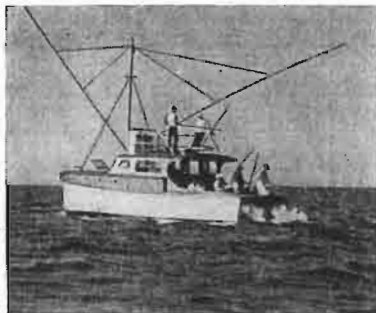




Penn Reels

Sport Fishing



THE SEA BECKONS

All along the Atlantic, Gulf and Pacific coast of our continent countless thousands of anglers enjoy the sport of salt water fishing. Indeed our coastal waters offer a variety of fishing superior to any throughout the world. From the small pan fish to the big game fish, from the cold water fish to the tropical species (see page 28), they all roam our waters to furnish exciting and healthful sport. Be it fishing the bays and inlets, or casting into the surf, or deep sea fishing, or

trolling offshore for big game fish, there are many favored spots along our shores, which truly can be called the angler's Paradise.

THE MOST ANCIENT SPORT

Fishing is the most natural sport, dating back to the time when men lived in caves, never shaved and ate their meat raw. That is why fishing appeals to so many of us, because our ancestors have been fishing for centuries, and because the love of the chase is in our blood. And maybe because the cave men didn't shave and lived a hard life is the reason why today's Fishermen hate to shave and endure hardships willingly for the sake of the sport. We can't help but love to go fishing.

TAKE A BOY FISHING

The fishing bug bites us at a very tender age in life. It is a rare boy of five or six who would not show interest in a fishing expedition. Indeed the country boy of ten or twelve who does not go fishing is a rare case. Fishing appeals to young and old alike, so don't leave the boys at home; take a boy fishing and don't forget the girls either.



Releasing Tarpon
By Members of the Penn Reel Co.

FISH FOR THE SPORT

Let's not forget that there should be just as high a code of ethics in salt water fishing as in any other sport. Fish for the sport of CATCHING fish. Catch all you can, but why KILL all the fish that will not be used. Set your own limit and RELEASE fish to furnish sport in the future. Most game fish can be returned to the water unharmed. Let's not overlook the fact that the supply of game fish can be reduced to the point of extinction. Don't be a FISH HOG.

Trolling



THE THRILL OF GAME FISHING

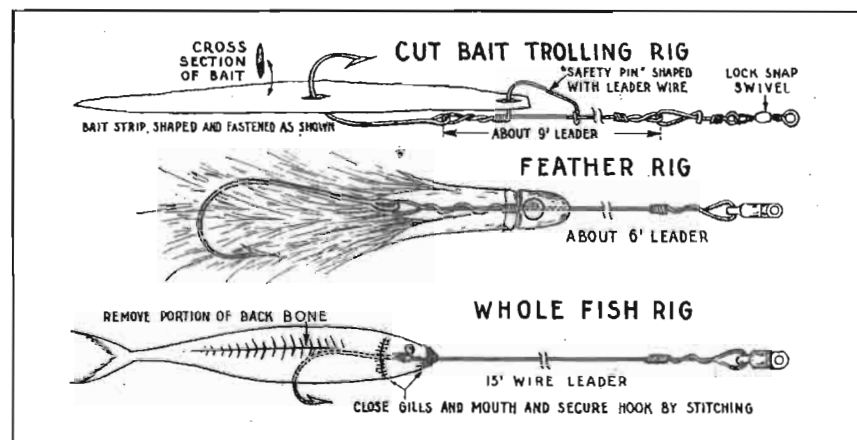
To battle the terrific rushes of a powerful game fish is the fulfillment of a lifetime dream of every fisherman, and will truly provide the angler with never-to-be-forgotten thrills. Whether it be Sailfish, Marlin, Tuna or Swordfish, the anxious moments of the strike, the hard give and take battle following, matching your strength and wits against the mad

and untiring efforts of the fish trying to gain freedom; and finally, when you are ready to admit defeat, the successful boating of the fish all provide the angler with thrills not to be experienced in any other kind of fishing.

Much of the thrill of the sport is lost by not using proper and well balanced tackle for the species of game fish sought. The size of the line should be governed by the ethical codes of good sport fishing. The rod should be of the proper weight and length to be in accord with the line. The reel should only be large enough to hold the required length of the line. The length and size of the leader should be within reasonable bounds, and when using double line, the length of the double line must not exceed the length of the leader.

The suggestions in the tackle chart on page 17 are not made to put down any law, but solely governed by the ethics of good sportsmanship and to deliver the utmost thrill in this sport. The tackle specifications in this chart are not intended to conflict with any existing rules of fishing clubs nor to belittle the spirit of the ultra light tackle enthusiast.

TROLLING RIGS



Bottom Fishing

Bay Fishing



A GLORIOUS PASTIME

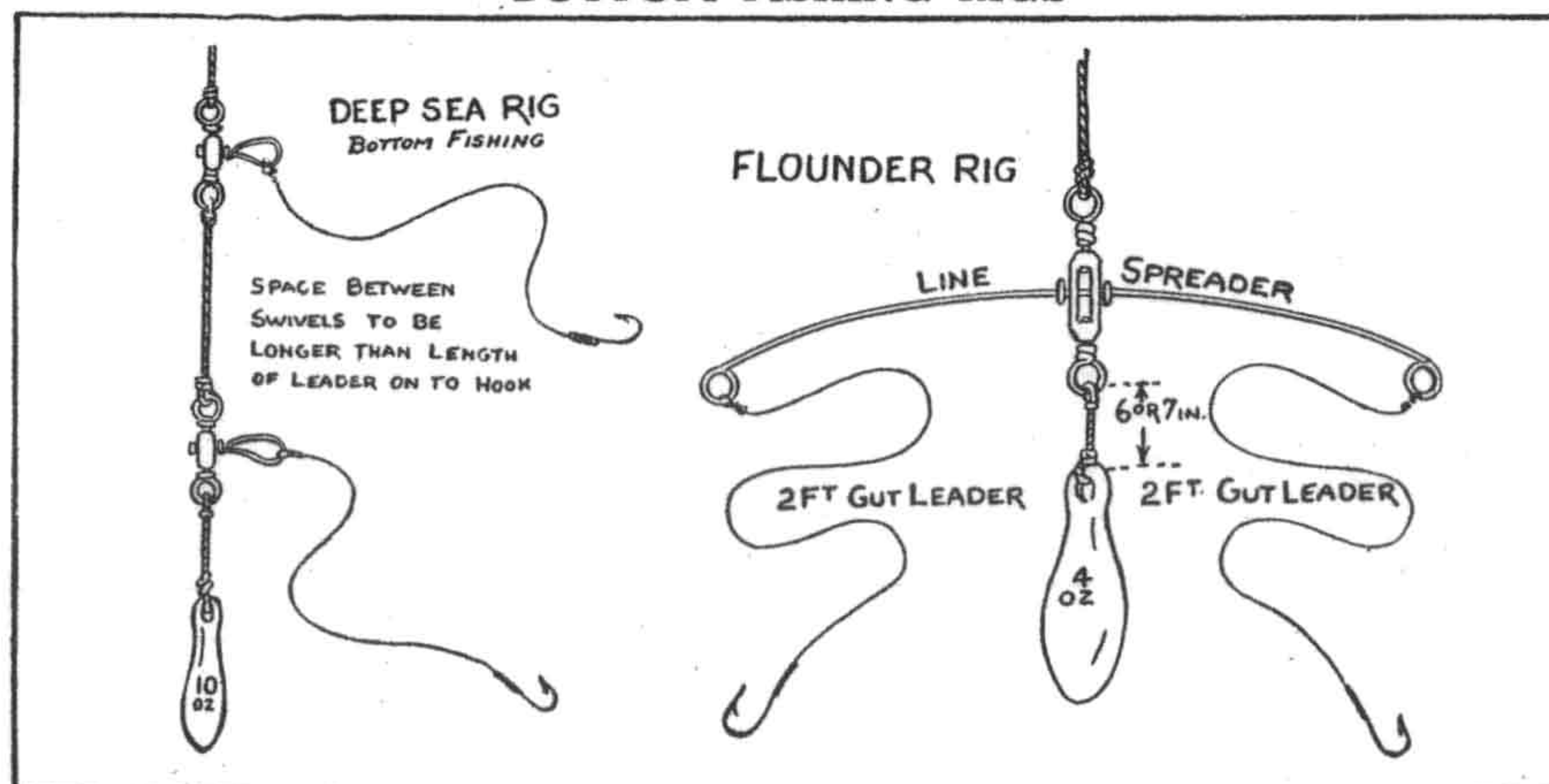
Of the many forms of salt water fishing, off-shore bottom fishing or so-called deep sea fishing attracts by far the greatest number of sportsmen. Boats of all descriptions from small boats to the big party steamers take thousands of fishermen to offshore fishing grounds for a day's pleasure at very little expense. This kind of fishing is popular because the sport is not limited to seasons. As the water temperature changes, some species of fish will migrate and others appear, thus furnishing practically all the year round sport.

Efficient guides take the fisherman off-shore and anchor the boat at a likely spot, the so-called grounds. Here is where a variety of fish feed at the bottom, due to certain conditions of the ocean floor, which make these spots natural feeding grounds. Fishing is done by baiting the hook with natural bait and letting the bait sink to the bottom. For this reason a lead sinker of various weight, depending on the depth of the water and the tide running, is attached to the line.

A good bottom fishing outfit is inexpensive and consists of a short two-piece boat rod five to six feet in overall length, a multiplying salt water reel, 50 to 200 yards of linen line from 9 to 15 threads, snelled hooks, swivels and sinkers. Various natural baits are usually supplied by the party boats. Below are shown some commonly used bottom fishing rigs.

On page 13 are shown *Deep Sea Reels* designed for bottom fishing, especially for deep water fishing. These reels are made in one size only, but in three different styles to meet all requirements. The high gear ratio, providing for speedy action, and the oversize handle with torpedo grip will give the fisherman the utmost satisfaction and we highly recommend these specially designed bottom fishing reels. Also for wire line fishing these reels are excellent.

BOTTOM FISHING RIGS



THE LIGHT TACKLE SPORT

To the novice, inshore waters look fishless, but many thousands of anglers enjoy fishing the inlets, bays, channels and creeks from inexpensive rowboats, some of which are powered by outboard or small inboard motors.

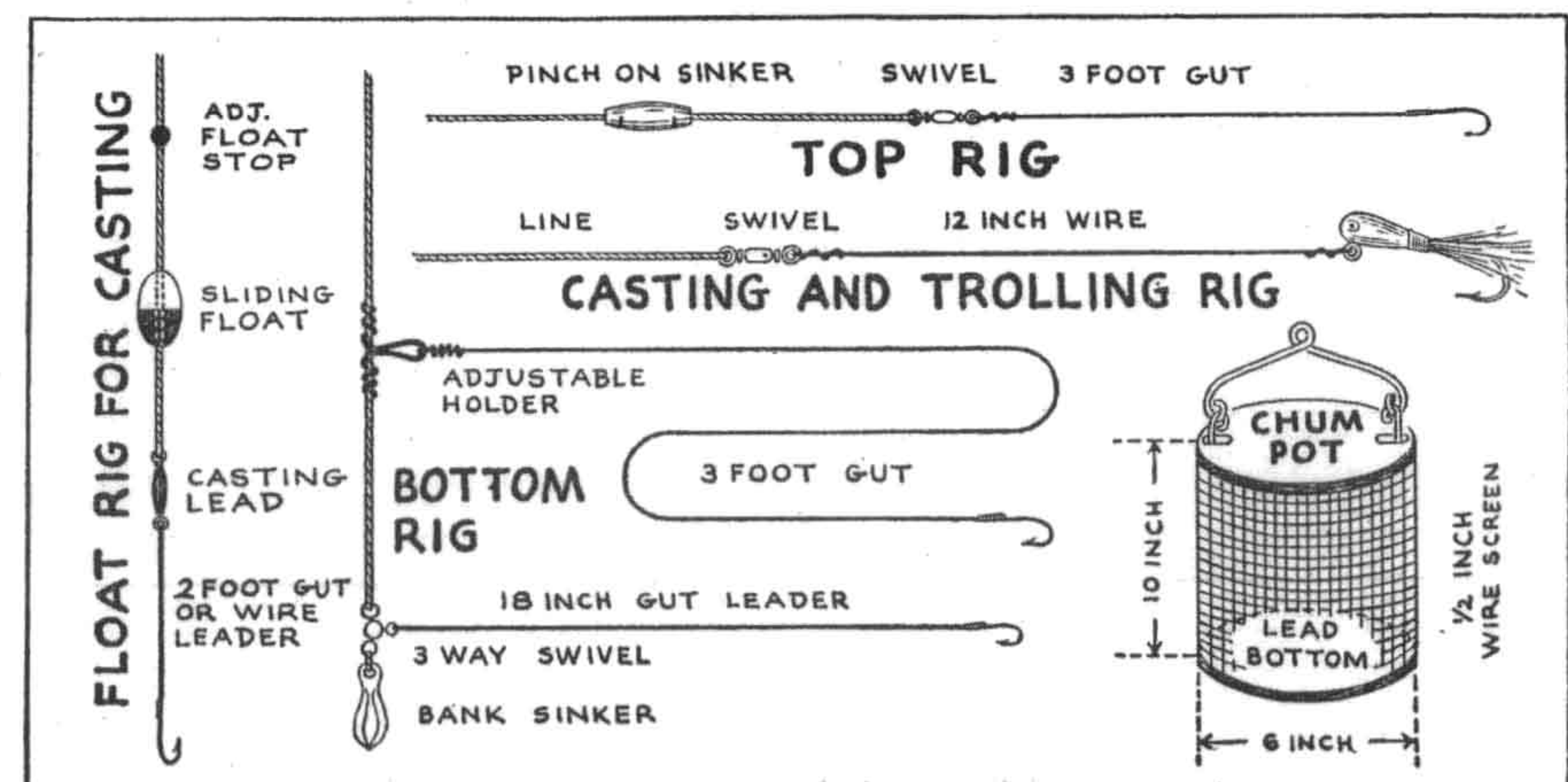
In off-shore fishing the captain hunts the fish and tells the angler when to drop his line, but in inshore fishing it is usually up to the fisherman himself to find the spots and fish at the right time and tide with suitable baits. Once this experience is gained, the waters are no longer fishless, but furnish

almost the year around the sport of catching on light tackle the many species of gamey fish, that invade the shallows inshore for feeding and spawning.

