2	2.50	9 1/2 x 4 1/2	7 3/4	4
3	3.50	12 x 6	10	10
4	4.50	15 x 7 1/2	11 1/2	12

Improved Wind Pennants

ADJUSTABLE COUNTER BALANCE

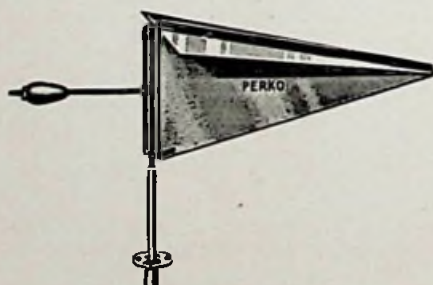


Fig. 837

This is the same as our popular Fig. 435 wind pennant improved by the addition of a horizontal vane attached to the regular vertical vane permitting a more distinct view when directly below the pennant. The horizontal vane is detachable if not required.

Furnished in plain or painted finish. Painted colors are red, blue or white.

No.	Complete Each	Size of Pennant Inches	Height Overall Inches	Weight Ounces
5	\$2.50	6 1/2 x 3	6 1/2	3
6	3.00	9 1/4 x 4 1/2	7 3/4	5
7	4.25	12 x 6	10	11 1/2
8	5.25	15 x 7 1/2	11 1/2	14

Ratchet Winches

POLISHED MANGANESE BRONZE

Of rugged construction, positive but simple action, can be used with wire as well as rope. The handles swing with a pump motion in a 130 degree arc. Power ratio about 8 to 1. On the top action type the handle is removable but snap catch prevents it dropping out accidentally.

TOP ACTION TYPE
With Removable Handle

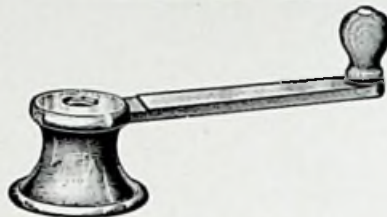


Fig. 800

Size No.	Each	Handles Only Each	For Diam. Rope Inches	Weight Each Pounds
1	\$12.50	\$2.25	3/8	3
2	16.50	3.50	1/2	6
3	24.00	4.75	5/8	12

Size No.	Smallest Diam. Drum Inches	Height Inches	Diam. Base Inches	Radius Handle Inches
1	1 3/4	2 3/4	3 1/2	7 3/4
2	2 1/4	3	4 1/4	10
3	3	4 1/2	5 3/4	12 1/2

BOTTOM ACTION TYPE
With Folding Handle—Not Removable



Fig. 802

Size No.	Price Each	Minimum Drum Dia. Inches	Total Height Inches	Base Dia. Inches	Radius of Hdle. Inches	Suitable Dia. Rope Inches
1	\$14.00	1 7/8	3 1/4	4	9 1/2	3/8
2	18.50	2 3/8	4	5	12	7/8 or 1/2

Sheet Snubbing Winch

CAST BRONZE—POLISHED



Fig. 937

A one way action winch which greatly reduces the strain of hauling on sheets or halyards.

Action of head is clockwise only for hauling in. But same is carefully machined and highly polished to allow free running of sheet when let out.

No.	Polished Bronze Each	Chromium Plated Each	Height Inches	Diam. Drum Inches	Diam. Base Inches	Weight Pounds
1	\$4.50	\$6.50	2 3/4	1 1/4	3 1/8	1 3/4



Sail Slides with Thimble

NICKEL SILVER SLIDE—BRASS THIMBLE

Our standard Fig. 98 Sail Slide with a brass sail thimble attached.



Fig. 1036

For width Of track Inches	Price Each Complete	Diam. of Thimble Inches	Score of Thimble Inches
3/8	\$.15	1/2	1/8
7/8	.20	3/4	1/4

Mast Track and Slides

NICKEL SILVER AND BRASS

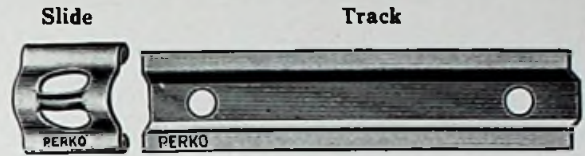


Fig. 98

Fig. 99

Width Track Inches	Nickel Silver Slides Each	Nickel Silver Track Per Foot	Brass Track Per Foot
3/8	\$.07	\$.16	\$.12
7/8	.10	.20	

"Perko" slides will fit any make of track of corresponding design and size.

Nickel silver lengths of track are 8, 10 and 12 feet. All orders will be filled with lengths available to make up total number of feet ordered.

Brass track furnished only in 3/8 size and in 10 foot lengths.

Halyard Fairleaders

POLISHED BRONZE



Fig. 580

Designed for main halyards on small boats this fitting has many other uses. Will not chafe rope.

Polished Each	Length Inches	Width Inches	For Diam. Rope Inches	Weight Ounces
\$.40	2 1/4	3/4	3/8	2 1/2

New Backstay Fittings

CAST BRONZE—POLISHED

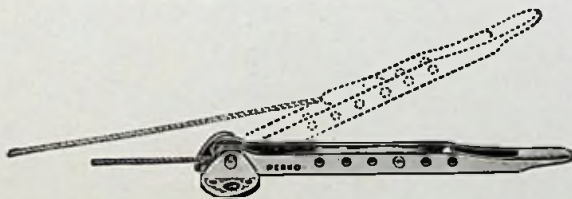


Fig. 1098

For quick release of backstay this fitting can't be beat. Turnbuckles are unnecessary. Complete with socket for 1/8 inch rigging. A set consists of fittings for port and starboard. Illustration shows 1/2 set.

Per Set	Length Inches	Base Inches	For Rigging Inches	Weight Pounds
\$7.50	12 1/4	3 1/4 x 2	up to 1 1/8	1 1/2

The Ohman Track Gate

CAST BRONZE WITH NICKEL SILVER TRACK

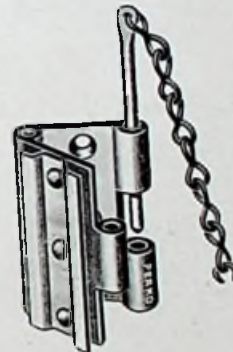


Fig. 1111

For setting a storm trysail or any other loose footed sail to track without removing main sail slides, will not foul mainsail.

Consists of a short length of nickel silver track riveted to a cast bronze hinge with fast pin in hinged side and removable pin in the other. Track is either 5/8 or 3/8 inch wide.

Very easily installed, simply cut away required length of track batten and fasten directly to mast so that track ends line up perfectly.

To set or remove trysail slides, lower main sail slides below hinge, remove pin, swing back hinge and track is open.

Each	Length Inches	Width Inches	Thickness Closed Inches	Weight Ounces
\$2.00	2 1/2	1 1/2	3/8	7

Give size of track when ordering.



Improved Rigging Turnbuckles

MANGANESE BRONZE

With Stiff Jaw Ends—S. A. E. Threads



Fig. 932

Size Inches	Plain Each	Polished Each	Length Inches of SHF Jaws		Jaw Opening Inches	Suitable Airplane Wire Rope Inches
			Closed	Opened		
1/4	\$1.75	\$2.25	7 1/8	10 3/8	Both 1/4	1/8
5/16	2.00	3.00	7 7/8	11 3/8	Both 5/16	5/16
3/8	2.75	3.75	9	12 3/4	Both 3/8	3/8
7/16	3.25	4.25	10	14 1/4	Both 7/16	1/4
1/2	3.75	4.75	11 1/2	16 1/2	Both 1/2	3/8

Size Inches	Approx. Strength Pounds	Recommended Working Load Pounds
1/4	2800	1000
5/16	4200	1500
3/8	6200	2200
7/16	8000	2800
1/2	11000	3850

Bronze Rigging Turnbuckles

DROP FORGED—WELDLESS
S. A. E. THREADS



Fig. 459

These are drop forged from special high strength solid bronze bars giving unusual strength as shown in table below.

Size Inches	Plain Each	Polished Each	For Diam. Wire Rope Inches	Weight Each Pounds	Diam. Pins in Jaws Inches	Length from Center to Center of Pins in Jaws Inches		Width Jaw Opening Inches	
						Extended	Closed	Narrow Jaw	Wide Jaw
1/4	\$1.75	\$2.25	1/8	3/8	1/8	8	5 3/4	1/4	1/4
5/16	2.00	3.00	3/16	1/2	5/16	10 3/8	7 1/4	5/16	5/16
3/8	2.75	3.75	1/4	3/4	3/8	12 1/4	8 1/2	3/8	3/8
7/16	3.25	4.25	5/16	1	7/16	13 1/2	9 1/2	7/16	7/16
1/2	3.75	4.75	3/8	1 1/2	1/2	14 1/2	10 1/4	1/2	1/2
5/8	5.50	6.75	3/8 & 1/2	2 3/8	5/8	17	12	5/8	5/8

Large sizes can be furnished with wide and narrow jaws. Two wide jaws furnished unless otherwise specified.

Rigging Turnbuckles

DROP FORGED BRONZE
WELDLESS—S. A. E. THREADS
WITH LOCK NUTS—HEXAGON BODY



Fig. 1028

Of great tensile strength far beyond that of cast bronze. The body and end fittings are drop forged from a solid bar of high grade bronze.

Size Thread Inches	Plain Each	Polished Each	Length Pin to pin of Jaws		Jaw Opening Inches
			Closed Inches	Opened Inches	
1/4	\$1.75	\$2.25	6 3/8	9 3/8	1/4
5/16	2.00	3.00	7 1/4	10 5/8	5/16
3/8	2.75	3.75	8 1/4	11 3/8	3/8
1/2	3.75	4.75	10 1/4	14 1/2	1/2

1/4, 3/8, 1/2 inch sizes can be furnished with jaw and eye. Add 10% to above prices.