Fishing is either bottom fishing with natural cut bait or live bait and sinker; deep fishing with a float set to the required depth; top fishing with live bait on a floating line or casting and trolling with artificial lures. Bottom fishing is done with the boat anchored or drifting. With the boat anchored, chumming will increase the catch. Cast well away from the boat and make no unnecessary noise. Fish are very wary in shallow water, especially the big ones. Adjust the weight of your sinker to the tidal current, but always use the lightest sinker possible to reach the bottom with a noticeable bump. Continuously lift your rod and let out a few feet of line and bump the bottom again. This keeps your bait moving to attract the fish and also shakes off the bait-stealing crabs. Incoming tides are best as the fish work with the tide to feed on the small bait which seek the security of shallow water on the rising tide.

The ideal tackle consists of a light steel or bamboo rod $4\frac{1}{2}$ to $5\frac{1}{2}$ feet long, a 100-yd. reel and 100 yds. of either 6 or 9-thread linen line. For the ideal reel, we recommend our Nos. 180 and 185 on page 9 for bottom, top fishing and trolling and our No. 109 on page 15 for casting as well as top fishing.

BAY FISHING RIGS



FISH FOR THE SPORT—SET YOUR OWN LIMIT—RELEASE THE FISH

Surf Fishing



THE CALL OF THE SURF

Surf-fishing or Beach-fishing is one of the oldest ways to fish saltwater. Fishing the ever-pounding, mysterious surf is an exciting, healthful and enjoyable sport and very productive, too, but requires a certain degree of expertness. A variety of fish feed close in-shore on the banks, on bars and around rocks where the turbulent surf uncovers food for the fish to feed on. Deep holes, gulleys and sloughs are good places to drop your bait. A long cast is not always necessary, in fact, an over-enthusiastic caster might often drop his bait beyond where the fish are feeding. In bait-

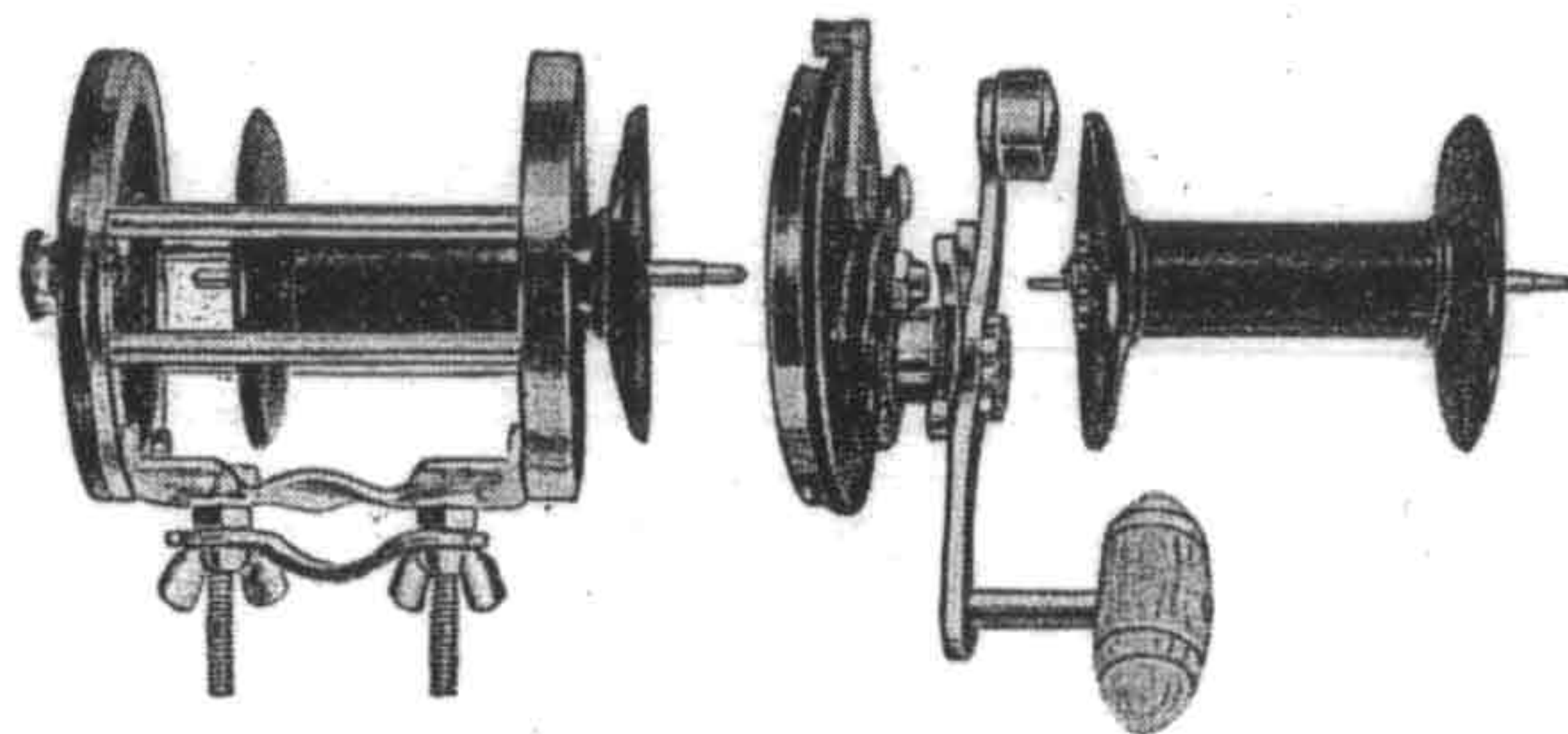
fishing, the bait used can be whole or cut fish, crabs, clams, mussel, shrimp, squid, worms or any other kind of bait, best results being obtained with fresh bait. A good practice is to reel in your bait several feet every few minutes so the crabs don't get a chance to chew your bait.

SQUIDDING

Not only shore-feeding fish can be caught in the surf, but also gamey deep-water fish often come close to the beach chasing and feeding on small bait-fish, which seek the protection of shallow water inshore. On these occasions a tin squid, also called a jig or drail is an excellent fish-taker. As this metal squid is to resemble live bait, it must not be allowed to sink to the bottom and, therefore, reeled in the instant it hits the water. To get the necessary action, a reel with a gear ratio of 3 to 1 is imperative. These lures weigh only 2½ to 3½ ounces and a squidding rod should be lighter and whippier than a bait-casting surf rod.

THE SURF REEL

Specially designed surfcasting reels make casting a real pleasure. Fitted with an extra wide spool of small diameter and light weight, these reels take the hard work out of casting, give longer casts and reduce back lashes. A take-apart construction is of advantage in cleaning the reel, as in beach-fishing, there is the danger of the reel becoming sandlogged and useless for fishing. Also, an extra spool is supplied with this model to provide for the use of different size lines, or in the case of a broken line, the angler does not have to lose precious fishing time, but only a minute to exchange spools. A smooth acting star drag is indispensable when fighting gamey fish. Reels most widely used today have a line capacity of 200 yards of #9 line. And don't forget, even the best reel will perform better with the help of a little lubrication. Salt water is very injurious to metals, and the reel should be thoroughly lubricated to combat corrosion. Never lay your reel on the sand. When not in use, place your rod in a sandspike and cover the reel with a cloth to prevent blowing sand from getting into the reel and spoil a day's fishing.



PENN
"SURFMASTER"
EASY-TAKE-APART
REEL
with
2
INTERCHANGEABLE
SPOOLS

Surf Tackle

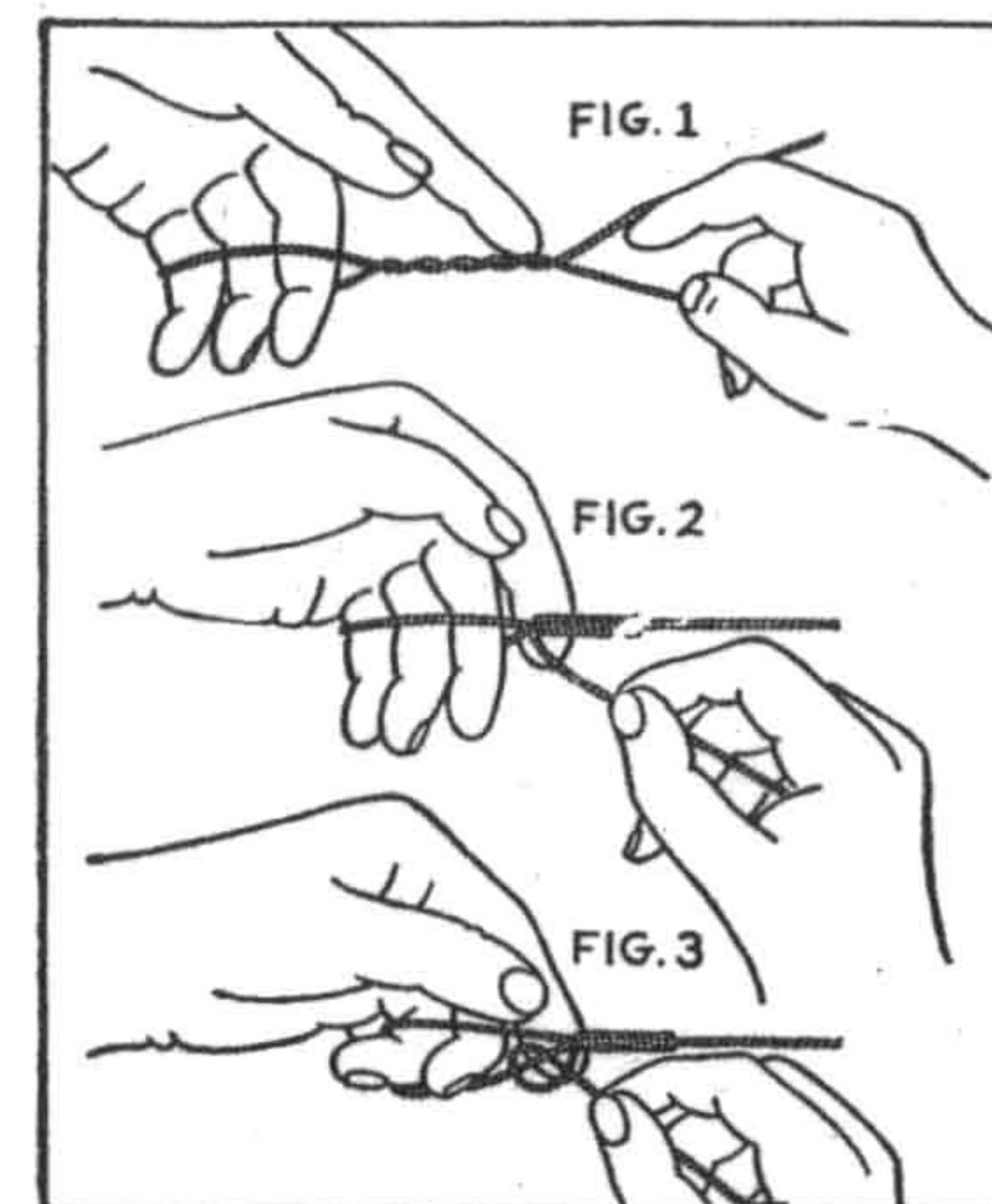
THE SURF ROD



Standard surfcasting rods are made in two pieces, tip and butt, which are joined by metal ferrules. The tip is made from split bamboo 6 to 7 feet in length and fitted with a large rod top and one or more line guides along the tip. The weight of the tip is from 10 to 15 ounces; general rule being short anglers, shorter tips; tall men, longer tips; stiffer tips for weighty bait-casting; whippier tips for lighter metal squids. The butt is made from Hickory, 30 inches in length and fitted with a screw-lock reel seat to hold the reel securely in place.

THE SURF LINE

The most widely used casting line today is 200 yards of 9-thread linen line of 50 lea, which has a wet breaking test of 27 lbs. and which will land fish of double that weight safely when in good condition and without knots. And beware of knots, they will cut a line at a fraction of its tested strength.



MAKING A SAFE LOOP

Fasten the line about four feet from the end to be able to exert a slight tension on the line at all times. Now double about 18 inches of line and place three fingers of your left hand inside the loop. With your right hand twist evenly the end around the line four times and hold the twist with the index finger of your left hand (Fig. 1). Now wind closely backwards over the twist (Fig. 2). Always keep a slight tension on the line to hold an even twist, as this is very important. Now secure the end by a half-hitch to each strand of the loop (Fig. 3) and cut off the excess end.

END TACKLE

Always use a swivel on the end of your line. This will prevent untwisting and kinking. Average weight of casting sinker is 4 ounces; pyramid style being used on sandy bottom and pear-shaped on rocky bottom. There are many styles and sizes of hooks and it is best to get local advice. Always keep your hooks sharp. Gut leader vary in length from 12 inches to 3 feet. Wire leaders are necessary for fish with sharp teeth. A fishfinder rig will help to hook fish, which do not strike hard. The tin squid or drail is a most reliable fish taker. They vary in size and shape to resemble various kinds of bait fish. A narrow 2-inch strip of pork rind on the hook or tail feathers increase their efficiency. Use a short wire leader and keep your squids shiny.

ACCESSORIES

Other equipment necessary are hip boots when the water is cold; rod socket belt to rest your rod when fishing; sand spike to hold your rod when rigging up, baiting the hook or taking off fish; bait knife and beach bag to carry the equipment.

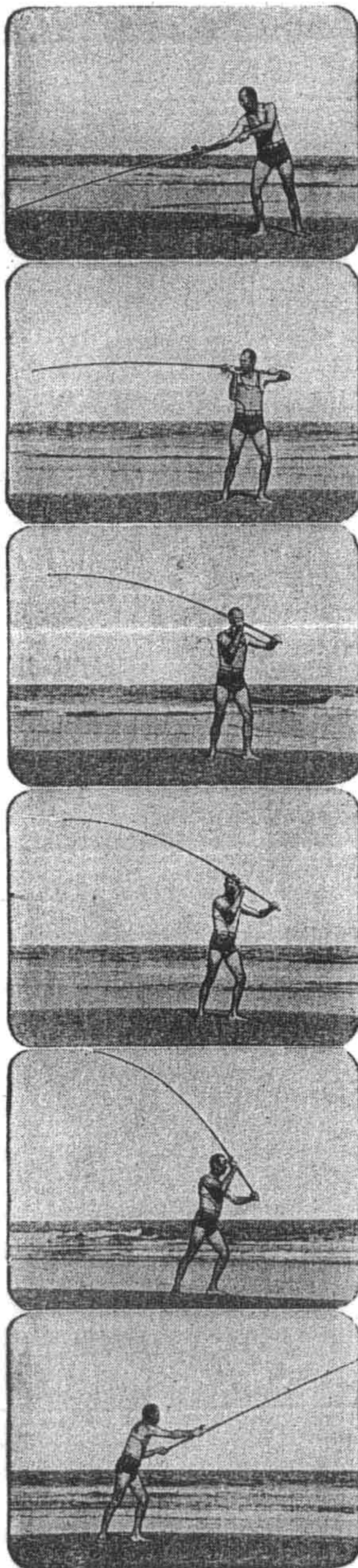
Surf Casting

THE CAST

Brute strength is not required in casting. It is rather a combination of arm, body and leg work that sends the bait far out into the breakers. There are several styles of casting. The cast described below is the most widely used, but if you find that an overhead cast or a side swipe feels easier to you, then cast the way that is most natural to you. The beginner does well not to try to break the world's record of 660 feet. Start easily, then gradually increase the force on the rod, a jerky cast snaps the line or results in backlash. Regardless of the style of casting, the motions of the cast are substantially the same.

Put your left foot forward toward the spot you want to cast, toe set a bit to the right. The right foot is a normal step to the rear and right. You are facing to the right of the target at an angle of about 45 degrees. Place the right hand up under the reel with your thumb on the spool. Put the reel in free spool, let out about two feet of line and grasp the lower end of the butt with your left hand. Now twist your body at the hips and, facing backwards, bring your rod back as far as possible by extending your right arm and bending your right knee. Your left hand is near the chin and the tip low to the ground. The left side plate of the reel is facing upwards by a slight twist of your right wrist to the right. From this position the cast is started by bringing your right hand near the shoulder and your left hand forward. Up to now, the butt is higher than the tip. The power is put into the cast by the simultaneous upward and forward thrust of your right arm and the downward and backward pull of your left arm. During the cast the body is pivoted and the weight shifted from the right foot to the left foot as the cast progresses. The rod swings in an arc of about 45 degrees. When the rod is near the vertical, release the reel spool and from then on apply only enough thumb pressure to prevent the over-running of the spool. This proper thumbing might seem difficult to the beginner, but by watching NOT the sinker but the spool and thumbing lightly as soon as loose coils of line develop on the spool, backlash will be eliminated. Follow through with your rod until the tip is in line with the flight of the sinker. You are now facing the target with your body leaning forward and your left knee bent. Your right arm is well extended and your left hand near the left thigh. Hold the rod in this position until the sinker drops, at which time stop the spool entirely to prevent over-running. Shift the reel in gear, reel in all slack line and watch for a strike.

If a backlash occurs, perhaps you forced the cast too much. Straighten out your line and try again with less force. You can cast almost as far with half of your total strength. To eliminate backlash requires the observance of a dozen or more precautions and we are bound to slip up on one of them once in a while, so don't let a backlash discourage you, we all get them.



Casting Tips

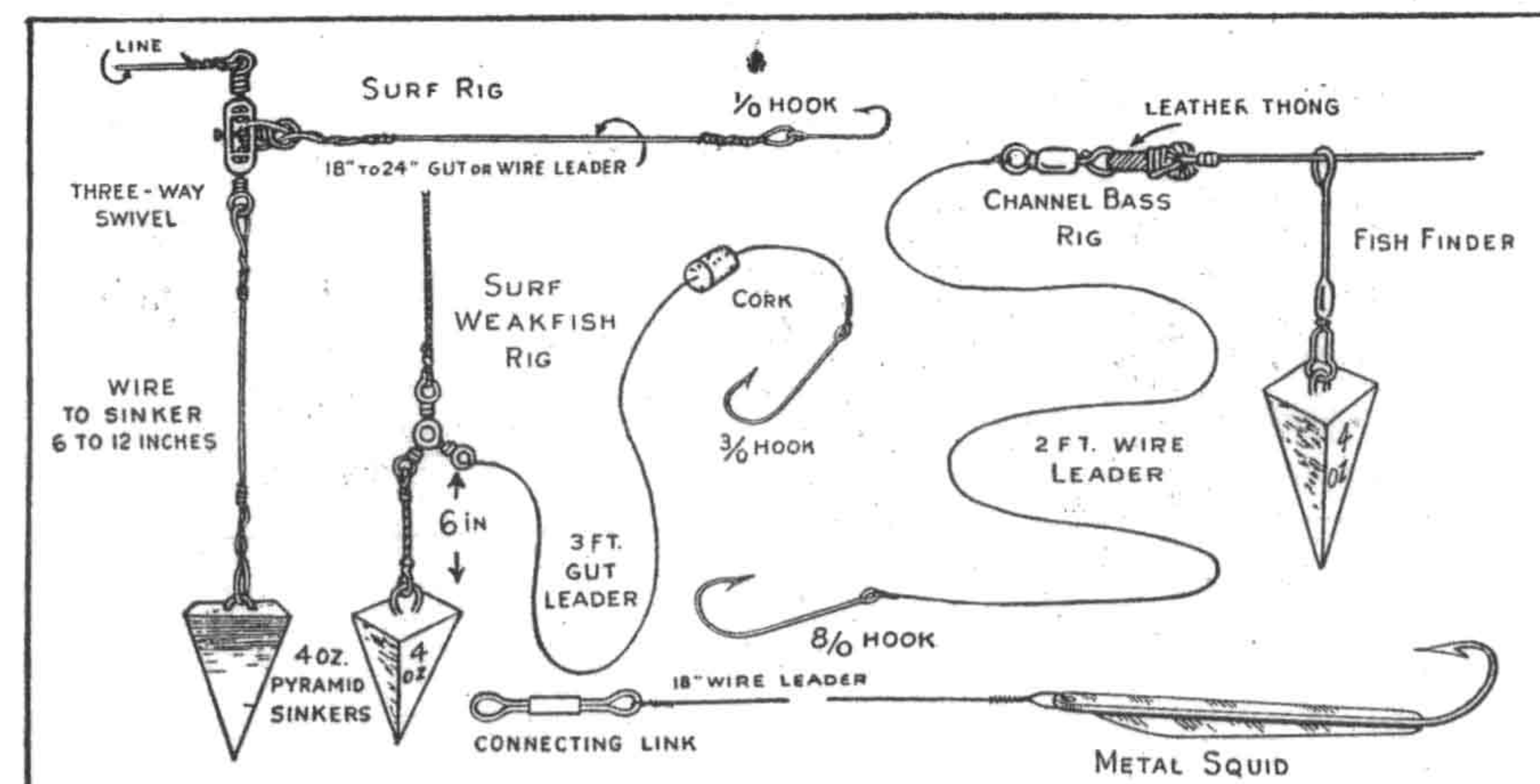
USEFUL TIPS

To cast successfully, several precautions are imperative. Do not start casting with a dry line, you will only burn your thumb, cast short or backlash. Wet linen line is 50% stronger and cast easier. To wet the line, make an easy short cast, dip the tip of your rod into the water and reel the wet line back on the spool. Do not dip your reel into the ocean, as you only get the inside of the reel wet and not much of the line. Another point is to wind the line evenly and tightly on the spool, even in the excitement of reeling in a fish, a humpy spooled line will cause backlash. Also, loose line on the spool will dig in and cause backlash. Heavy oil on the spool bearings cuts down backlashes. Penn #24 Reel oil is excellent for this purpose. Even if you are in a hurry to start fishing, never try a forced cast with a dry, uneven wound or loose line, you will only lose precious fishing time, while trying to untangle the birdnest caused by a backlash. Always take the time to prepare your line with one or more short preliminary casts. Never cast with the click on. The purpose of the click is to signal a strike when the rod is fished in a fixed position. Before each trip break off about 4 feet from the end of your line to eliminate any weakness caused by the strain of casting and chafing on the sand. When assembling the rod, line up the guides with the reel to insure even winding. Also, anchor the line to the spool arbor to prevent slipping. Set the star drag to the desired tension before you start fishing. To check the amount of drag, put the reel in gear and pull line off the spool. Care should be taken not to have any more drag on the reel than the line or rod will stand. The purpose of the drag is to have a steady tension on the line rather than to stop the run of a fish. Too much drag on the reel might only result in breaking tackle or pulling out the hook.

CARE OF THE CATCH

Fresh fish are delicious food, but fish spoil easy when lying on the beach in a hot sun. Keep the fish out of the sun and cover with wet seaweed, or a wet sack. Bleed, take out the gills and gut your fish as soon as possible. To preserve the flavor of the fish, do not scale or cut off the head, do this just before preparing and you will enjoy a delicious meal, more so because you caught the fish yourself.

SURF FISHING RIGS



Penn » Surf and Squidding Reels «

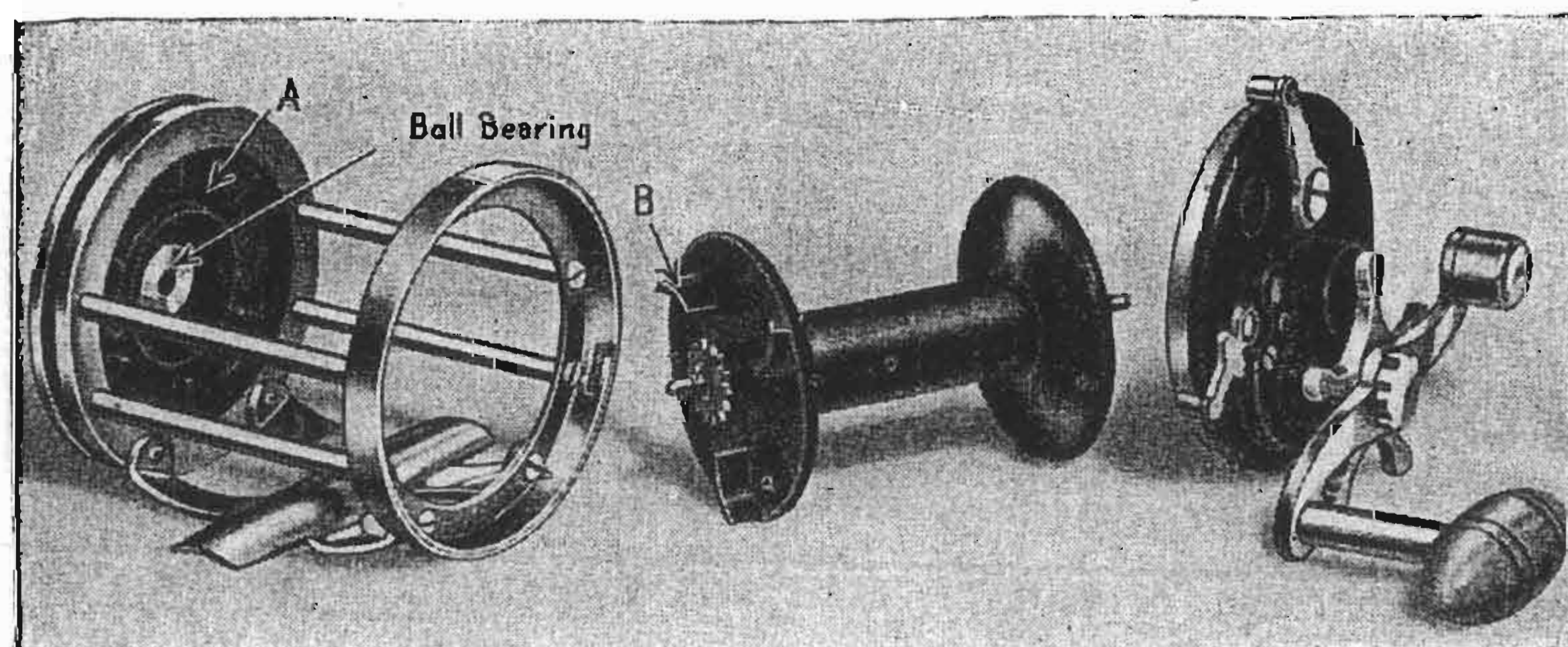
THE "PENN SQUIDDER"



This reel is designed by surfmen for surfmen and is the finest in surfcasting reels. Spool capacity is 200 yds. of 9-thread 50-lea linen line. This spool runs in precision built ball bearings and gets off to a flying start with very little effort. Considering the fact, that at every cast the spool revolves 750 times at a speed of 10,000 revolutions per minute, it is easy to see why the spool bearings are the most important part of the reel. By far the greatest improvement on casting

reels is the development of the light-weight spool of small diameter which cuts down the momentum and thereby reduces backlashes. Also, the Squidder spool is equipped with our patented air brake, which further reduces backlashes. The Squidder reel has the quick-to-take-apart feature for cleaning. This reel is fitted with two interchangeable spools allowing the surfman to carry, ready for use, an extra spool of line for quick replacement of a worn line or changing to a different size line without the loss of precious fishing time. Reel is equipped with our patented convertible star drag and can be fished with or without drag at the fisherman's will by the flip of a lever on the front plate. Our attached rod clamp feature insures rigidity of the reel, which is especially helpful when using calcutta rods. The high gear ratio provides for just the right speed in squidding.