Toggles for Turnbuckles

MANGANESE BRONZE—POLISHED



Fig. 1033

No.	Price Each	For turnbuckle Inches	Width Between jaws Inches
1	\$.55	1/4	5/16
2	.65	5/16	3/8
3	.75	3/8	3/8
4	.85	7/16	7/16
5	1.00	1/2	7/16

Bronze Wire Rope Sockets

MANGANESE BRONZE

Eliminating the necessity of splicing wire rigging, especially the difficult splicing of stainless steel rigging. While lead is commonly used when socketing the wire we recommend the use of zinc.

CLOSED TYPE



Fig. 756

No.	Each	Diam. Wire Inches	Width Inside Inches	Length Overall Inches	Weight Ounces
00	\$.40	1/8	3/8	1 3/4	1
0	.40	5/16	3/8	1 3/4	1
1	.40	1/8	3/8	1 3/4	1
2	.50	5/16	1/2	2 1/4	2
3	.70	1/4	3/8	2 3/4	3
4	.90	3/16	3/4	3	4 1/2
5	1.20	3/8	1	3 1/4	8

OPEN TYPE



Fig. 757

No.	Each	Diam. Wire Inches	Jaw Opening Inches	Diam. Pin Inches	Length Overall Inches	Weight Ounces
9	\$.60	1/8	1/4	1/4	1 3/4	1
10	.60	5/16	1/4	1/4	1 3/4	1
11	.60	1/8	1/4	1/4	1 3/4	1
12	.75	5/16	3/8	3/8	2 1/4	2 1/2
13	1.05	1/4	3/8	3/8	2 3/4	3 1/2
14	1.35	3/16	1/2	1/2	3 1/4	5
15	1.75	3/8	5/8	5/8	3 1/2	9

All above items furnished CHROMIUM PLATED if desired—Price on Application

Screw Eye on Plate CAST BRONZE



Fig. 1035

Furnished with a flush plug to screw in place when eye is removed.
For all leader blocks and other items requiring easy removal from deck.

No.	Polished Each Complete	Inside Diam. Eye Inches	Diam. Thread Inches	Diam. Plate Inches
1	\$2.00	3/4	1/2	2 7/8
2	2.25	1	1/2	2 7/8

Foot Rope Plates

GALVANIZED DROP FORGED STEEL AND BRONZE

For Foot Ropes or Bowsprit Shrouds

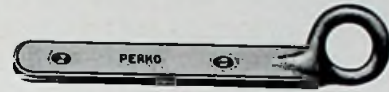


Fig. 568

Length Under Eye Inches	Galv. Each	Plain Bronze Each	Polished Bronze Each	Size Iron Inches	Size Eye Inches
4	\$.50	\$1.10	\$1.55	7/8 x 3/16	5/8
5	.60	1.25	1.70	1 x 1/4	3/4
6	.75	1.50	1.95	1 1/8 x 1/4	7/8
8	1.00	1.70	2.30	1 1/4 x 1/4	7/8
10	1.50	2.10	2.90	1 1/4 x 1/4	1

Fitted for Shackle when desired. Larger sizes made to order.

Gaff Topsail Hooks

GALVANIZED MALLEABLE IRON
COLEMAN PATTERN



Fig. 931

Size Inches	Each	Weight Pounds	Size Inches	Each	Weight Pounds
1/4	\$.60	1/4	1/2	\$1.20	3/4
5/16	.65	7/16	5/8	2.75	1 1/4
3/8	.85	7/8	3/4	3.25	2 1/2
7/16	.95	5/8			

Bob Stay Straps

GALVANIZED DROP FORGED STEEL AND POLISHED BRONZE



Fig. 803

Diam. of Metal in Eye Inches	Galvanized Each	Pol. Bronze Each	Overall Length inches	Length of Strap Inches
3/8	\$.75	\$1.10	3	2
7/16	.85	1.40	4	3
1/2	.95	1.70	5	3 1/2
5/8	1.10	2.80	6	4
3/4	3.40		8	5

Chain Plates

GALVANIZED DROP FORGED STEEL AND BRONZE



Fig. 569

Length Under Eye Inches	Galv. Each	Plain Bronze Each	Polished Bronze Each	Size of Plate Inches
4	\$.30	\$.95	\$1.30	3/4 x 1/8
5	.35	1.10	1.45	7/8 x 1/8
6	.40	1.20	1.55	1 x 1/8
8	.50	1.45	1.90	1 1/8 x 1/4
10	.75	1.80	2.40	1 1/8 x 1/8
12	1.00	2.20	2.90	1 5/8 x 1/8
14	1.50	3.20	4.30	1 5/8 x 3/8
16	1.75	4.30	6.00	1 13/16 x 3/8
18	2.00	6.00	8.00	1 13/16 x 1/2
20	2.50			1 13/16 x 5/8

Any size made to order.

Small Boat Chain Plate

CAST BRONZE



Fig. 629

A good looking dressy chain plate for sail boats up to about 20 feet long.

"Snipe" Chain Plates BRASS

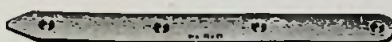


Fig. 143

Plain Each	Polished Each	Size Inches	Weight Ounces	Plain Each	Polished Each	Chromium Plated Each	Length Inches	Thick-ness Inches	Weight Ounces
\$.70	\$.90	10 1/2 x 1 x 1/8	6	\$.50	\$.70	\$1.00	6	1/4	7

Boom Travelers

CAST BRONZE

FOR MAIN SHEET BLOCKS ON BOOMS

FOR RECTANGULAR BOOMS



Fig. 1112

Fastened by one rivet and two screws.

Plain Each	Polished Each	For Thickness Boom Inches	Weight Ounces
\$.50	\$.75	1/2 to 1 3/4	2 1/2

FOR T BOOMS



Fig. 1113

Fastened with two rivets.

Plain Each	Polished Each	For Thickness Boom Inches	Weight Ounces
\$.40	\$.60	3/4 to 1	1 1/2

FOR ROUND BOOMS



Fig. 878

Diam. Boom	Plain Each	Polished Each	Width of Plate Inches	Weight Ounces
2	\$.80	\$ 1.15	1 1/4	
2 1/2	.90	1.25	1 1/2	
3	1.10	1.50	1 3/8	

Adjustable Jib Sheet Leaders

CAST BRONZE



Fig. 1114

One solid casting with large head thumb screw for fastening with fingers. Furnished complete with 24 inches of 5/8 inch nickel silver track.

Plain Each	Polished Each	Length Inches	Size Eye Inches	Complete Weight Ounces
\$.90	\$ 1.40	1 7/8	3/4 x 3/8	6

Bronze Block Shackles

MANGANESE BRONZE



Fig. 893

No.	Size Inches	Plain Each	Polished Each
0	1/8	\$.35	\$.50
1	1/4	.40	.55
2	3/8	.50	.65
3	1/2	.80	1.00

Rigging Cleats

MANGANESE BRONZE



Fig. 879

No.	Plain Each	For Diam. Mast Inches	Size Overall Inches
1	\$.40	2 1/2	2 1/2 x 1 1/4
2	.45	3	3 3/8 x 1 5/8
3	.55	4	4 x 1 7/8

Eye Plates

MANGANESE BRONZE



Fig. 880

No.	Length Plate Inches	Opening of Eye Inches	Stock in Eye Inches	Plain Each	Polished Each
1	3 1/8	1 1/8 x 3/4	5/8	\$.65	\$ 1.15
2	3 1/2	1 1/2 x 7/8	1 1/2	.90	1.50
3	4 1/8	3/8 x 1 1/8	3/8	1.10	1.80
4	4 1/4	1 1/8	7/8	1.25	

Eye Straps

MANGANESE BRONZE



Fig. 881

No.	Length Inches	Size Eye Inches	Stock in Eye Inches	Plain Each	Polished Each
0	2	5/16	3/16	\$.22	\$.35
1	2 1/4	3/8	1/4	.28	.45
2	2 3/4	1/2	5/16	.35	.55
3	3 1/8	7/8	7/8	.45	.65

Deck Straps

MANGANESE BRONZE



Fig. 882

No.	Plain Each	Polished Each	Length Inches	Size Eye Inches	Stock in Eye Inches
1	\$.40	\$.50	3 1/2	1/2	5/16
2	.50	.60	4 1/4	5/8	3/8
3	.60	.75	4 3/4	3/4	1/2

Snipe Travelers

GALVANIZED IRON OR BRASS

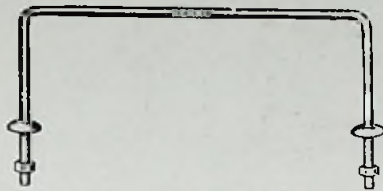


Fig. 271

Galv. Each	Plain Brass Each	Polished Brass Each	Size Inches	Height Above Deck Inches	Weight Pounds
\$1.00	\$1.50	\$2.25	3/8x18	6	1 1/2

Bronze Deck Travelers

TO BOLT THROUGH DECK

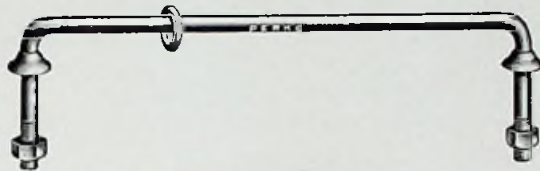


Fig. 933

Diameter of Rod Inches	Length of Rod Inches	Height Between Deck and Traveler Inches	Polished Each
3/8	12	1 1/2	\$3.20
3/8	18	1 1/2	3.50
1/2	12	2	4.00
1/2	18	2	5.00
1/2	24	2	6.00
1/2	30	2	7.00
5/8	18	2	8.00
5/8	24	2	8.75
5/8	30	2	9.50
5/8	36	2	10.25

Bronze Deck Travelers

WITH PLATES TO SCREW TO DECK



Fig. 896

Diam. Slide Inches	Length Inches	Plain Each	Polished Each
3/8	24	\$3.50	\$4.20
1/2	24	4.75	5.50

OTHER SIZES MADE TO ORDER

Mast Shroud Tangs

CAST BRONZE—PLAIN

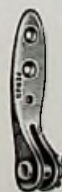


Fig. 387

For the mast shroud of small sail boats. Drilled for fastening by rivet and screws.

Each	For Wire Inches	Length Inches	Width Inches	Weight Ounces
\$.50	1/8-3/16	4	7/8	2 1/2

Snipe Centerboards

GALVANIZED IRON

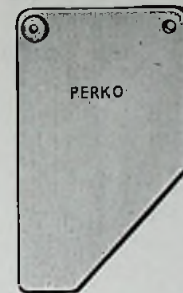


Fig. 134

Galvanized Each	Size Inches	Weight Pounds
\$7.50	36x21x 3/16	32

Centerboard Hoisting Strap

FOR "SNIPE" PIVOT TYPE CENTERBOARDS GALVANIZED



Fig. 212

Required only when Pivot Type Centerboards are used on "Snipe" class sail boats.

Price Each	Length Inches	Width Opening Inches	Size Holes Inches
\$.30	2 1/2	3/8	3/8

"Snipe" Stay Tangs

ALL BRASS



SINGLE
Fig. 47



DOUBLE
Fig. 57

Commonly used for attaching standing rigging to mast on snipe and similar classes of sail boats.

Fig. No.	Plain Brass Each	Pol. Brass Each	For Dim. Rope Inches	Dim. Straps Inches	Dim. Bolt Inches	For Wood Thick-ness Inches	Wt. Each Lbs.
47	\$.60	\$.75	3/16	3/4x4	1/4	2	1/8
57	1.00	1.25	3/16	3/4x4	1/4	2 1/8	1/4

Jib Snaps

GALVANIZED MALLEABLE IRON AND BRASS



Fig. 765

Size No.	Galv. Each	Plain Brass Each	Polished Brass Each	Extreme Length Inches	For Dia. Stay Inches	Weight Per 100 in Lbs.
0	\$.25	\$.35	\$.55	1 5/8	1/4	4 3/8
1	.30	.40	.60	2	1 1/8	10
2	.35	.50	.75	2 3/8	3/8	12 1/2
3	.40			2 3/4	1/2	21
4	.45			3	5/8	23 3/4

Fast Eye Boat Snaps

GALVANIZED MALLEABLE IRON AND BRONZE



Fig. 612

Size No.	Galv. Each	Plain Bronze Each	Polished Bronze Each	Inside Dia. Eye Inches	Extreme Length Inches	Weight Per 100 Pounds
0	\$.25	\$.35	\$.55	3/8	2	5
1	.30	.40	.60	5/8	2 3/4	10
2	.35	.50	.75	3/4	3 1/4	13 1/8
3	.40	.65	1.00	3/4	3 3/8	26 1/4
4	.45			1	4 1/8	27 1/2
5	.50			1 1/8	4 7/8	43 3/4
6	.60			1 1/4	5 1/4	56 1/4

Swivel Eye Boat Snaps

GALVANIZED MALLEABLE IRON AND BRONZE



Fig. 613

Size No.	Galv. Each	Plain Bronze Each	Polished Bronze Each	Inside Diam. Eye Inches	Extreme Length Inches	Weight Per 100 Pounds
1	\$.50	\$.60	\$.75	5/8	3 1/4	11
2	.60	.70	.85	3/4	3 1/4	16 1/4
3	.75	.90	1.25	7/8	4 3/4	32
4	.90			1	5 1/4	37
5	1.10			1 1/8	6	60

Baby Snaps

GALVANIZED AND POLISHED BRASS WITH FAST EYE



Fig. 842

Diam. of Eye Inches	Galvanized Each	Polished Brass Each	Length Inches
3/8	\$.05	\$.15	1 1/4

Improved Jib Snap Hooks

CAST BRONZE



Fig. 1037

A very strong, quick acting Snap. Has two holes for fastening to luff rope of jib. Brings the sail close to the stay.

No.	Plain Each	For Size Stay Inches	For Size Luff Rope Inches
0	\$.35	1/8	1/4
1	.40	3/8 or 1/2	5/8
2	.60	5/8	3/4

Release Hooks

MANGANESE BRONZE



Fig. 890

No.	Plain Each	Polished Each	Length Closed Inches	Opening Size Inches	Eye Size Inches
1	\$1.40	\$1.60	4	1/2	1 1/2 x 3/8
2	1.80	2.00	5 1/2	3/8	5/8 x 3/8

Baby Snaps

WITH SWIVEL EYE
ELECTRO GALVANIZED AND POLISHED BRASS



Fig. 1042

Diam. of eye Inches	Galvanized Each	Polished brass Each	Length Inches
3/8	\$.10	\$.18	2

Baby Snaps

WITH OBLONG EYE—ELECTRO GALVANIZED



Fig. 1041

Diam. of Eye Inches	Galvanized Each	Polished Brass Each	Length Inches	Size of eye Inches	Galvanized Each	Length Inches
3/8	\$.05	\$.15	1 1/4	5/8 x 1/4	\$.05	1 3/4



Eye Bands

GALVANIZED DROP FORGED STEEL
AND MANGANESE BRONZE



Fig. 426

Inside Diam. Inches	Price Each			
	One Eye	Galvanized or Bronze Two Eye	Three Eye	Four Eye
1 1/4	\$.90	\$.90	\$1.50	\$1.50
1 1/2	.95	.95	1.55	1.55
1 3/4	1.00	1.00	1.65	1.65
2	1.10	1.10	1.80	1.80
2 1/4	1.25	1.25	2.00	2.00
2 1/2	1.40	1.40	2.20	2.20
3	1.55	1.55	2.40	2.40
3 1/2	1.70	1.70	2.60	2.60
4	1.85	1.85	2.80	2.80
4 1/2	2.10	2.10	3.00	3.00

No extra charge for bronze bands.
Larger sizes furnished to order.

Solid Brass Rings

POLISHED



Fig. 417

Thickness Inches	Inside Diam. Inches	Per Dozen	Thickness Inches	Inside Diam. Inches	Per Dozen
3/32	1/2	\$.60	1/4	1 3/4	\$3.00
1/8	3/8	.60	1/4	2	3.25
5/32	3/4	.70	1/4	2 1/4	3.75
3/16	7/8	.85	1/4	2 1/2	4.00
1/4	1	1.00	5/16	1 3/4	4.50
5/16	1 1/8	1.20	3/8	2	4.80
3/8	1 1/4	1.35	1/2	2 1/4	5.20
7/16	1 1/2	1.50	5/8	2 1/2	5.70
1/2	1 3/4	2.00	3/4	2 3/4	6.00
5/8	2	2.50	7/8	3	6.50

Mast Hoops

GALVANIZED WROUGHT IRON



Fig. 849

Size Inches	Price Per 100	Weight Per 100 in Lbs.	Size Inches	Price Per 100	Weight Per 100 in Lbs.
2 x 1/4	\$ 6.00	10 1/2	5 x 1/4	\$14.00	24 1/2
2 1/2 x 1/4	8.00	12 1/2	6 x 1/4	15.00	30
3 x 1/4	8.50	15	7 x 1/4	16.00	34 1/2
3 1/2 x 1/4	10.00	17	8 x 1/4	18.00	39
4 x 1/4	13.00	20	9 x 1/4	21.00	44
4 1/2 x 1/4	13.50	22 1/2	10 x 1/4	25.00	49

Measure in clear, special size made to order.

Lacing Eyes

GALVANIZED MALLEABLE IRON AND BRASS
REGULAR

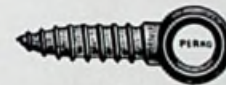


Fig. 766

Size No.	Galv. Each	Plain Brass Each	Inside Diam. of Eye Inches	Length Under Eye Inches	Weight Per 100 in Lbs.
1	\$.04	\$.05	1/4	1	1 1/8
2	.05	.08	5/16	1 1/8	3 3/4
3	.07	.10	3/8	1 1/2	8 1/8
4	.12	.14	1/2	2	11 1/4

Jib Rings

GALVANIZED WROUGHT IRON



Fig. 897

Size Inches	Price Each	Size Inches	Price Each	Size Inches	Price Each
3/8 x 1 1/2	\$.21	3/8 x 3	\$.28	1/2 x 6	\$.55
1/2 x 2	.22	3/8 x 3 1/2	.30	5/8 x 3	.60
5/8 x 2 1/4	.23	1/2 x 3	.40	3/8 x 3 1/2	.65
3/8 x 2	.24	1/2 x 3 1/2	.43	3/8 x 4	.70
3/8 x 2 1/4	.25	1/2 x 4	.48	5/8 x 5	.80
3/8 x 2 1/2	.25	1/2 x 5	.50		

WITH SHOULDER

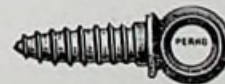


Fig. 767

Size No.	Galv. Each	Plain Brass Each	Inside Diam. of Eye Inches	Length Under Shoulder Inches	Weight Per 100 in Lbs.
5	\$.04	\$.05	3/8	1	3 1/2
6	.05	.08	3/8	1 1/8	3 3/4
7	.07	.10	1/2	1 1/2	4 3/8
8	.12	.14	3/8	1 3/4	11

Washer Grommets

SHEET BRASS



Fig. 898

Size No.	Price Per Gross	Size Hole Inserted Inches	Est. Wt. Per Gross Pounds
0	\$.50	1/4	3/8
1	.60	3/8	7/8
2	.70	3/8	3/4
3	1.00	1/2	1
4	1.50	1/2	2
5	2.00	3/4	2 1/2

Junior Grommet Dies

CAST IRON

For inserting Brass Washer and Teeth Grommets



Fig. 901

Size No.	Each	Weight Each Lbs.
0	\$1.15	3/4
1	1.30	3/4
2	1.80	1
3	2.00	1 1/8

This die is not guaranteed and not for commercial use, a useful, inexpensive tool for those who have only a few grommets to insert.