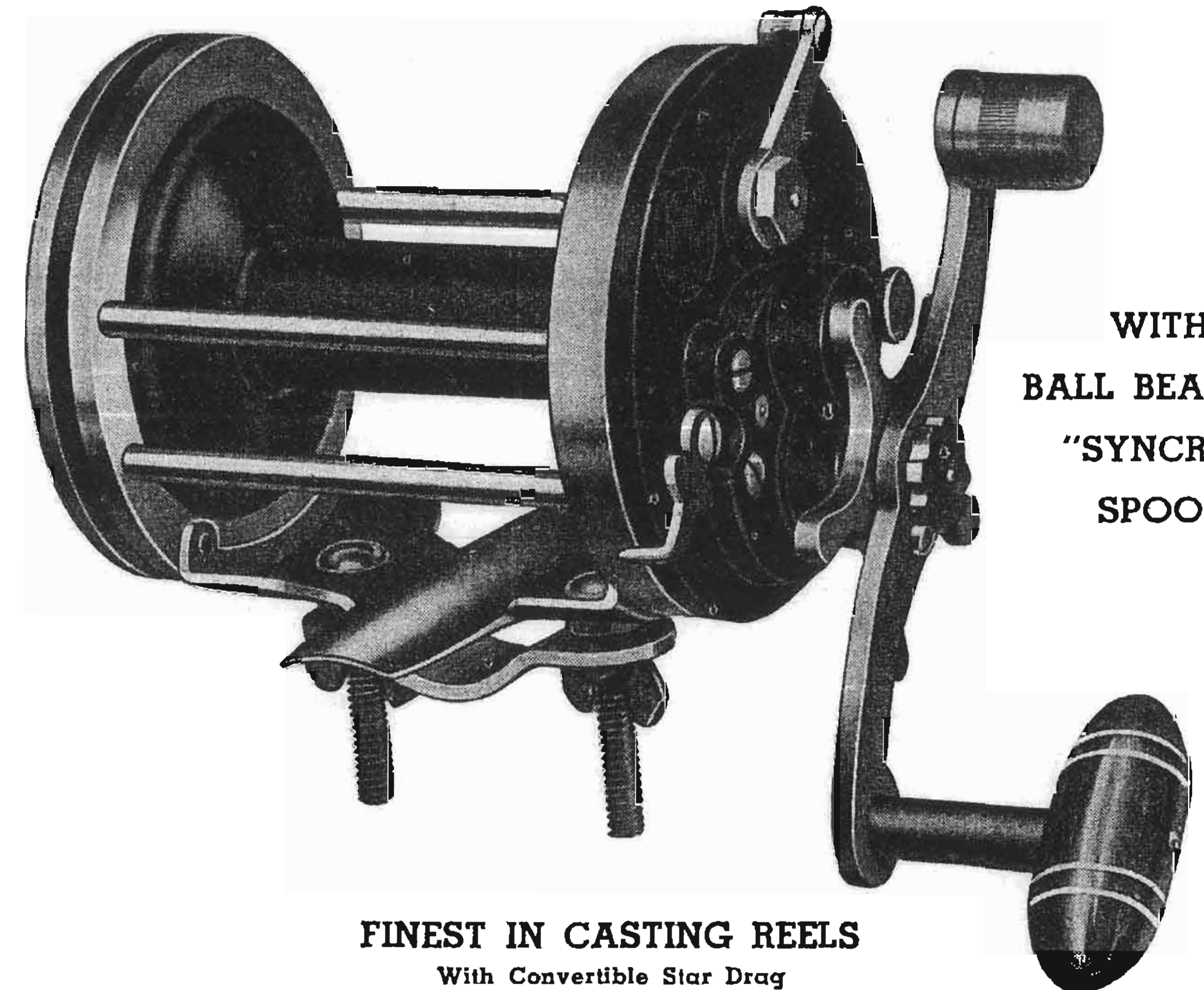
TAKE APART CONSTRUCTION



PENN SQUIDDER "AIR BRAKE"

Details of construction on page 25

» PENN SQUIDDER « WITH 2 "AIR BRAKE" SPOOLS



WITH
BALL BEARING
"SYNCRO"
SPOOL

FINEST IN CASTING REELS
With Convertible Star Drag

No. 140—With 2 synchronized spools, cap. 200 yds. No. 9\$27.50
No. 140L—Left hand model 29.50

The Penn Squidder is the last word in reel design. It has the casting ability of a tournament reel built for fishing. This reel is equipped with our patented synchronized light weight spool (2 oz.), which is of small diameter ($2\frac{1}{8}$ "") and great width ($2\frac{3}{4}$ ""). Runs in frictionless ball bearings, and is equipped with our patented air brake to reduce backlashes. Due to the large spool arbor ($\frac{3}{4}$ " diam.) it is not necessary to build up the spool with idle line. This reel is equipped with our patented convertible star drag, and can be fished with or without drag at the fisherman's will by the flip of a lever. The stainless steel gears multiply $3\frac{1}{3}$ to 1 for fast reeling. Frame is light in weight, made of nickel-silver and has the easy-take-apart feature. End plates are $2\frac{3}{4}$ " in diameter and weight of reel is 17 ounces.

PENN PLASTIC LIGHTWEIGHT SPOOLS ARE EXCELLENT FOR CASTING

with Easy-Take-Apart Feature and Extra Interchangeable Spool

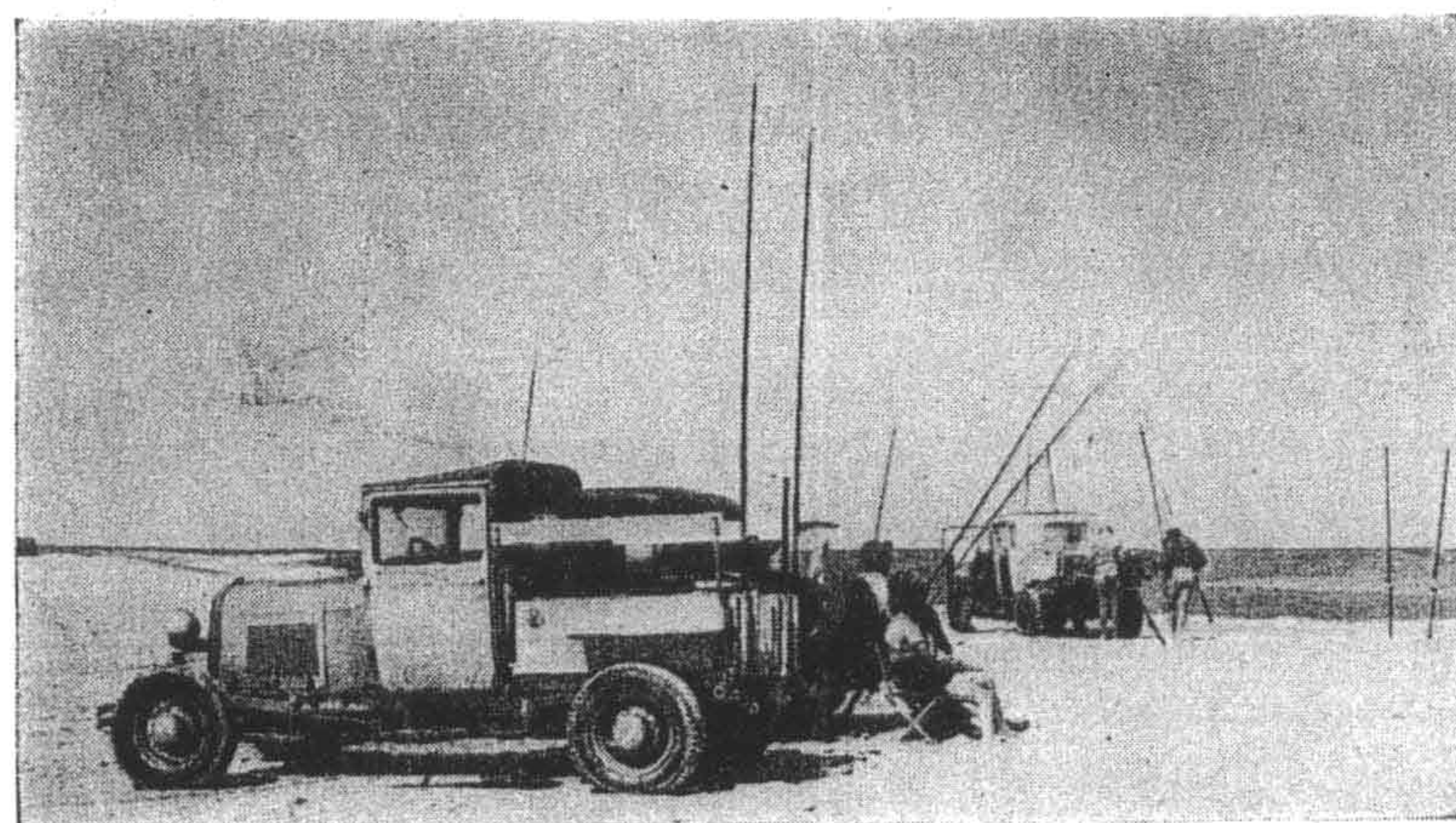
THE "SURFMASTER" REEL



Old Light at
Cape Hatteras, N. C.

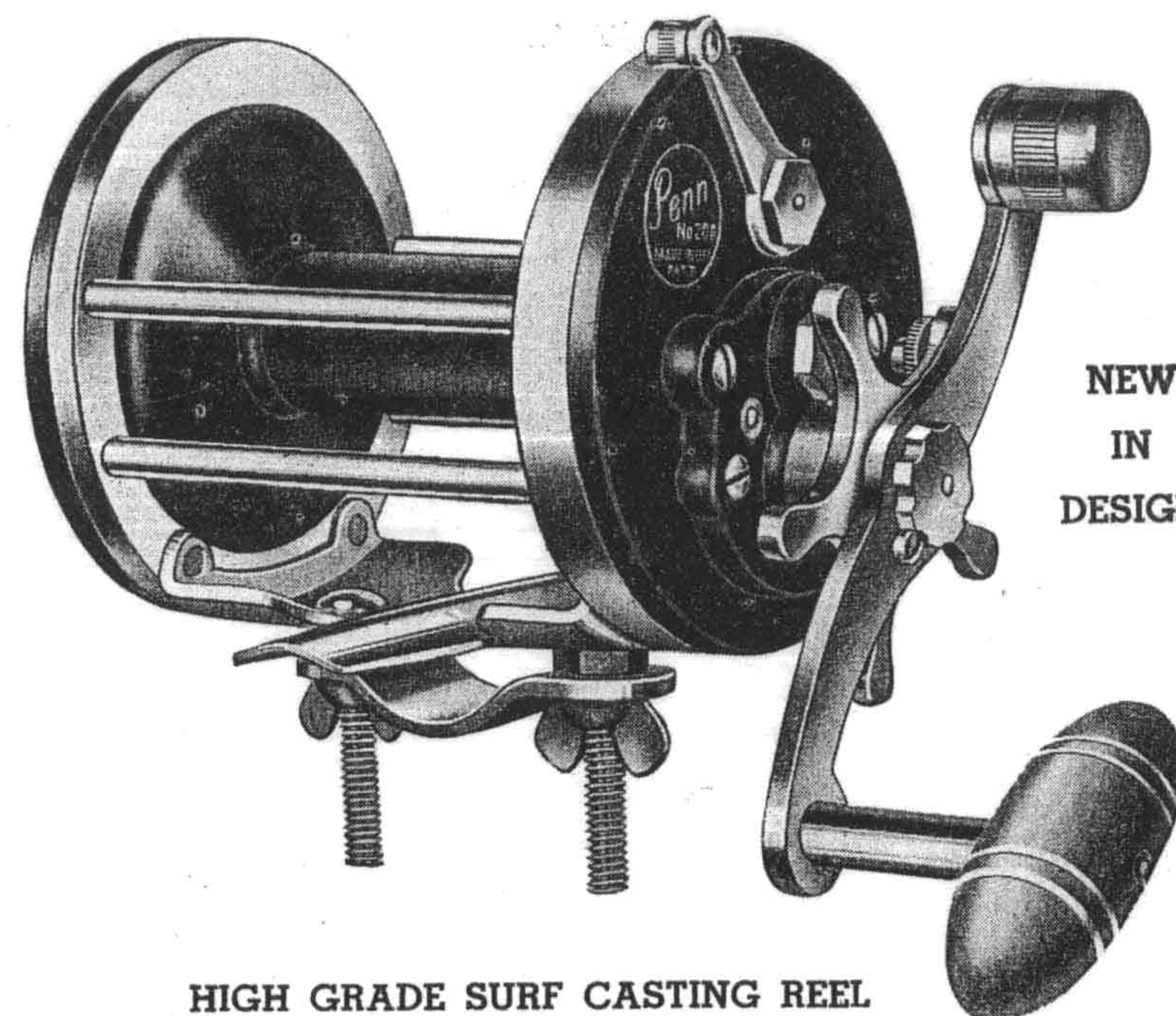
This reel is built along the lines of the Squidder, but moderately priced and enjoys a great popularity, wherever a surfman wets his line. It is built in three different sizes for light, medium and heavy casting. The Penn Easy-Cast plastic spool is light in weight, small in diameter and extra wide for line capacity. It gets off to a flying start with very little effort. This spool is excellent for casting light weights and also greatly reduces backlashes. In addition, this spool is 100% salt water proof and a great line saver, as the line does not come in contact with any metal. All Surfmaster reels have the quick-to-take-apart feature for cleaning should sand get into the reel, which might happen in surfcasting. All reels are fitted with two interchangeable spools allowing the surfman to carry, ready for use, an extra spool of line for quick replacement of a worn line or changing to a different size line without the loss of precious fishing time. Our attached rod clamp insures rigidity of the reel under all conditions, which is especially helpful when using calcutta rods. The high gear ratio provides for just the right speed in squidding. The star drag is designed to tackle game fish and

is very smooth in action, eliminating the danger of breaking the line or rod.



Surf Fishing with Beach Buggies

» SURFMASTER « WITH 2 "EASY-CAST" SPOOLS



NEW
IN
DESIGN

HIGH GRADE SURF CASTING REEL Easy to Take Apart

No. and Cap. of Reel	Type of Reel	Style of Fishing	Plate Diam.	Spool Width	Weight of Reel	Price Each
No. 150—200 yds. No. 6	Star Drag	Light	2 $\frac{3}{4}$ "	2 $\frac{1}{8}$ "	17 oz.	\$12.50
No. 200—200 yds. No. 9	Star Drag	Medium	2 $\frac{3}{4}$ "	2 $\frac{7}{8}$ "	18 oz.	13.50
No. 250—200 yds. No. 12	Star Drag	Heavy	3 $\frac{1}{8}$ "	2 $\frac{7}{8}$ "	19 oz.	14.50

The Surfmaster reel is built along the lines of the Squidder reel, but held at a price within everybody's reach. Made in 3 sizes for light, medium and heavy fishing. This reel is light in weight, speedy in action and excellent in casting for bait fishing and squidding. All reels are equipped with 2 EASY-CAST light weight spools. Gears are triple multiplying. Frame is made of nickel-silver and chrome-plated.

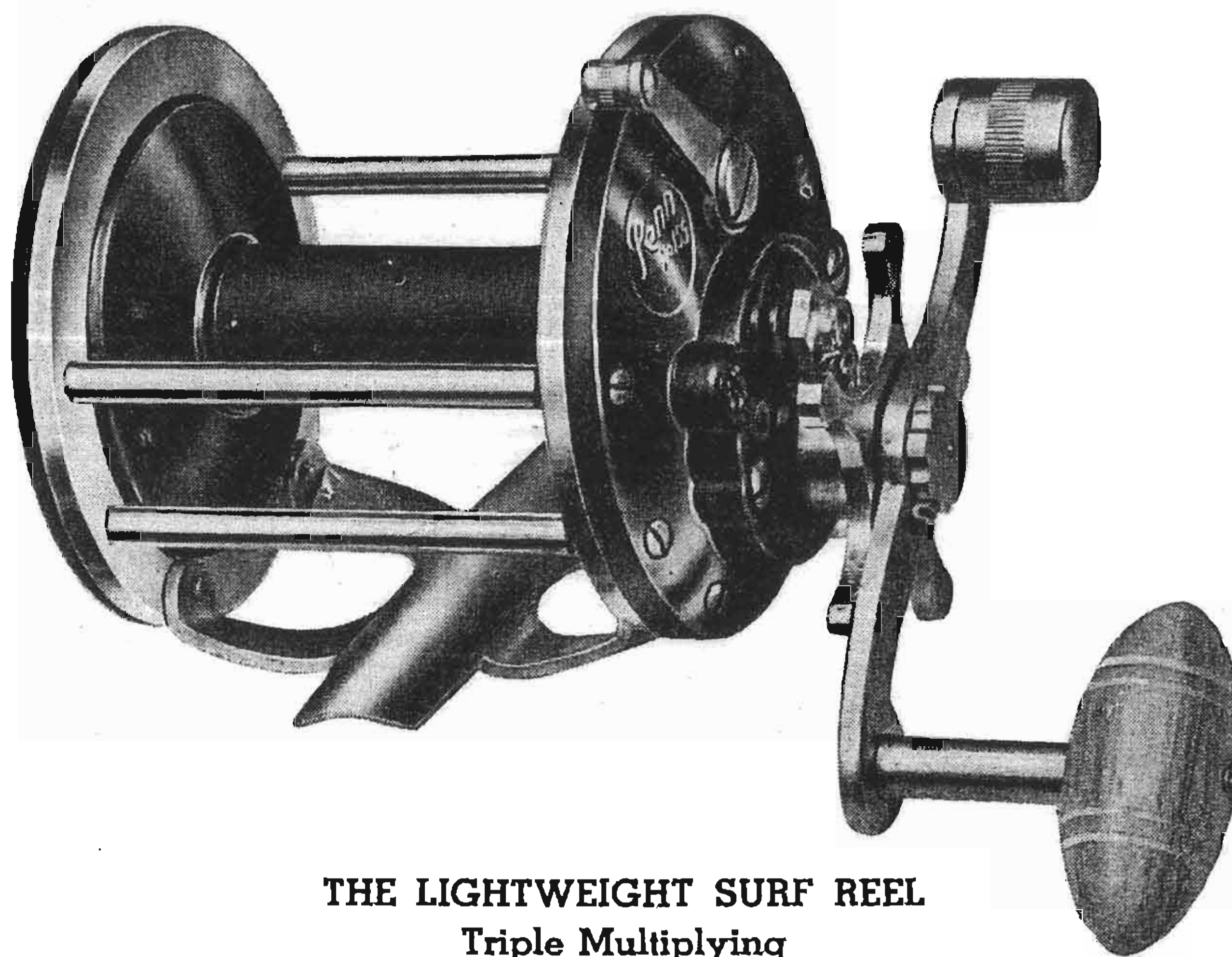
PENN PLASTIC LIGHTWEIGHT SPOOLS ARE EXCELLENT LINE SAVERS

Penn » Light Tackle « Casting Reels

200 Yard

» LIGHT TACKLE SURF REEL «

With "EASY-CAST" Spool



THE LIGHTWEIGHT SURF REEL
Triple Multiplying

No. 155—Star Drag; cap. 200 yds. No. 9, weight 14 oz.\$8.00

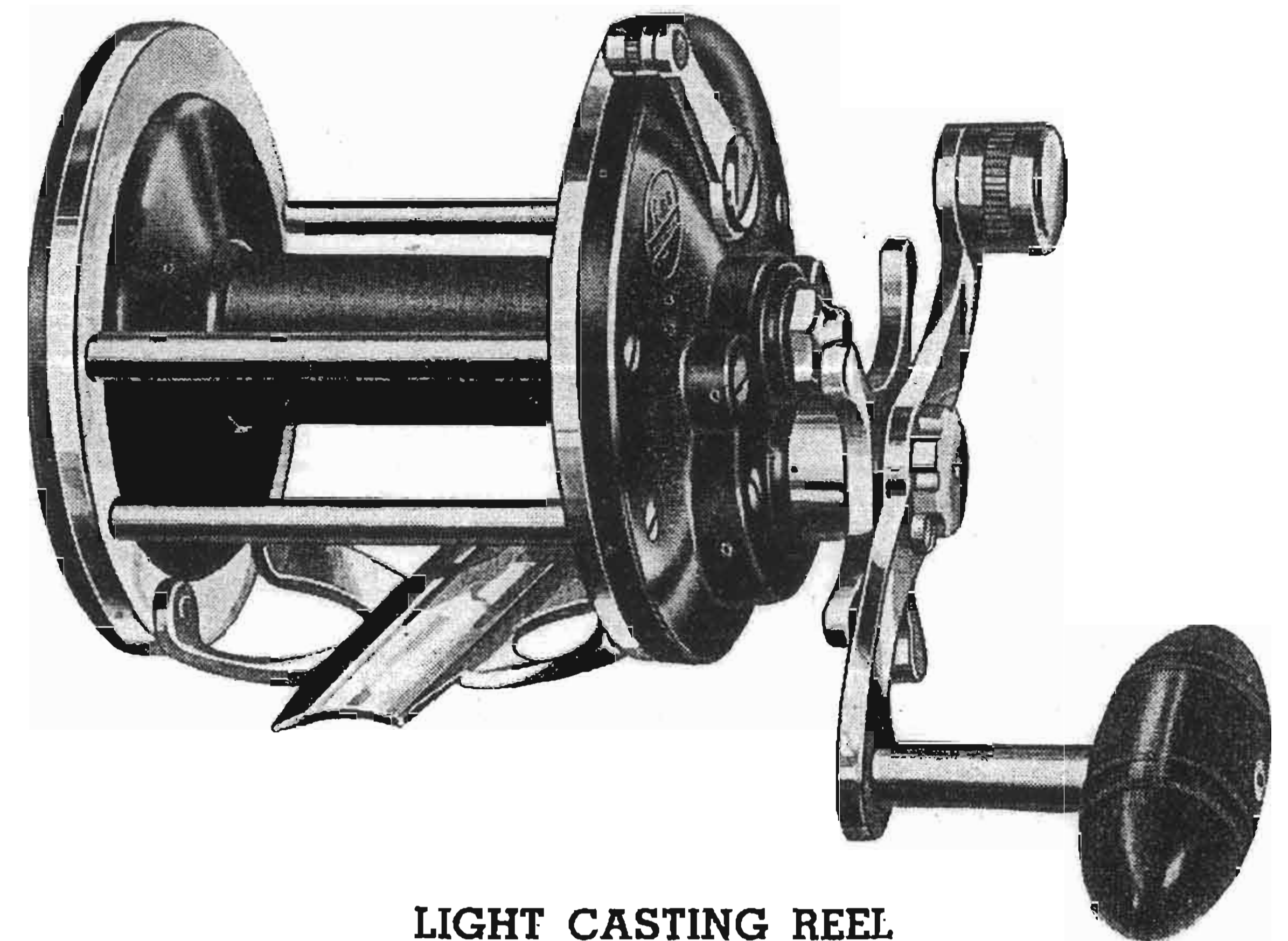
Small, light weight reel especially designed for light tackle fishing. Ideal reel for 3/6 tackle. Equipped with our light weight and corrosion-proof "EASY-CAST" spool 2 7/8" wide. This spool is excellent for distance casting and reduces backlashes. The non-strip gears are triple multiplying for speedy action. Frame is light in weight but sturdily built. End plates are streamlined, metal bound and small in diam. (2 3/4"). Equipped with free spool clutch, torpedo handle and One Shot lubricating system.

The increasing use of light rods demands lighter reels. In the new light casting reels all overweight is eliminated by the combination of wider spools and small streamlined end plates. Ideal reels for light tackle fishing.

150 Yard

» LIGHT TACKLE CASTING REEL «

With "EASY-CAST" Spool



LIGHT CASTING REEL
Triple Multiplying

No. 160—Star Drag; cap. 150 yds. No. 9, weight 13 1/2 oz.\$7.00

Small, light weight reel, excellent for light casting, top and bay fishing. Capacity 150 yds. No. 9 or 200 yds. No. 6 line. End plates are streamlined, metal bound and beautifully engraved. The light weight frame is 2 3/4" in diameter. The spool is light in weight, 2 1/8" wide, weighs only 2 oz. and gets off to a flying start with less effort, which is very helpful when using light lures. As the arbor of these spools is of greater diameter, it is not necessary to build up the spool with idle filler line which only adds undesirable weight to the spool and impairs the casting ability.