Spur Grommets

BRASS TUBES AND TOPS—ROLLED RIM



Fig. 899

Size No.	Price Per Gross	Size Hole Inserted Inches	Est. Wt. Per Gross Pounds
0	\$ 1.55	1/4	1 1/8
1	1.75	1/4	1 1/8
2	2.25	3/8	1 1/2
3	2.60	1/2	1 3/4
4	3.50	1/2	2 1/2
5	4.60	3/4	3 1/2
6	6.00	3/4	5 3/8
7	15.00	1 1/8	5 3/8
8	17.50	1 1/8	8

Senior Grommet Dies

FORGED STEEL

Style B for inserting Spur Grommets
Style C for inserting Washer and Teeth Grommets



Fig. 902

Size No.	Style B Each	Style C Each	Weight Each Lbs.
0	\$3.00	\$2.70	1 1/4
1	3.20	2.90	1 3/8
2	3.30	3.00	1 3/8
3	3.50	3.20	1 7/8
4	3.70	3.40	2 3/8
5	4.00	3.70	2 5/8
6	4.20	4.10	3 1/2
7	4.50		3 3/4
8	4.80		5

Use a wooden mallet with above dies.

Teeth Grommets

SHEET BRASS



Fig. 900

Size No.	Price Per Gross	Size Hole Inserted Inches	Est. Wt. Per Gross Pounds
0	\$.70	1/4	3/8
1	.75	3/8	7/8
2	1.10	3/8	3/4
3	1.30	1/2	1 1/8
4	1.90	1/2	1 3/4
5	2.70	3/4	2 1/2

Grommet Hole Cutters

FORGED STEEL



Fig. 903

No.	Price Each	No.	Price Each
0	\$.80	5	\$1.50
1	.80	6	2.75
2	.80	7	3.00
3	1.00	8	3.25
4	1.25		



Curtain Fasteners

WROUGHT BRASS



Fastener
Fig. 995



Eyelet
Fig. 996



Washer
Fig. 997

Made of stamped brass, for single and double curtains, fastener base size is 1 1/4 x 1/2.

	Single	Double
Complete with Eyelet and Washer—per gross	\$11.00	\$14.00
Fastener Only—per gross	9.00	12.50
Eyelet Only—per gross	1.50	1.50
Washer Only—per gross	.90	.90

Grommet Rings

MALLEABLE IRON—GALVANIZED
INSIDE MEASUREMENT



Fig. 1002

Light		Heavy	
Inside Diam. Inches	Price Per Gross	Inside Diam. Inches	Price Per Gross
1/4	\$.60	1/2	\$ 1.00
5/16	.60	3/8	1.25
3/8	.60	1/4	2.00
1/2	.85	5/8	2.25
5/8	1.15	1	2.50
3/4	1.25	1 1/8	4.00
7/8	1.75	1 1/4	5.25
1	2.00	1 1/2	7.00
1 1/8	3.80	1 3/4	9.00
1 1/4	4.00	2	14.00
1 1/2	6.75	2 1/4	16.00
1 3/4	8.25	2 1/2	18.00
2	9.00	3	21.00

1 1/2 inch and smaller are packed in boxes of 1 gross each.

1 3/4, 2 and 2 1/4 inch are packed in boxes of 1/2 gross each.

2 1/2 and 3 inch are packed in boxes of 1/4 gross each.

Enos Windlass

GALVANIZED—BRONZE

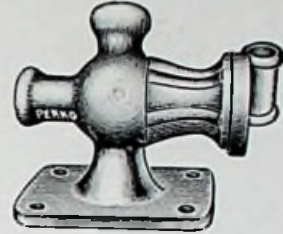


Fig. 964

Size No.	Galvanized Each	Polished Bronze Each	Height Inches	Width Overall Inches	Est. Wt. Each Bronze in Lbs.
0	\$10.50	\$25.00	6	7 1/2	12
1	18.75	46.00	8 1/2	9	27
2	20.80	54.00	10 1/2	11	34
3	29.00	71.00	11 1/2	13 1/2	58

Size No.	Diam. Drum Inches	Size Base Inches	Size Bolts Inches	Size Chain Inches	Size Rope Inches	Est. Wt. Each Galv. in Lbs.
0	2 1/2	4 1/2 x 6	3/8		3/8	11
1	3 1/4	6 1/4 x 8 1/2	5/8	1 1/8	3/4	25
2	3 1/2	7 3/8 x 9 1/2	5/8	1 1/4	7/8	31
3	4 1/2	7 1/2 x 10	3/4	1 3/8	1 1/8	53

Patent Gypsy Windlass

PAINTED FINISH

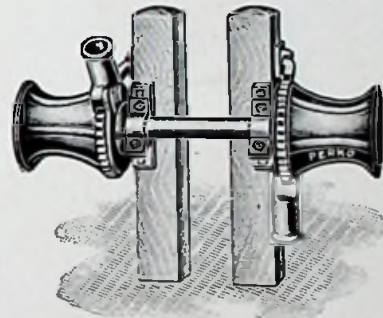


Fig. 966

Full Windlass has Two Heads
Half Windlass has One Head

Size	Half Windlass Each	Full Windlass Each	Bits Inches	Length of Head Inches	Diameter of Head on End Inches
E	\$10.50	\$15.50	6	5 1/4	4 1/2
D	11.50	17.00	8	6	5
C	13.50	19.00	10	6 1/2	7 1/2
B	17.00	24.00	12	7	7 1/2
0	24.00	30.00	12	8	8 1/2
1	27.00	40.00	14	9 1/2	10
2	31.00	53.00	16	12	11 1/2
2 1/2	42.00	71.00	18	13	13

Galvanized Windlasses—Price on Application

Grommet Hooks

CAST BRONZE

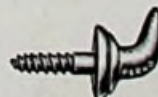


Fig. 1000

Plain Bronze Per Dozen \$.80

Polished Bronze Per Dozen \$1.25



Pick-Up Buoy
FLAT TOP



Fig. 234

Heavy galvanized iron, double seamed and soldered.

Wrought iron handle riveted to body, large eye on bottom and rope thimble. Every buoy fully tested before it leaves our factory.

Measurements do not include handle or eye.

No.	Size Inches	Weight Lbs.	Price Each
1	9x14	4	\$4.00
2	12x18	5	4.75
3	13x22	7	5.75

Cone Mooring Buoy
GALVANIZED

Heavy galvanized iron, iron pipe running all the way through buoy, heavy galvanized 3/8 inch buoy rod through pipe allowing body to swivel, eye on top, swivel on bottom, body grooved for bumper, which is of heavy 1 1/2 inch outside diameter rubber hose.



Fig. 370

Can also be furnished with welded eye bolts top and bottom non swivel—same prices.

Size Inches	With Bumper Each	Without Bumper Each
16 x 24	\$15.00	\$11.00
20 x 30	18.00	14.00
24 x 36	24.00	20.00
30 x 36	26.50	24.00

Size does not include swivel or eye.

Can also be furnished with 3/8 inch diameter buoy rod and swivel—add to above prices \$3.50 each.

Pick-Up Buoy
CONE TOP



Fig. 235

Heavy galvanized iron, double seamed and soldered. Wrought iron handle riveted to body, large eye on bottom for rope.

Fully Tested

Measurements do not include handle or eye.

No.	Size Inches	Weight Lbs.	Price Each
4	13x22	5	\$3.00
5	16x24	6 1/2	4.00

Heavy Duty Mooring Buoy
RIVETED BODY—GALVANIZED



Fig. 551

Extra heavy construction, all riveted. 3/8 inch wrought iron buoy rod through center, eye on top, swivel on bottom, grooved to take heavy rubber bumper. Bumper is 1 1/2 inch outside diameter heavy hose. outlet in bottom for draining.

Size Inches	With Bumper Each	Without Bumper Each
24 x 36	\$34.00	\$30.00
30 x 36	38.00	34.00
36 x 42	46.00	42.00
40 x 48	52.00	48.00

Measurements do not include swivel or eye.

Hold Fast Buoy

A REAL MOORING BUOY FOR SMALL BOATS
AT A LOW PRICE



Fig. 445

A heavy gauge galvanized sheet iron body, a 3/8 inch forged rod through a galvanized pipe in the body, large eye on top, large heavy swivel on bottom, a substantial rubber bumper set in groove of body, will not mar or scratch hull of boat.

No.	Price Each	Diam. Body Inches	Length Body Inches
1	\$10.00	13	22
2	13.50	17	27

Length Overall Inches	Inside Diam. Eye Inches	Weight Pounds
33 1/2	3	15
38 1/2	3	24

Galvanized Buoy Rods
COMPLETE AS ILLUSTRATED

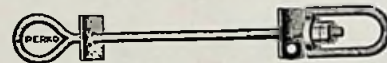


Fig. 278

Diam. Inches	Length Under Eye Inches	Price Each
1/2	18	\$1.90
1/2	20	2.00
5/8	24	2.50
5/8	30	2.75
5/8	33 1/2	4.00
5/8	37 1/2	4.25
5/8	43 1/2	4.50
7/8	37 1/2	7.00
7/8	43 1/2	7.50
7/8	52	8.00

Perko Round Steel Mooring Buoys

14 GAUGE—21 INCH DIAMETER—HEAVILY WELDED—TESTED

WITH TWO WELDED EYES

WITH STEEL ROD THROUGH CENTER
SWIVEL ON BOTTOM—WELDED EYE ON TOP



Fig. 967



Fig. 1099

Perko steel mooring buoys are made from new modern tools and dies therefor contain no wrinkles or distortions in shape. Constructed of new material and protected by a heavy coat of paint.

Eyes are riveted and welded to a heavy plate which is welded to the body of the buoy.

A heavy steel band is welded to the inside of each hemisphere at the joint which is also heavily welded.

Bumper is 1½ inch diameter heavy rubber hose held in position by welded clips.

Fig. 1099 has ¼ inch steel rod through center with ¾ inch steel swivel eye on bottom.

Fig. 967		Fig. 1099		Inside Welded Eye	Inside Swivel Eye	Weight Fig. 967	Weight Fig. 1099
Without Bumper	With Bumper	Without Bumper	With Bumper	Inches	Inches	Pounds	Pounds
Each	Each	Each	Each	2¼x2	3½x2	35	38
\$12.00	\$16.00	\$14.00	\$18.00				

Racing or Marking Buoys

GALVANIZED STEEL



Fig. 965

With 1¼ inch diameter flag pole socket in top of body, and galvanized handle for picking up. Large eye on bottom for anchor line.

No.	Each	Size Inches	Weight Pounds
1	\$4.00	13x22	5½
2	5.00	16x24	7

Size shown does not include handle or eye.

Steel Light Buoy

RIVETED
LEAD BALLASTED
BATTERY OPERATED
LIGHT IN TOP



Fig. 988

A 1000 hour heavy duty bulb and four ordinary 1½ volt dry cell batteries enclosed in a watertight container sealed with gasket and hinged bolts.

Will stay lighted for 25 to 30 consecutive days without attention.

Moulded lead ballast in bottom of buoy insuring upright position under all ordinary conditions.

Without Lens Guard	With Lens Guard	Extreme Height	Extreme Diam.	Size Lens	Weight Complete
Each	Each	Inches	Inches	Inches	Pounds
\$75.00	\$80.00	58	24	5x3½	100

Price does not include batteries.

For more detailed information see page 37.

Kedge Anchors
DROPPED FORGED STEEL



Fig. 149

Weight Pounds	Galvanized Each	Self Colored Each	Length Inches
5	\$ 3.10	\$ 2.90	16
8	3.40	3.10	23
10	3.60	3.20	24
12	4.25	3.75	27
15	4.60	4.00	28
20	5.00	4.25	31
25	5.60	4.60	33
30	6.40	5.20	34
35	7.40	6.00	37
40	8.50	7.00	40
50	10.50	8.50	42
60	13.50	11.00	45
75	16.50	13.50	45
100	22.50	18.50	51
125	29.00	24.00	52
150	35.00	29.00	55½
200	47.00	39.00	62½
250	58.00	48.00	64
300	70.00	58.00	65

Larger Sizes—Price on Application

Non-Fouling Anchor
GALVANIZED DROPPED FORGED STEEL

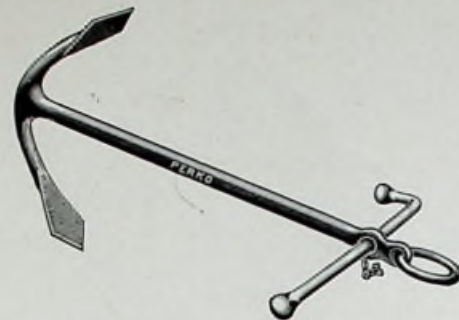


Fig. 236

The result of a great deal of experimenting and testing, the flukes are designed to bite and hold on the first pull of the cable, a weldless reinforcing under each fluke will prevent bending or breaking under maximum strain.

Weight Pounds	Galv. Each	Length Overall Inches
15	\$ 4.80	29
25	6.00	36
35	8.00	40
42	9.50	41
50	11.25	43
60	14.50	44½
75	17.50	46½
100	24.00	50
125	31.00	52½
150	37.50	59
200	50.00	65

Navy Type Anchor

DROPPED FORGED SHANK—GALVANIZED



Fig. 45

Weight Pounds	Price Each	Weight Pounds	Price Each
5	\$1.50	50	\$ 9.50
10	2.30	60	11.00
15	3.00	80	15.00
20	3.75	100	18.50
25	4.75	125	23.00
30	5.50	150	27.50
35	6.50	200	37.00
40	7.50		

Swivel Anchors

GALVANIZED



Fig. 174

Weight Pounds	Price Each	Weight Pounds	Price Each
5	\$1.50	50	\$ 9.50
10	2.30	60	11.00
15	3.00	80	15.00
20	3.75	100	18.50
25	4.75	125	23.00
30	5.50	150	27.50
35	6.50	200	37.00
40	7.50		

Government Tolerance in Weight, Plus or Minus 5%

Trawl and Sand Anchors

DROP FORGED STEEL

FAST STOCK



Fig. 364

Weight Pounds	Galvanized Each	Self Colored Each
5	\$ 2.15	\$ 1.95
8	2.50	2.15
10	2.65	2.25
12	3.10	2.60
15	3.40	2.80
20	4.20	3.40
25	5.15	4.20
30	6.10	4.90
35	7.15	5.75
40	8.20	6.60
50	10.50	8.50
60	13.00	10.50
75	16.50	13.50
100	22.50	18.50

LOOSE STOCK

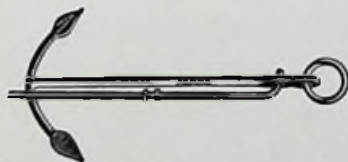


Fig. 365

Weight Pounds	Galvanized Each	Self Colored Each
5	\$ 3.10	\$ 2.90
8	3.40	3.10
10	3.60	3.20
15	4.60	4.00
20	5.00	4.25
25	5.60	4.60
30	6.40	5.20
35	7.40	6.00
40	8.50	7.00
50	10.50	8.50
60	13.50	11.00
75	16.50	13.50
100	22.50	18.50

Note: All anchors are subject to government tolerance of plus or minus 5% in weight.

Mushroom Anchor

STEEL SHANK RIVETED THROUGH HEAD

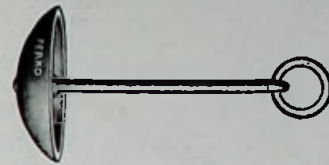


Fig. 142

Mushroom Anchors to 35 pounds inclusive are equipped with rings. 50 pounds and larger have eye in shank for a shackle.

Weight Pounds	Galv. Each	Self Colored Each	Weight Pounds	Self Colored Each
5	\$1.35	\$1.15	100	\$ 7.00
8	1.95	1.70	125	8.75
10	2.10	1.75	150	10.50
15	2.75	2.25	200	14.00
20	3.40	2.70	250	17.50
25		3.15	300	21.00
35		3.25	350	24.50
50		3.50	400	28.00
75		5.25	450	31.50
			500	35.00

Grappels

GALVANIZED DROP FORGED STEEL
FIVE PRONG

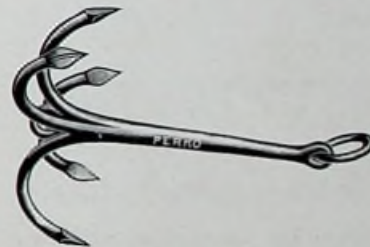


Fig. 207

Weight Pounds	Galvanized Each	Weight Pounds	Galvanized Each
4	\$1.70	12	\$2.95
5	1.75	15	3.25
6	1.85	18	3.90
8	2.10	20	4.25
10	2.25		

Larger sizes—prices on application.

Grappling Irons

GALVANIZED DROP FORGED STEEL



Fig. 1094

Weight Pounds	Each	Height Inches	Width Inches	Number of Prongs
1 1/2	\$1.70	7 1/2	6	4

Northhill Folding Anchors

STAINLESS STEEL OR GALVANIZED
TREMENDOUS HOLDING POWER
LIGHT WEIGHT

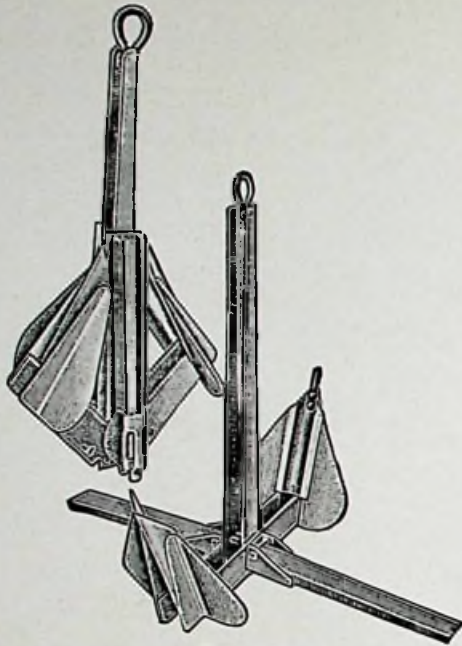


Fig. 441

Northhill Anchors are scientifically designed to hold!—Irrespective of weight.

Northhill Anchors have an average holding power of 60 times their own weight—as compared to averages ranging from 2½ to 1 or 8 to 1 in other styles.

Northhill Anchors save weight, space, time and physical effort.

Widely used by the U. S. Navy and foreign governments.

In the Northhill Anchor a new design of fluke has been developed that buries itself in the bottom because of its shape and proportion alone.

When not in use it folds compactly and is easily stowed away.

The comparative table below has been compiled from data of the Bureau of Construction and Repair, U. S. Navy; from exhaustive tests of Pan-American Airways and other authorities.