PENN PLASTIC LIGHTWEIGHT SPOOLS DO NOT REQUIRE IDLE FILLER LINE

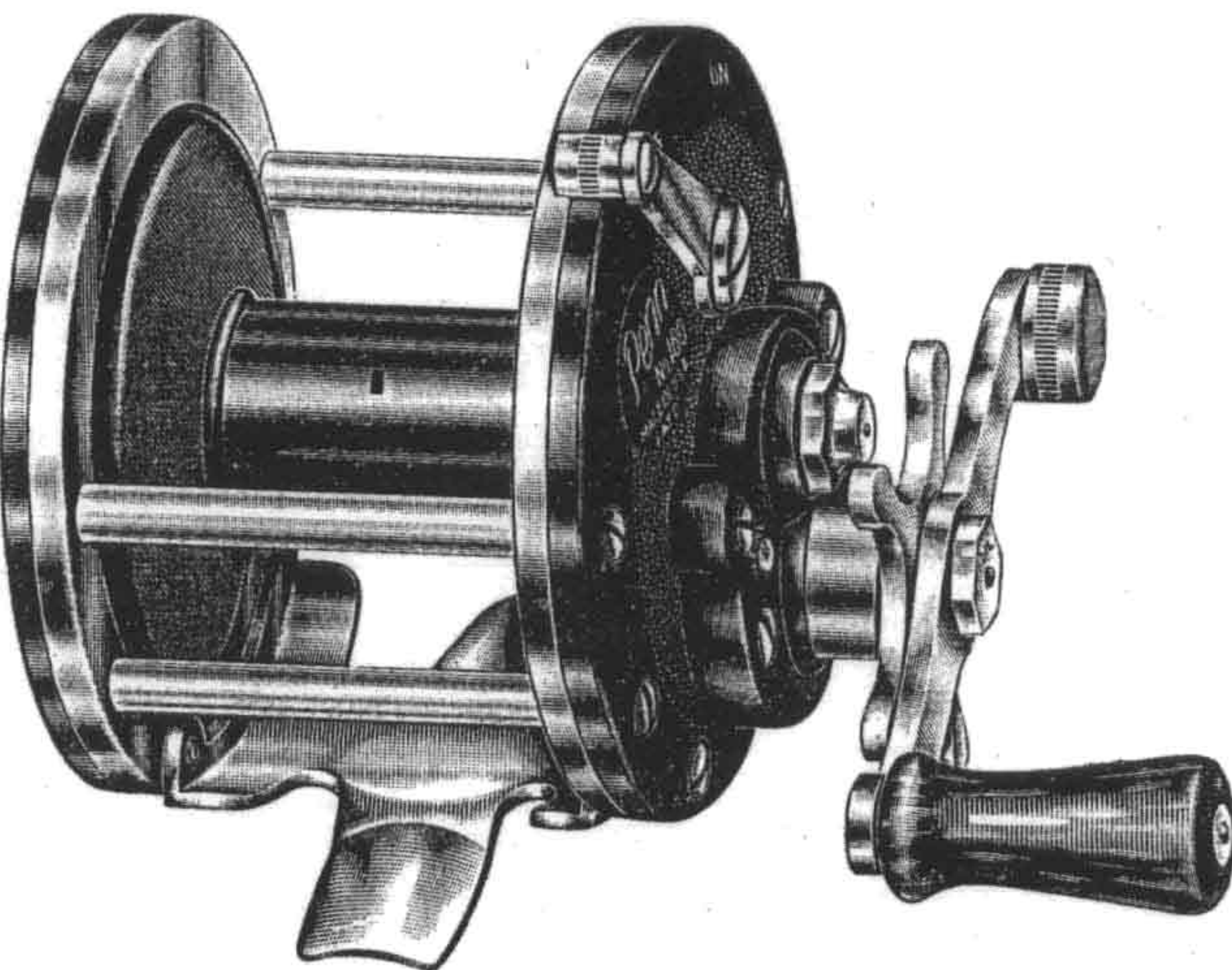
for Surf and Bay Fishing

with » Easy-Cast « Lightweight Spools

100 Yard

» EXTRA LIGHT CASTING REEL «

With "EASY-CAST" Spool



IDEAL BAY REEL

Made With or Without Star Drag

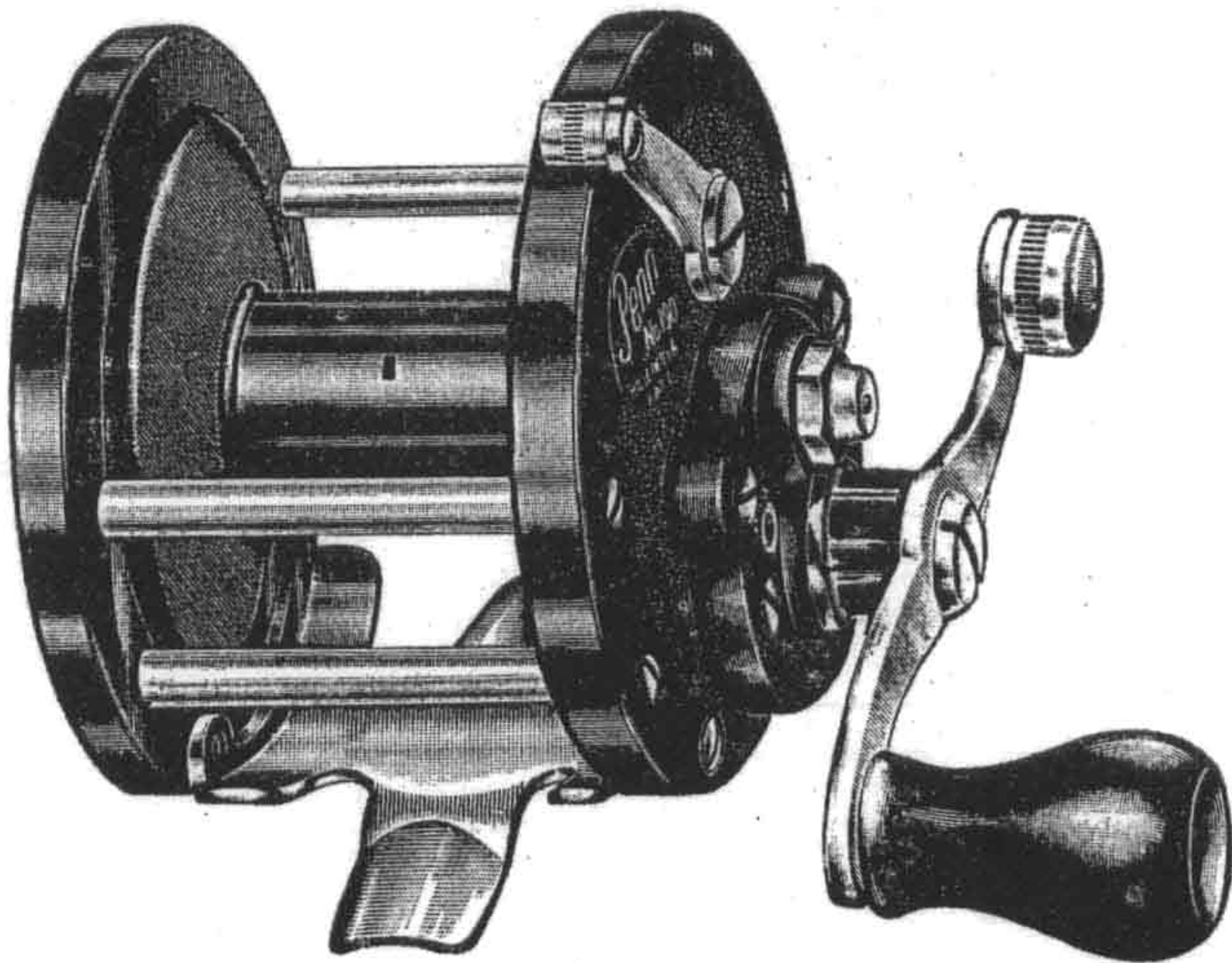


5 lb. Striped Bass caught by
5 year old Blakeley Chandlee,
Jr., in the surf at Bayhead,
N. J.

100 Yard

» LIGHT TACKLE BAY REEL «

With "EASY-CAST" Spool



POPULAR BAY REEL

Without Star Drag

- No. 180—Star Drag—Weight 11½ oz.Price \$6.00
No. 185—Free Spool—Weight 11 oz. 5.00

A small light weight reel that will add greatly to the pleasure of light tackle fishing. Capacity 100 yards of No. 9 or 150 yards of No. 6 line. Made with and without Star Drag. Adaptable to fresh and salt water rods. Sturdy reel but light in weight. The non-strip gears are triple multiplying for fast action. Equipped with free spool clutch, sliding click, and *One Shot Lubrication*. End plates are streamlined and metal bound. Plate diameter 2¾", spool width 1⅝".

- No. 190—Free Spool—Weight 11 oz. Triple MultiplyingPrice \$3.50

Ideal reel for light tackle bay fishing. Capacity 100 yards No. 9 line. Reel seat fits fresh and salt water rods. The spiral cut gears are triple multiplying for speedy action. Free spool clutch is operated by a *snap* lever on rim. Spool end play can be taken up by an adjustable bearing. A sliding click provides for arresting spool. Reel can be lubricated from the outside. Metal parts are nickel-plated. The small streamlined end plates are beautifully engraved and 2¾" in diameter.

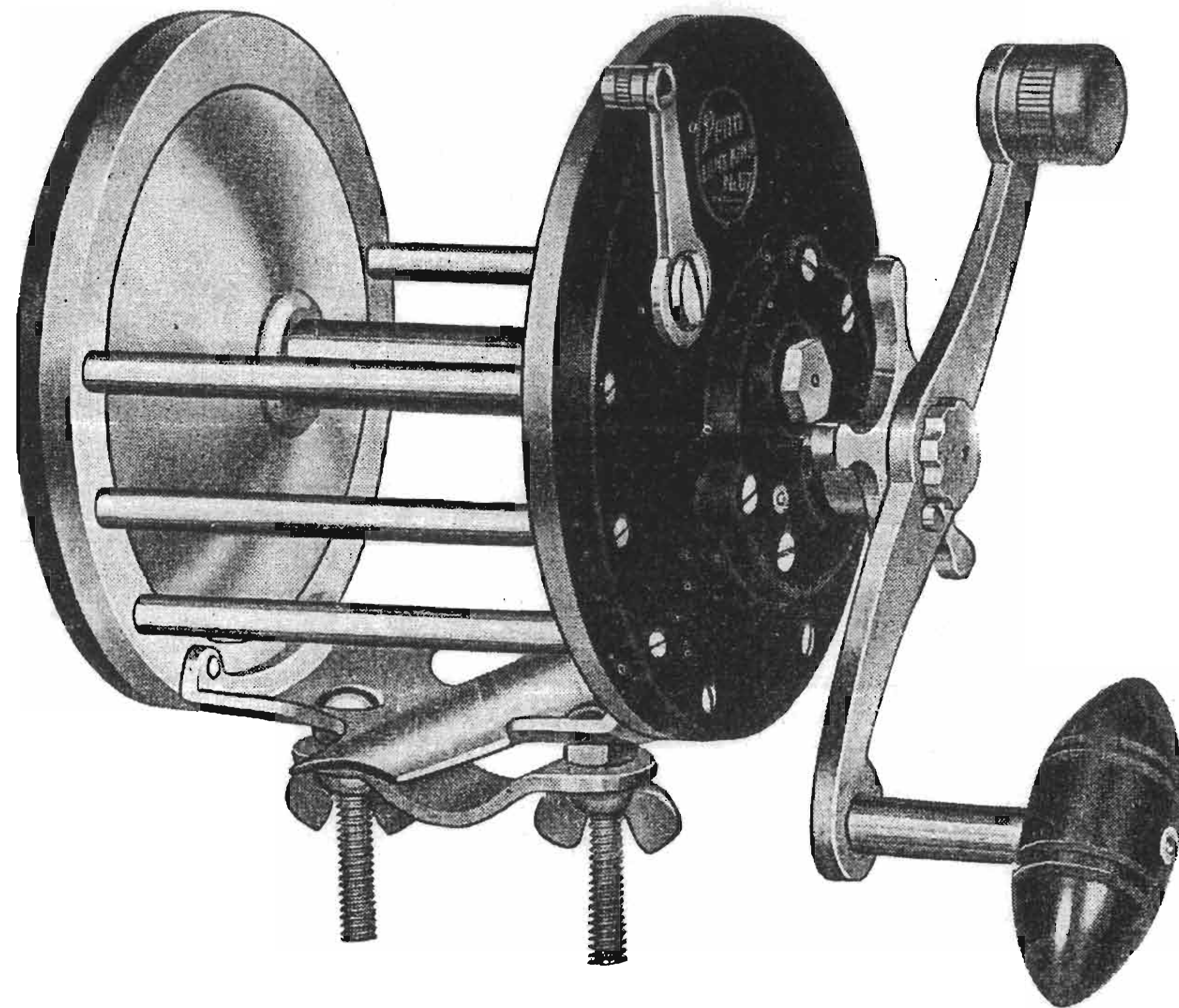
*On this page are shown the new small, extra light weight 100 yard reels, unsurpassed for bay fishing.
In combination with light rods, these reels add greatly to the thrill of light tackle fishing.*

WITH PENN PLASTIC LIGHTWEIGHT SPOOLS LINE CAN BE FISHED TO THE LAST INCH

Penn » Universal « Star Drag Reels

400 to 600 Yards

» LONG BEACH «



POPULAR GAME FISH REEL

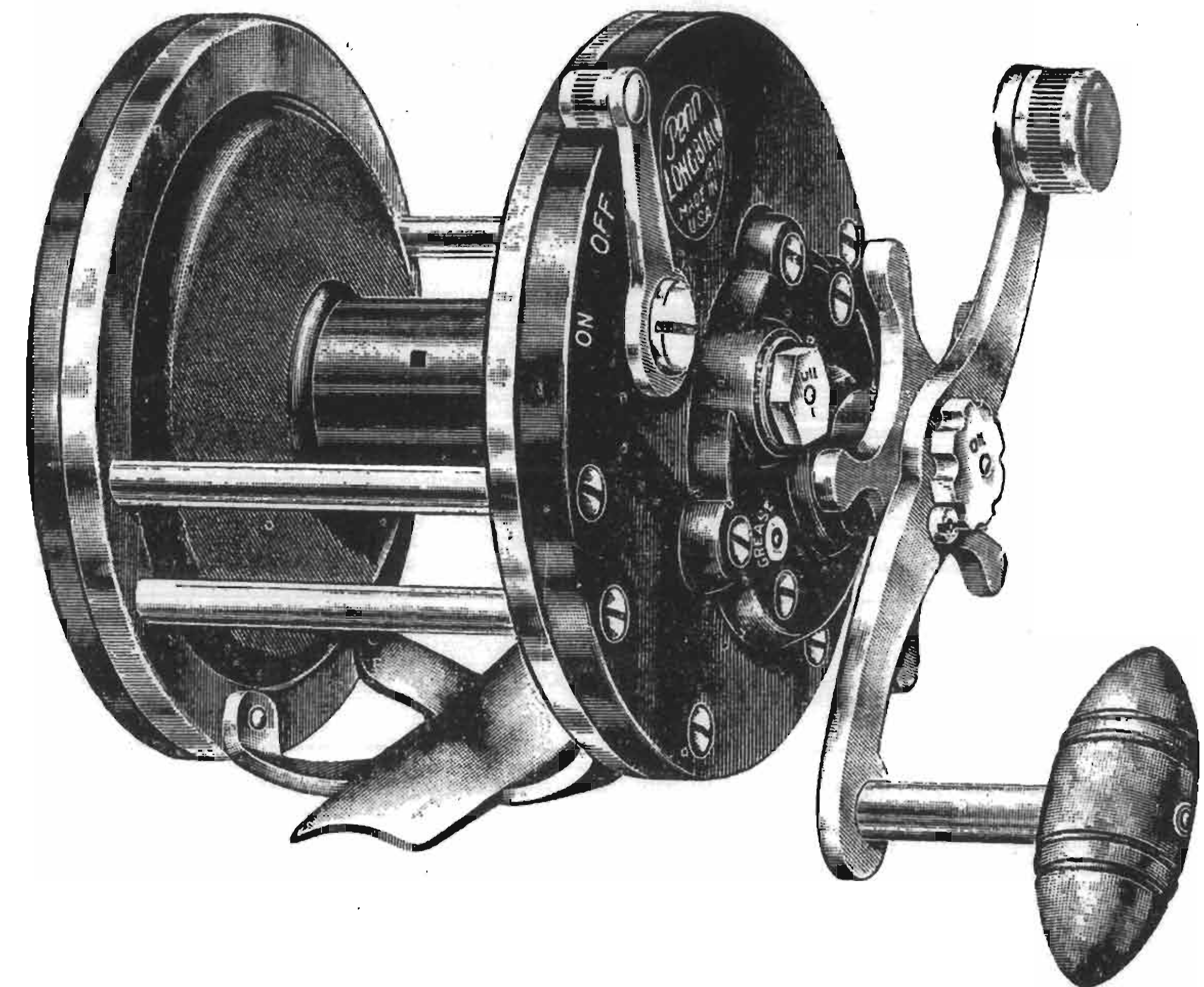
No. and Size of Reel	Line Capacity in Yards				Plate Diam.	Spool Width	Weight of Reel	Price Each
	No. 9	No. 12	No. 15	No. 18				
No. 66—400 yds. ...	400	300	250	200	3 5/8"	2 1/8"	24 oz.	\$10.00
No. 67—500 yds. ...	500	375	300	250	3 5/8"	2 7/8"	25 oz.	11.00
No. 68—600 yds. ...	600	450	375	300	3 5/8"	3"	26 oz.	12.00

The *Long Beach* is a popular game fish reel equipped with our powerful Star Drag. (Details on page 24.) The free spool *snap* lever is conveniently located on rim and the drag can be applied *instantly* without danger of stripping gears. Gear train consists of *hardened steel* driving gear and *stainless steel* pinion. Our *One Shot Lubrication* safeguards perfect performance. Metal parts are hand polished and chromium-plated.