Northhill Anchor Type No.	Holding Power Pounds	Stainless Steel Each	Galvanized Steel Each	Weight of Kedge Anchor Ratio 7 to 1 Pounds	Weight of Navy Anchor Ratio 2½ to 1 Pounds
6	240	\$ 22.50	\$19.50	35	96
12	720	38.50	24.50	100	300
20	1200	58.50	38.50	175	650
30	1800	97.50		260	720
50	3000	175.00		425	1200
80	4800	225.00		700	1900

Type No. indicates approximate weight.

NOTE—A 12 pound Northhill Anchor outholds a 300 pound navy type stockless anchor.

Formula to determine required anchor holding power for various type craft:

- Power Cruiser Types—7% of gross weight.
- Motor Boat Types—6% of gross weight.
- Sail Boats (centerboard types)—5% of gross weight.
- Sail Boats (keel types)—10% of gross weight.

Northhill Utility Anchors

HEAT TREATED DUCTILON—GALVANIZED
NORTHILL HOLDING POWER AT LOW PRICE

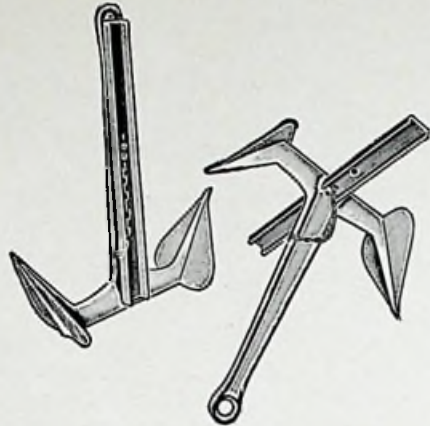


Fig. 1067

Has removable stock for compact stowage. These anchors have tremendous structural strength and the same proven scientific advantages as the original Northhill folding anchors.

Type No.	Galv. Each	Weight Pounds	Com- parative Weight Kedge Type Pounds	Com- parative Weight Navy Type Pounds
6-R	\$ 9.50	13	65	180
12-R	17.50	25	130	360

Folding Anchors

GALVANIZED MALLEABLE IRON



Fig. 226

Weight Pounds	Each	Length	Weight Pounds	Each	Length
6	\$ 2.85	19	30	\$12.80	34
8	3.85	22	35	15.00	36
10	4.80	23	45	19.00	38
12	5.60	25	55	23.00	41
15	6.80	28	76	31.00	44
20	8.80	30			
25	10.80	33			

Anglers Anchor

FOR SMALL BOATS



Fig. 216

Weight Pounds	Galvanized Each	Japanned Each	Diameter Inches	Height Inches
7	\$1.70	\$1.50	6	8
11	2.10	1.75	7	9
15	2.75	2.25	8	10

Anchor Trip Hooks

CAST BRONZE—PLAIN



Fig. 1038

A fine grade, heavy bronze Hook of great tensile strength. Hook is held in working position by positive locking device with cotter pin on chain to prevent accidental tripping. A pull on the tripping lever when cotter is removed immediately releases hook as shown by dotted lines.

No.	Price Each	Length Inches	Diam. Hook Inches	For Block Inches	Weight Pounds
1	\$2.75	5	3/8	3 1/2	1
2	3.85	5 1/2	3/4	4	1 1/2

Anchor Balancing Bands

GALVANIZED DROP FORGED STEEL



Fig. 1095

Usually used on kedge or non-fouling anchors. One of these bands placed about the anchor shank at center of gravity is of great aid in handling.

No.	Each	For Anchors Weighing Pounds
1	\$2.50	25 to 100
2	3.50	125 to 200

Anchor Keys

GALVANIZED DROP FORGED STEEL

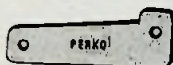


Fig. 1096

Used for locking the stock in loose stock anchors such as kedge, non-fouling and sand.

Size No.	Each	Length Inches	For Anchor Weighing Pounds
1	\$.10	2 3/8	4 to 6
2	.15	2 5/8	8 to 20
3	.20	3 1/2	25 to 50
4	.25	4 3/4	60 to 100
5	.25	5	125 to 250

Anchor Chocks

CAST BRONZE—PLAIN

Made for the purpose of keeping the anchor in a set place on deck ready for instant use, and to prevent the damage caused by an anchor not fastened down when a rough, choppy stretch of water is encountered.

Many boat owners have suffered wasteful expense repairing gouged decks, ventilators, hatch covers, etc., because they neglected to install anchor chocks for their deck anchors.

FOR NAVY TYPE ANCHORS

For all sizes of anchors up to 60 pounds inclusive.

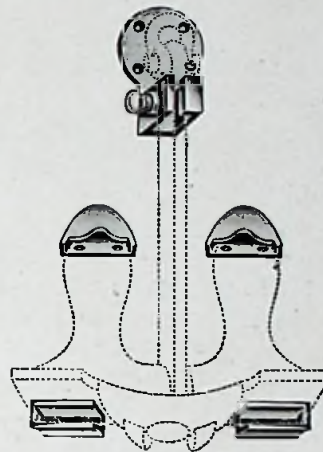


Fig. 938

Consists of 5 pieces illustrated. Lashing is unnecessary as the head of shank is locked in place by an overhang and thumb screw arrangement. Flukes cannot move out of recess until the shank is released.

Anchor does not touch deck at any point.

Keep thumb screw coated with heavy grease.

Price Per Set of 5 Pieces\$4.80

FOR KEDGE AND NON FOULING ANCHORS

For all sizes of kedge anchors up to 60 pounds inclusive.
For all sizes of non fouling anchors up to 75 pounds inclusive

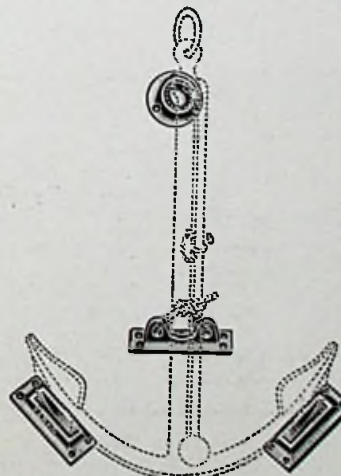


Fig. 939

Consists of four pieces illustrated, including the fitting for lashing down, which has two eyes large enough for 3/8 inch rope.

Anchor does not touch deck at any point.

Price Per Set of 4 Pieces\$3.25



Boat Scrapers

TRIANGULAR

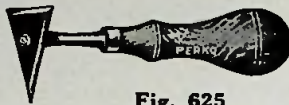


Fig. 625

Size Blade Inches	Per Dozen	Blades Only Per Dozen	Length Inches	Wt. Per Dozen in Pounds
2	\$6.60	\$3.00	6	2½

Yacht Scrapers

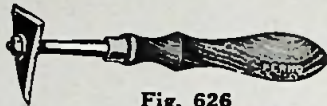


Fig. 626

Size Blade Inches	Per Dozen	Blades Only Per Dozen	Length Inches	Wt. Per Dozen in Pounds
2¾	\$10.80	\$3.60	9½	5

Oval Boat Scrapers



Fig. 918

Size Blade Inches	Per Dozen	Blades Only Per Dozen	Length Inches	Wt. Per Dozen in Pounds
2x1¼	\$6.60	\$3.00	6	2¾

Ship Scrapers

TEMPERED STEEL BLADES



Fig. 920

No.	Size Blade Inches	Each	Blades Only Each	Handles Only Each	Length Inches
1	4½x¼	\$1.75	\$.80	\$1.00	17
2	4½x¼	1.70	.75	1.00	17

Caulking Irons

MALLEABLE IRON



Fig. 311

Size No.	Per Dozen	Thickness Inches	Length Inches	Width Blade Inches	Weight Per Doz. in Lbs.
00	\$7.00	1/32	5	2	3½
0	7.00	1/16	5½	2½	4½
1	7.25	1/8	5¾	2¾	5¼

Marlin Spikes

POLISHED STEEL FOR WIRE ROPE

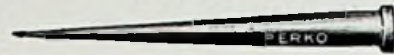


Fig. 921

Length Inches	Per Dozen	Approx. Weight Per Dozen in Pounds
8	\$20.50	6
10	26.00	10
12	32.00	12¾
14	37.00	16½
16	43.00	25
18	49.00	30

FOR MANILA ROPE



Fig. 922

Length Inches	Per Dozen	Approx. Weight Per Dozen in Pounds
6	\$ 8.00	5¾
8	9.25	7½
10	10.50	12
12	12.00	17
14	16.00	23½
16	19.50	27
18	23.50	34¾

Hand Fids

MAPLE



Fig. 923

For use in splicing ropes and light flexible cables; has a rounded end for hand use; varnished finish.

No.	Per Dozen	Size Inches
0	\$ 5.45	12x1¾
1	6.50	14x1¾
2	7.25	16x2
3	8.20	18x2
4	16.25	20x2¼
5	21.50	24x3

Caulking Mallets

LOCUST HANDLES

Mallet Head, 15 inches long; 1½ inches diameter.

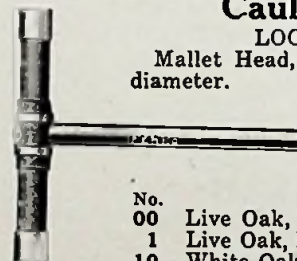


Fig. 924

No.	Each
00	Live Oak, Tempered Steel Rings \$4.00
1	Live Oak, Polished Steel Rings 3.50
10	White Oak, Varnished Iron Rings 2.50

Caulking Irons

DROP FORGED STEEL



Fig. 925

No.	Per Dozen	Thickness Inches	Length Inches	Width Inches
0	\$11.50	¼	5¾	2½
1	12.00	⅜	6 ⅞	2½

MARINE LAMPS FOR THE HOME

A beautiful assortment of table lamps and fixtures for the homes of yachtsmen and others who desire the savor of the sea in their home decorations.

What would be more appropriate in yacht clubs, marine decorated dens or basements, as trophies for boat or yacht races, and especially in any room or office where pleasure or business has some connection with the sea and vessels that sail upon it.

All shades are hand painted in beautiful colors on parchment, leather laced.

All bases are brass and bronze, highly polished and lacquered.

All lamps wired with 6 feet silk covered cable and plug attached.



Fig. 1126

"SEA FOAM"

Ht. Overall, 12½ in.
Diam. Shade, 9 in.
Diam. Base, 5¼ in.

Complete with Shade

Polished Brass Each	Chromium Plated Each
\$8.50	\$10.00

Shades Only
Each
\$2.25

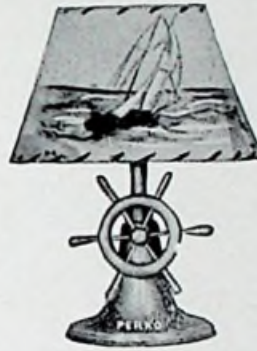


Fig. 1129

"MARINER"

Ht. Overall, 12½ in.
Diam. Shade, 9 in.
Diam. Base, 5¼ in.

Complete with Shade

Polished Brass Each	Chromium Plated Each
\$10.00	\$12.00

Shades Only
Each
\$2.25



Fig. 1127

"BELL BUOY"

Ht. Overall, 12½ in.
Diam. Shade, 9 in.
Diam. Base, 5¼ in.

Complete with Shade

Polished Brass Each	Chromium Plated Each
\$8.50	\$10.00

Shades Only
Each
\$2.25



Fig. 1130

"HATTERAS"

With green fresnel lens, additional socket inside lens, with switch.

Ht. Overall, 13 in.
Diam. Shade, 10 in.
Diam. Base, 6 in.

Complete with Shade

Polished Brass Each	Chromium Plated Each
\$10.00	\$12.00

Shades Only
Each
\$2.25

Anchor Book Ends

CAST BRONZE



Fig. 1128

"SEA WAY"

Ht. Overall, 12½ in.
Diam. Shade, 9 in.
Diam. Base, 5¼ in.

Complete with Shade

Polished Brass Each	Chromium Plated Each
\$8.50	\$10.00

Shades Only
Each
\$2.25

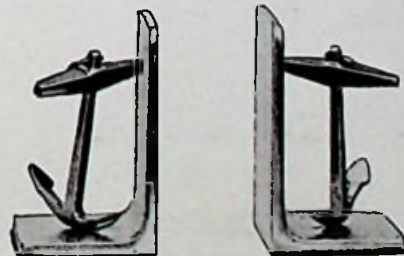


Fig. 1132

Height
Inches
5

Polished Bronze
Per Pair
\$10.00

Base
Inches
3½ x 3

Chromium Plated
Per Pair
\$12.50

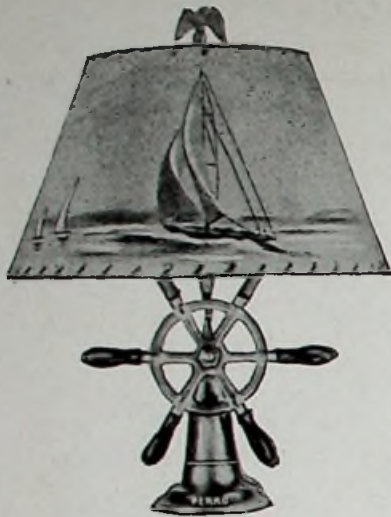


Fig. 1120

NAUTILUS

Height, 22"
Diam. Base, 5 3/4"
Diam. Shade, 16"
Diam. Wheel, 12"

Bronze Steering Wheel.
Hand painted sail cloth shade.

Complete with Shade

Polished Brass Each
\$18.00

Chromium Plated Each
\$22.00

Shades Only Each
\$5.00

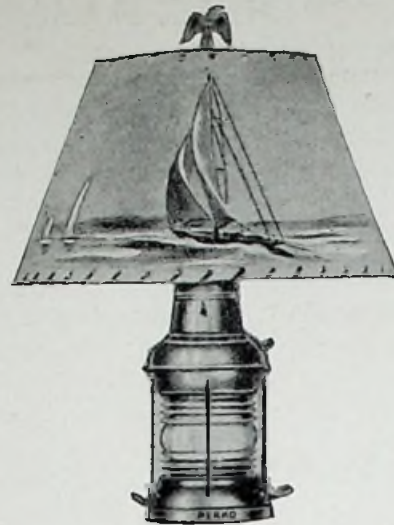


Fig. 1123

NOMAD

Height, 20"
Diam. Base, 5 1/2"
Diam. Shade, 16"
Size Glass, 4x4 1/4"

Glass clear. Light inside.
Hand painted sail cloth shade.

Complete with Shade

Polished Brass Each
\$16.00

Chromium Plated Each
\$18.50

Shades Only Each
\$5.00

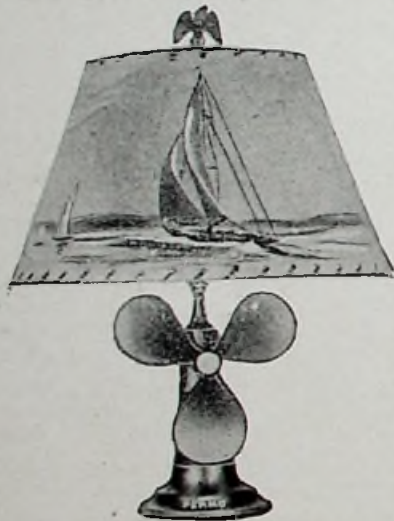


Fig. 1121

NORSEMAN

Height, 20"
Diam. Base, 5 3/4"
Diam. Shade, 16"
Diam. Prop., 9"

Aluminum propeller.
Hand painted sail cloth shade.

Complete with Shade

Polished Brass Each
\$17.00

Chromium Plated Each
\$20.00

Shades Only Each
\$5.00



Fig. 1124

SEA GULL

Height, 19 1/2"
Diam. Base, 4 1/4"
Diam. Shade, 16"
Size Globe, 6x6"

Globe frosted. Light inside.
Hand painted sail cloth shade.

Complete with Shade

Polished Brass Each
\$18.50

Chromium Plated Each
\$22.00

Shades Only Each
\$5.00

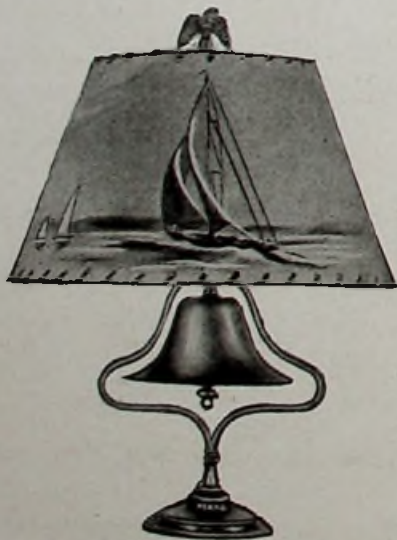


Fig. 1122

NORTHERN LIGHT

Height, 22"
Diam. Base, 6"
Diam. Shade, 16"
Diam. Bell, 8"

Hand painted sail cloth shade.

Complete with Shade

Polished Brass Each
\$16.00

Chromium Plated Each
\$19.00

Shades Only Each
\$5.00

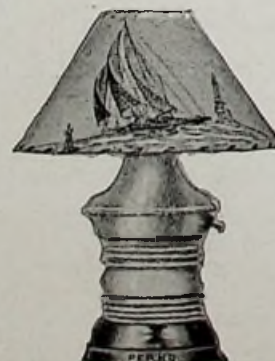


Fig. 1125

"CAPE COD"

Height, 13"
Diam. Base, 4 3/4"
Diam. Shade, 10"
Size Glass, 3 3/8 x 3 1/2"

Clear glass. Light inside. Pen and ink parchment shade.

Complete with Shade

Polished Brass Each	Chromium Plated Each
\$10.00	\$12.00

Shades Only Each
\$2.25

"PERKO" MARINE HOUSE FIXTURES

All constructed of heavy brass or copper, with original marine fresnel magnifying lens, glass dome bottom for reflecting light downward and standard screw sockets. All wired to meet requirements of fire underwriters, ready for installation.



Fig. 471

Universal Pattern

With cast bronze ring in top for loose hanging from chain or wall bracket. Hinged dome bottom.

No.	Height Inches	Diam. Inches	Size Globe Inches
1	9	4 1/2	3 3/8 x 3 1/2
2	11 1/2	5 1/2	4 1/4 x 4 1/4

No.	Pol. Brass Each	Pol. Copper Each	Chrom. Plated Add Each
1	\$6.00	\$8.00	\$2.00
2	7.75	9.75	2.00



Fig. 436

Turret Pattern

With cast bronze ring for hanging. A regular ship's anchor light fitted up for fixture use.

No.	Height Inches	Diam. Inches	Size Globe Inches
22	17	7 1/2	5 5/8 x 6
22 1/2	18 1/2	7 1/2	6 x 6 5/8
23	21 1/2	9 1/2	7 x 8

No.	Polished Brass Each	Polished Copper Each	Chromium Plated Add Each
22	\$25.00	\$30.00	\$5.00
22 1/2	27.00	32.00	5.00
23	33.00	42.00	9.00



Fig. 363

Universal Pattern

WITH WALL BRACKET

Diameter bracket 4 1/2 inches.