Reel can be furnished in left hand model at extra cost of \$1.00.

200 and 250 Yards

» LONG BEACH «



THE STANDARD STAR DRAG REEL

With Easy-Cast Spool

No. and Size of Reel	Line Cap. in Yards			Gear Ratio	Plate Diam.	Spool Width	Weight of Reel	Price Each
	No. 9	No. 12	No. 15					
No. 60—200 yds. ...	200	150	125	2 1/2 to 1	3 1/4"	1 1/8"	17 oz.	\$7.50
No. 65—250 yds. ...	250	200	150	2 1/2 to 1	3 1/4"	2 1/8"	18 oz.	8.00

The *Long Beach* is a universal salt water reel equipped with our powerful Star Drag. The free spool *snap* lever is conveniently located on rim and the drag can be applied *instantly* without danger of stripping gears. Gear train consists of *hardened steel* driving gear and *stainless steel* pinion. Handle is fitted with catalin torpedo grip. Our *One Shot Lubrication* safeguards perfect performance. Metal parts are hand polished and chromium-plated. Reel can be furnished in left hand model at extra cost of \$1.00.

PENN REELS CAN BE LUBRICATED FROM THE OUTSIDE

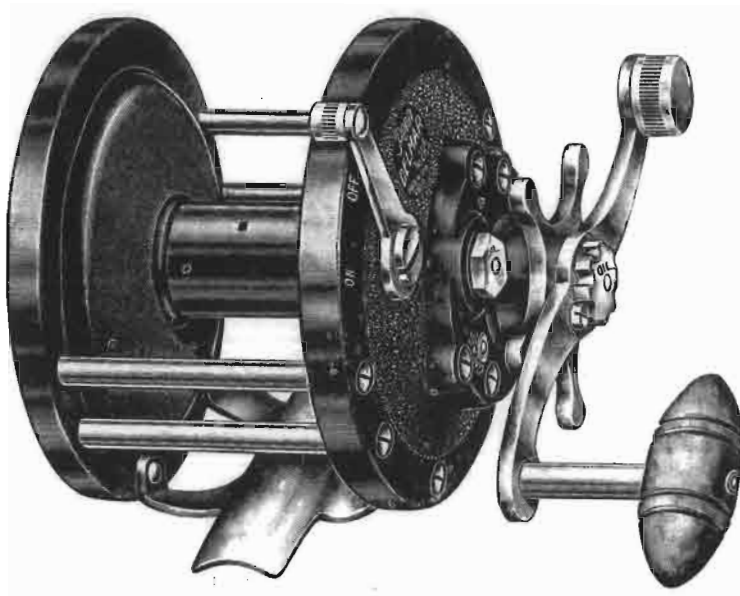
For General All Around Fishing

Light Trolling, Surf, Pier, Deep Sea and Bay



200 Yard

» DELMAR «



UNIVERSAL STAR DRAG REEL

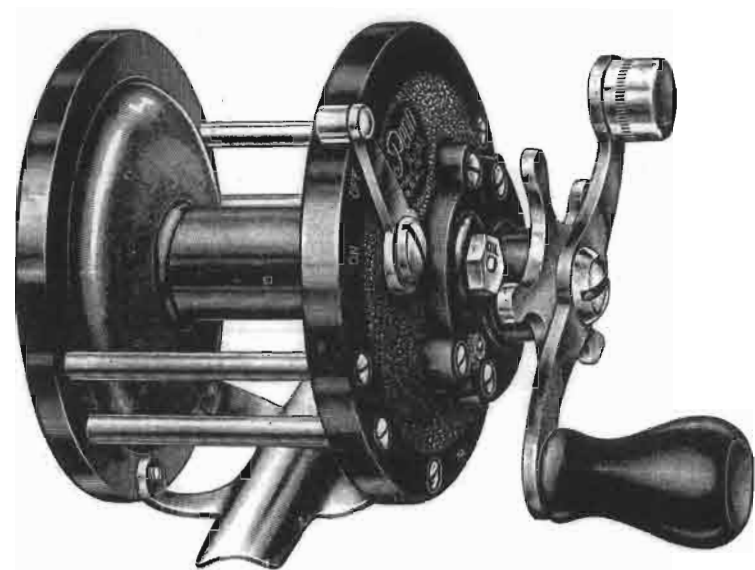
With "EASY-CAST" Spool

No. 285—Cap. 200 yds. No. 9Price \$5.50

Excellent star drag reel. Standard 200 yd. size at a moderate price. Equipped with EASY-CAST non-corrosive spool, steel gears, torpedo handle, smooth action drag and one-shot lubrication. Metal parts are hand-polished and chrome-plated. The streamlined end plates are $3\frac{1}{4}$ " in diam. and spool width is $1\frac{13}{16}$ ". Weight of reel $13\frac{1}{2}$ oz. Line capacity 200 yards. No. 9 or 150 yards No. 12 linen line.

200 Yard

» PENN No. 85 «



POPULAR STAR DRAG REEL

With "Light Weight" Spool

No. 85—Cap. 200 yds. No. 9Price \$4.00

A star drag Universal salt water reel of standard size for deep sea, surf, pier, boat and bay fishing. This reel is equipped with our light weight EASY-CAST spool which produces long casts and reduces backlashes. In addition, this spool is corrosion proof and a great line saver. Reel is made of genuine bakelite and brass, finished in nickel. Plate diam. $3\frac{1}{4}$ "; spool width $1\frac{13}{16}$ "; weight $13\frac{1}{2}$ ozs. Line capacity 200 yards. No. 9 or 150 yds. No. 12.

A COMBINATION WRENCH AND SCREWDRIVER IS PACKED WITH EVERY REEL

Penn » Narrow Spool « Reels

REELS FOR DEEP FISHING

The narrow spool reels illustrated on this page are of a distinctly different design and are especially made for wire line deep trolling. Made in one size only, but in three different styles to meet all requirements. Linen line capacity is 250 yds. No. 12 or 200 yds. No. 15 or 150 yds. No. 18. Wire line capacity is 200 yds. of No. 10—.024" diameter or 300 yds. No. 8—.020" diameter of stainless steel or monel single wire. Twisted and braided metal line capacity is the same as linen line capacity in the corresponding sizes. The extra large end plates of these reels are $4\frac{1}{8}$ " in diameter and the narrow spool is only $1\frac{5}{8}$ " in width. Also the spool is fitted with an extra large $1\frac{3}{4}$ " diameter winding arbor to prevent the kinking of the wire line. In addition the spool is very light, made of molded plastic and is 100% corrosion proof, as there is no metal to come in contact with the line. The reels are fast in winding and one turn of the handle takes in 2 to 3 feet of line. The handles are extra large (5") for easy winding. For deep fishing with wire line or linen line these reels are excellent.

No. 49 reel is a star drag reel equipped with our patented convertible star drag and can be fished as a star drag reel or free spool reel at the will of the fisherman. (See page 24.) Gear ratio is $3\frac{1}{2}$ to 1 for fast action.

No. 149 reel is a star drag reel of the same general construction but without the star drag throw-off feature. The gears are double multiplying for easier reeling-in of heavy weights. Ideal reel for deep sea bottom fishing and wire line deep trolling.

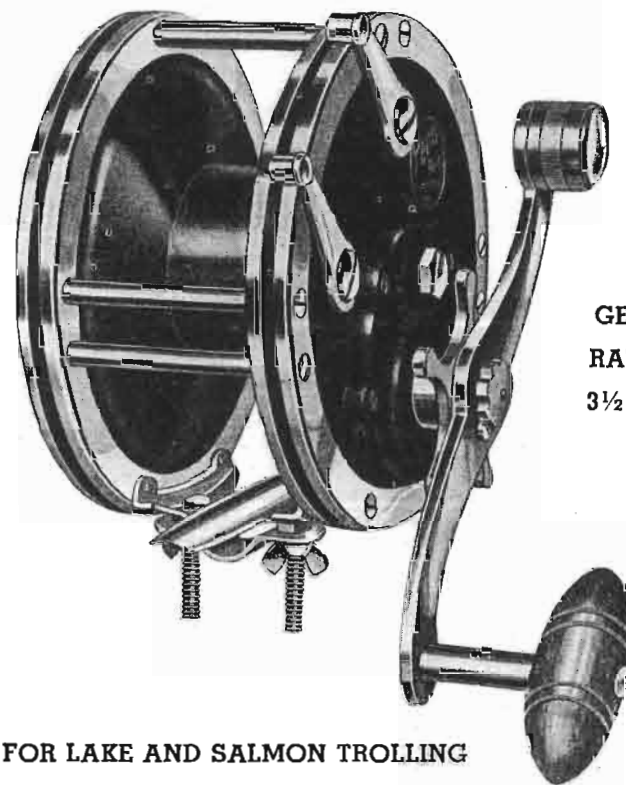
No. 249 reel is of the same size but without the free spool feature. Gears are double multiplying for fast action.



53 Lb. Prize Chinook Salmon
Caught by J. S. Dickson, Cathlamet, Wash.

» PENN No. 49 «

IDEAL
FOR
WIRE
LINE
TROLLING



GEAR
RATIO
 $3\frac{1}{2}$ to 1

FOR LAKE AND SALMON TROLLING

No. 49 —Convertible Star DragPrice \$15.00

No. 49L—Left hand modelPrice 16.00

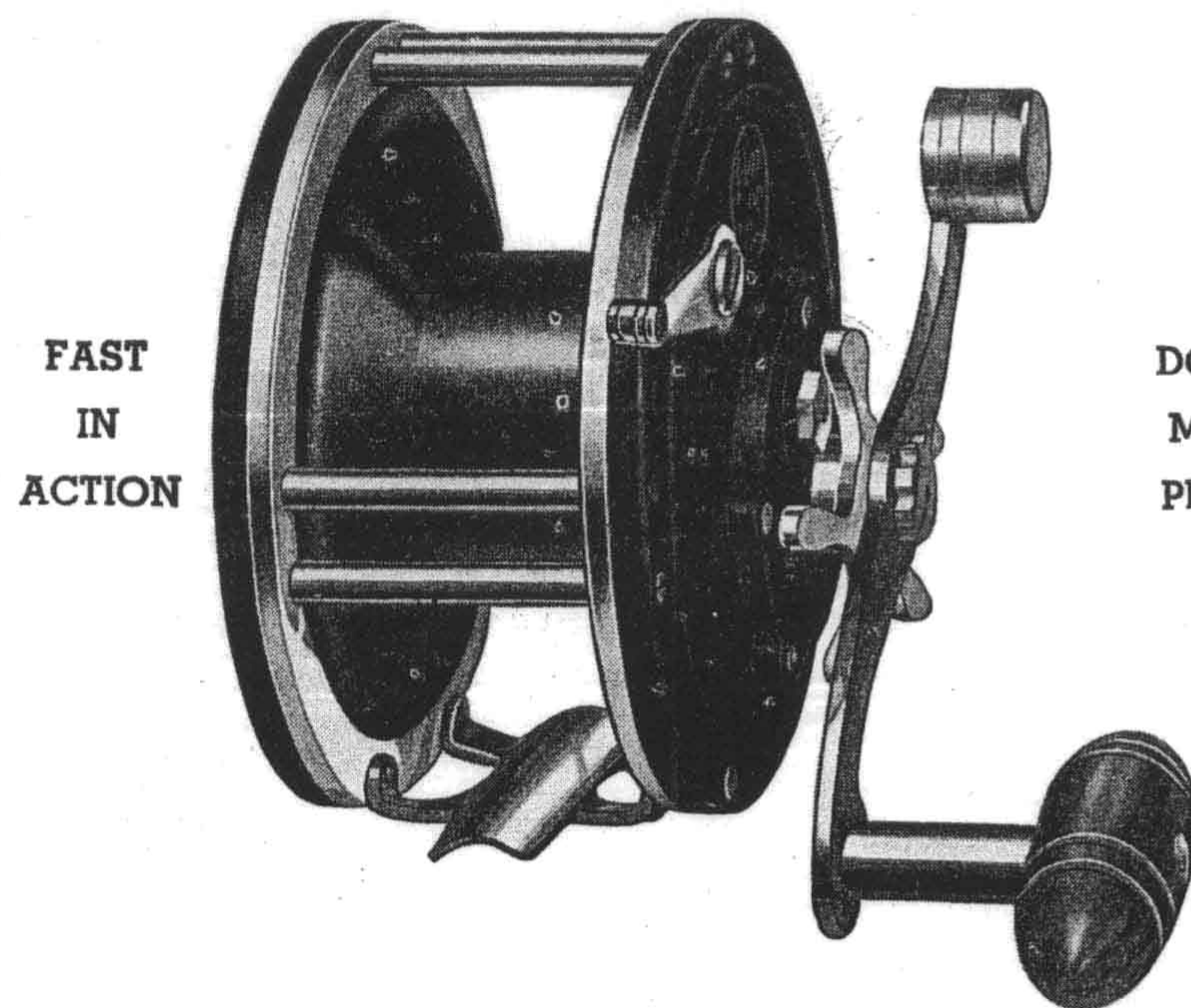
The No. 49 reel is a fast action reel with a gear ratio of $3\frac{1}{2}$ to 1 and one turn of the handle winds in $2\frac{1}{2}$ feet of line. This reel is equipped with our patented convertible star drag and can be fished as a star drag reel or free spool reel at the will of the fisherman. A flip of a lever converts the reel. (See page 24.) Gears are always in mesh and cannot strip. The oversize handle is fitted with our torpedo grip. End plates are double metal bound. Cross plate is fitted with an attached rod clamp. Metal parts are polished and chrome-plated. Weight of reel 28 oz.