No.	Height Inches	Diameter Inches	Size Globe Inches
1	9	4 1/2	3 3/8 x 3 1/2
2	11 1/2	5 1/2	4 1/4 x 4 1/4

No.	Pol. Brass Each	Pol. Copper Each	Chrom. Plated Add Each
1	\$7.50	\$ 9.50	\$2.00
2	9.25	11.25	2.00

With red, green, or blue globes, add \$5.00 each.



Fig. 361

Universal Pattern

WITH CEILING CANOPY

Diameter canopy 4 1/2 inches.

No.	Height Inches	Diam. Inches	Size Globe Inches
1	9	4 1/2	3 3/8 x 3 1/2
2	11 1/2	5 1/2	4 1/4 x 4 1/4

No.	Pol. Brass Each	Pol. Copper Each	Chrom. Plated Add Each
1	\$7.50	\$ 9.50	\$2.00
2	9.25	11.25	2.00



Fig. 442

Marine Pattern

Half round body with flat back for mounting on wall or side of post.

With front door for cleaning or re-bulbing and bracket.

No.	Height Overall Inches	Width Inches	Size Lens Inches
1	11	5	4 1/4 x 6 1/2
2	13	5 1/2	5 1/4 x 7 1/4

With Clear Lens

No.	Galvanized Brass Each	Polished Brass Each	Chromium Plated Add Each
1	\$5.00	\$6.25	\$2.00
2	6.25	8.50	2.25

With colored lens, red or green—add \$1.00 each.

Anchor Candle Sticks

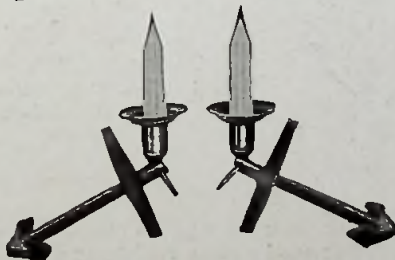


Fig. 1133

	Polished Bronze Per Pair	Chromium Plated Per Pair	Height Inches	Length Inches
	\$6.00	\$7.50	4 1/2	6 3/4



Fig. 443

Triangle Pattern

A triangular shaped body for mounting in corners.

With front door for cleaning or re-bulbing and bracket.

No.	Height Overall Inches	Width of Sides Inches	Size Lens Inches
1	11	5 1/4	4 1/4 x 4 3/4
2	13	5 5/8	5 1/4 x 5 3/4

No.	Galvanized Brass Each	Polished Brass Each	Chromium Plated Add Each
1	\$5.00	\$6.25	\$2.00
2	6.25	8.50	2.25

Furnished with clear, red or green lenses. Specify color desired.

Figs. 361, 363, 471 with red, green, blue, or amber globes add \$2.00 to above prices.



Knight Pattern

With cast bronze ring in top for hanging.

No.	Height Inches	Diam. Inches	Size Globe Inches
1	8½	4½	3¾ x 3½
2	12	5¾	4¾ x 4¾

No.	Polished Brass Each	Polished Copper Each	Chromium Plated Add Each
1	\$6.50	\$8.50	\$2.00
2	8.00	9.90	2.00

Fig. 519



Royal Pattern

With clear globe and ring in top for hanging.

No.	Height Inches	Width Inches	Globe Inches
1	12	8	6x 6
2	16	10	8x 8
3	23	12½	10x10

No.	Polished Brass Each	Polished Copper Each	Chromium Plated Add Each
1	\$10.50	\$11.50	\$2.50
2	13.00	14.50	2.50
3	23.50	26.50	4.50

Fig. 437

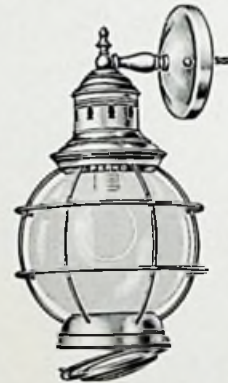


Knight Pattern WITH DAVIT BRACKET

No.	1	2
Height	10½	13
Projection	8¾	10
Size globe	3¾ x 3½	4¾ x 4¾
Diam. wall plate	4½	4½

No.	Pol. Brass Each	Pol. Copper Each	Chrom. Plated Add Each
1	\$11.00	\$13.00	\$3.00
2	12.50	14.50	3.00
Bracket only	4.00	4.50	1.00

Fig. 440



Royal Pattern

WITH WALL BRACKET

Diameter bracket 4½ inches.

No.	Height Overall Inches	Diam. Wall Plate Inches
1	13	4½
2	17	4½
3	24	4½

No.	Pol. Brass Each	Pol. Copper Each	Chrom. Plated Add Each
1	\$12.00	\$13.00	\$3.00
2	14.50	16.00	3.00
3	25.00	28.00	5.00

Fig. 438

Nautical Ashtrays

CAST BRONZE

These are very popular for marine rooms in homes, clubs or anywhere the marine motive is carried out.

Yacht



Fig. 1135

Dory



Fig. 1136

Whale Boat



Fig. 1137

Type	Polished Bronze Each	Nickel Plated Each	Chromium Plated Each	Length Overall Inches	Height Overall Inches
Yacht	\$2.00	\$2.50	\$3.00	5¾	2
Dory	.60	.85	1.20	6	1½
Whale Boat	.50	.75	1.10	6	1

Whale boat is brushed finish, not polished.



Royal Pattern

WITH CEILING CANOPY

Diameter canopy 4½ inches.

No.	Height Overall Inches	Diam. Canopy Inches
1	12¾	4½
2	16¾	4½
3	24	4½

No.	Pol. Brass Each	Pol. Copper Each	Chrom. Plated Add Each
1	\$12.00	\$13.00	\$3.00
2	14.50	16.00	3.00
3	25.00	28.00	5.00

Fig. 556

Royal pattern fixtures can be furnished with red, green, blue, or frosted globes. Add \$3.00 to above prices.

Knight pattern fixtures with red, green, blue or amber lenses, add \$2.00 each.

Colonial Pattern

With cast bronze ring in top for hanging from chain or wall bracket. Hinged dome bottom.

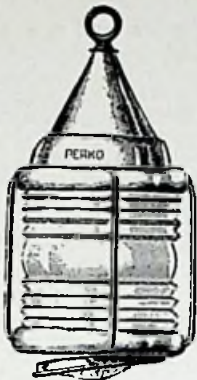


Fig. 518

No.	Height Inches	Diam. Inches	Size Globe Inches
1	7 1/4	4	3 3/8 x 3 1/2
2	8	4 3/4	4 1/4 x 4 1/4
3	9 1/4	6	5 3/8 x 6

No.	Polished Brass Each	Polished Copper Each	Chromium Plated Add Each
1	\$5.00	\$ 7.00	\$2.00
2	6.00	8.00	2.00
3	9.00	11.00	2.00

Bishop Pattern WITH IMPERIAL BRACKET

Same lamp as Fig. 518 with spun wall plate 4 1/2 inches in diameter.

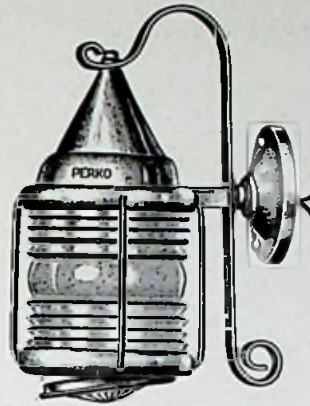


Fig. 464

No.	Height Overall Inches	Width Overall Inches
1	9 1/4	7 1/2
2	10 1/4	8 1/2

No.	Pol. Brass Each	Pol. Copper Each	Chrom. Plated Add Each
1	\$11.00	\$13.00	\$2.50
2	12.00	14.00	2.50

Colonial Pattern

WITH WALL BRACKET



Fig. 799

Diameter Bracket, 4 1/2 inches

No.	Height Inches	Diam. Inches	Size Globe Inches
1	7 1/4	4	3 3/8 x 3 1/2
2	8	4 3/4	4 1/4 x 4 1/4
3	9 1/4	6	5 3/8 x 6

No.	Polished Brass Each	Polished Copper Each	Chromium Plated Add Each
1	\$ 6.50	\$ 8.50	\$2.00
2	7.50	9.50	2.00
3	10.50	12.50	2.00

Ceiling Canopies

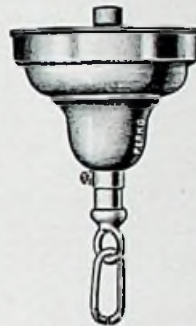


Fig. 465



Fig. 558

Furnished with one link of chain.

Fig.	Polished Brass Each	Polished Copper Each	Chromium Plated Add Each	Diam. Inches	Depth Inches
558	\$2.00	\$2.25	\$.75	4 1/2	1
465	2.50	3.00	.75	5	6

Brass or Copper Chain, per foot\$1.00

Colonial Pattern

WITH CEILING CANOPY



Fig. 360

Diameter Canopy, 4 1/2 inches

No.	Height Inches	Diam. Inches	Size Globe Inches
1	7 1/4	4	3 3/8 x 3 1/2
2	8	4 3/4	4 1/4 x 4 1/4
3	9 1/4	6	5 3/8 x 6

No.	Polished Brass Each	Polished Copper Each	Chromium Plated Add Each
1	\$ 6.50	\$ 8.50	\$2.00
2	7.50	9.50	2.00
3	10.50	12.50	2.00

The "Lighthouse"

ELECTRIC

A very attractive novelty, especially useful as a night light, and will harmonize very well in any place nautically decorated.

Made entirely of cast aluminum alloy, in steel gray finish. Equipped with 110 volt bulb, and toggle switch in base, furnished for steady light or flashing, on and off lighting.



Fig. 1134

Extreme Height Inches	Diam. Base Inches	Weight Pounds
11 3/4	6 3/4	3 1/2

Price—Steady light, no flasher\$17.00
 Price—Intermittent light, with flasher 18.50



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