PENN REELS ARE DESIGNED BY FISHERMEN FOR THE FISHERMEN

for Wire Line Deep Trolling and Deep Sea Fishing

with large arbores fast winding Plastic Spools

» PENN No. 149 «



**FAST
IN
ACTION**

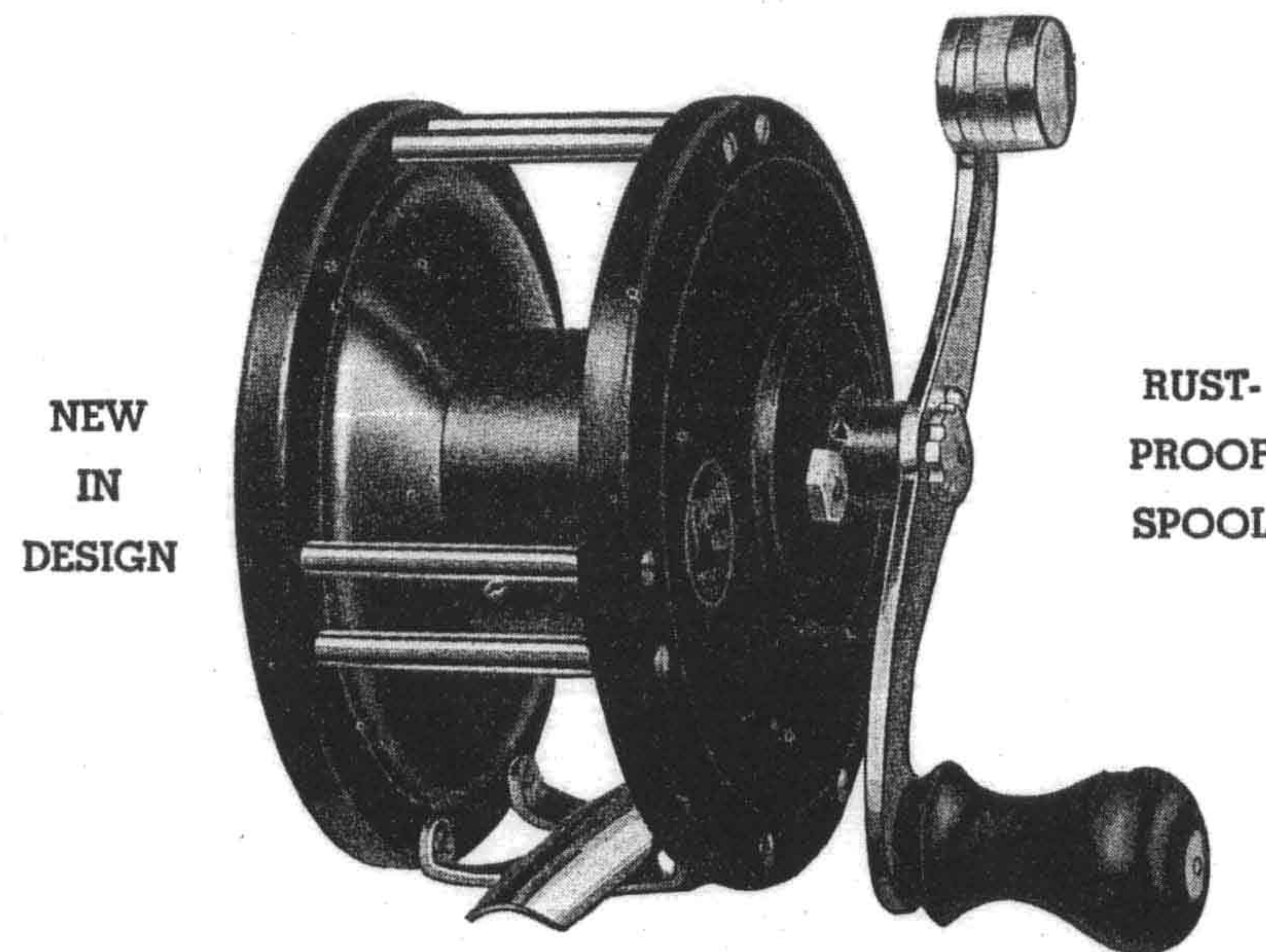
**DOUBLE
MULTI-
PLYING**

IDEAL FOR DEEP SEA BOTTOM FISHING

No. 149—Star drag; double multiplyingPrice \$10.00
No. 149L—Left hand modelPrice 11.00

The No. 149 is a star drag reel built along the lines of the No. 49, but is without the star drag throw-off feature. The free spool clutch is operated by a snap lever on rim. The steel gears are double multiplying for easy winding. The oversize handle is fitted with our slip-proof torpedo grip and one turn of the handle winds in 1½ feet of line. End plates are metal bound. The molded plastic spool is light in weight, 100% salt water proof and fitted with a large diameter (1¾") arbor for fast winding. Metal parts are hand polished and chromium-plated. Weight of reel 25 oz.

» PENN No. 249 «



**NEW
IN
DESIGN**

**RUST-
PROOF
SPOOL**

POPULAR FOR LAKE TROLLING

No. 249—Double multiplyingPrice \$5.00

The No. 249 reel is a fast action reel without the free spool arrangement. Ideal reel for deep lake trolling and deep sea fishing. Spool is light in weight and cannot rust. Handle is oversize. Back plate is fitted with an adjustable click. Frame is reinforced with double pillars. Metal parts are polished and nickel-plated. Weight of reel 18 oz.

LINEN LINE CAPACITY

200 yds. No. 15
250 yds. No. 12

SINGLE STRAND WIRE CAP.

200 yds. .024" diam.
300 yds. .020" diam.

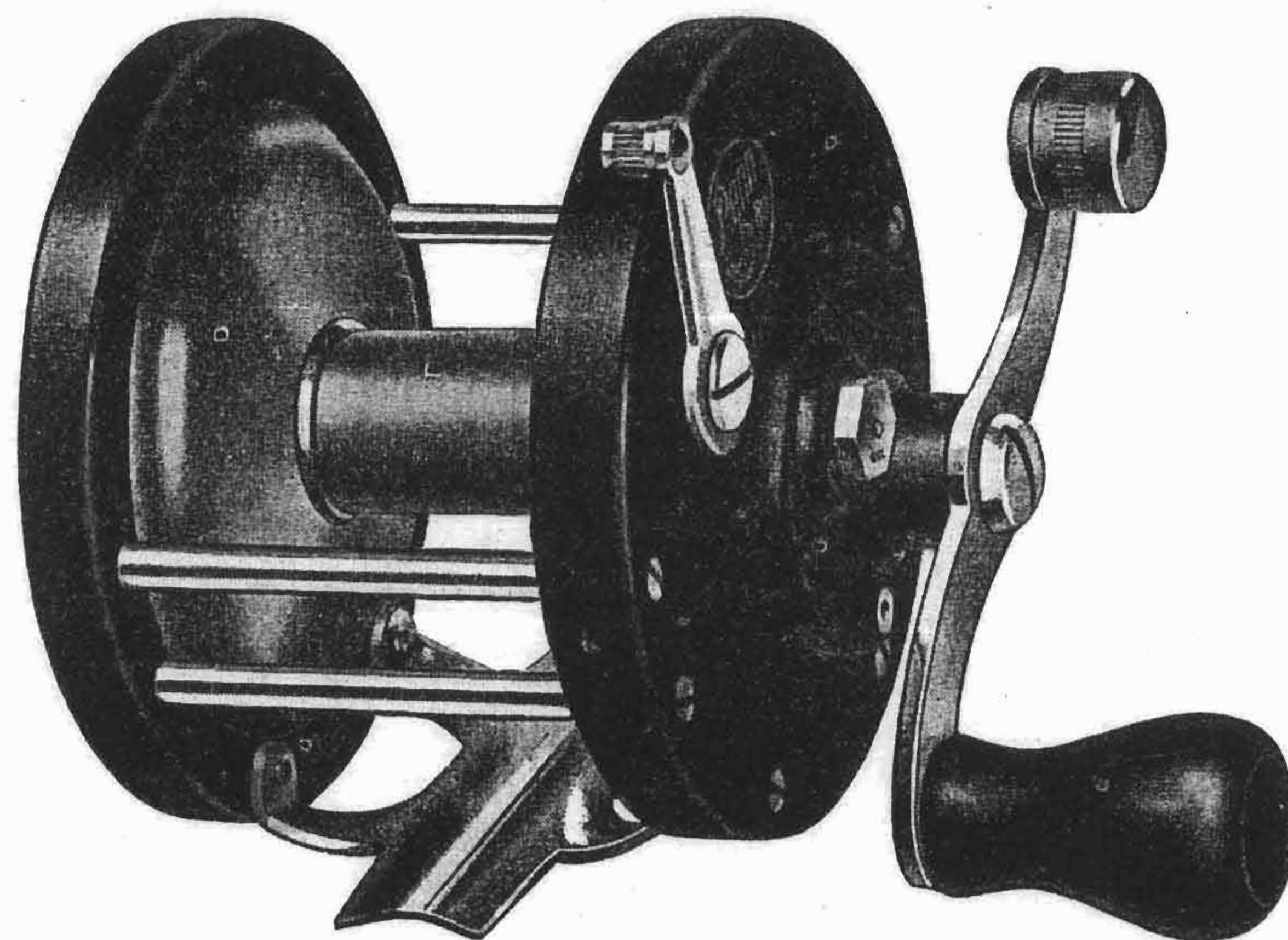
Penn Popular Salt Water Reels

For Surf, Pier, Deep Sea and Bay Fishing

200 Yard

» **PENN No. 80** «

With "EASY-CAST" Spool



POPULAR FREE SPOOL REEL

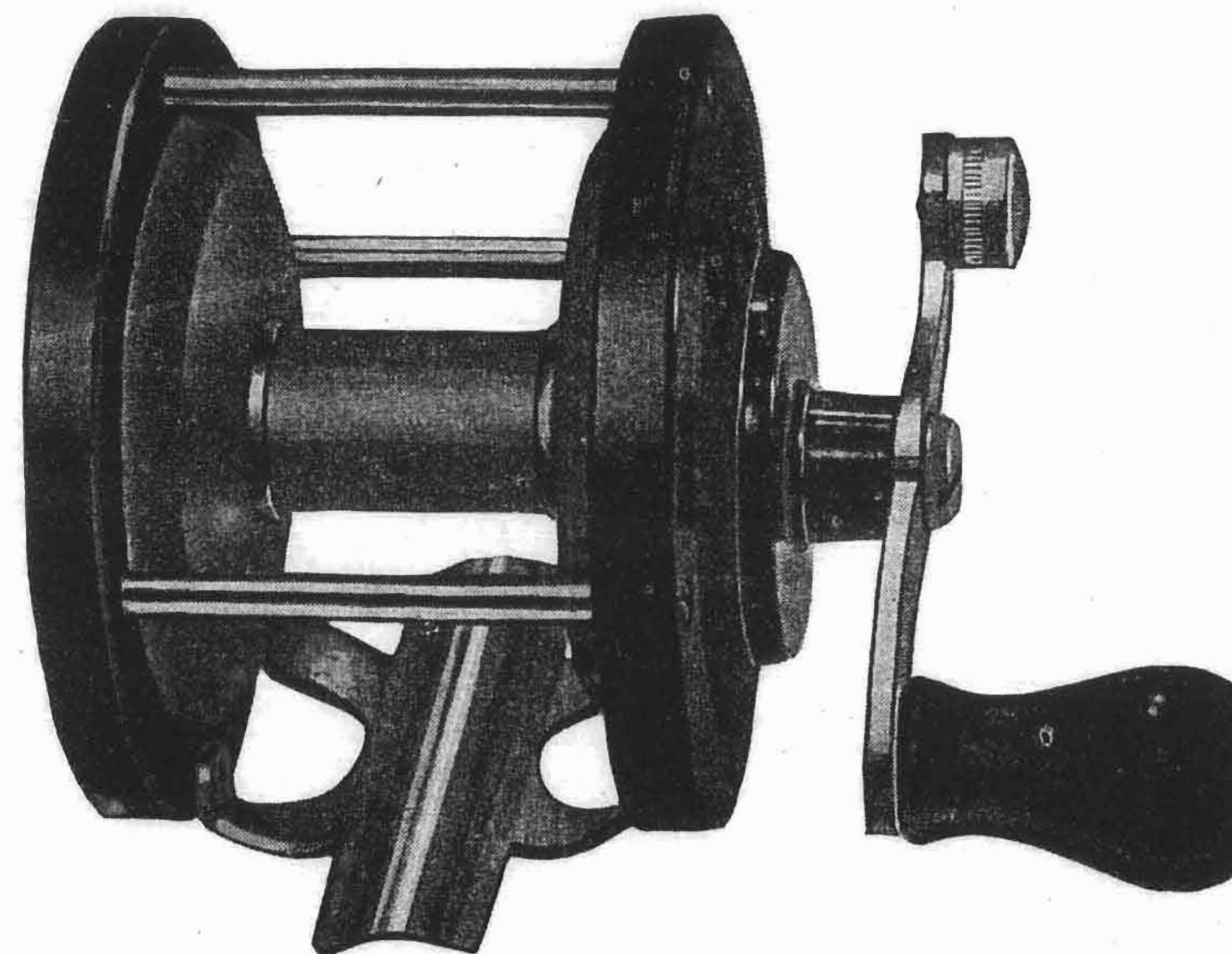
No. 80—200 yds.—Weight 12 oz.Price \$3.00

A free spool Universal salt water reel of standard size for deep sea, surf, pier, boat and bay fishing. This reel is equipped with our light weight EASY-CAST spool which produces long casts and reduces backlashes. In addition, this spool is corrosion proof and a great line saver. The patented free spool clutch is operated by a snap lever on rim. Gears are always in mesh and can not strip. Stainless steel springs. Sliding click. Adjustable and removable spool bearings. Water-proof oiling and greasing system. Reel is made of brass, finished in nickel. Plate diam. $3\frac{1}{4}$ "; spool width $1\frac{13}{16}$ ". Line capacity 200 yards. No. 9 or 150 yds. No. 12.

200 Yard

» **ATLANTIC** «

With PLASTIC Spool



DEEP SEA and LAKE TROLLING REEL

No. 14—Plate Diam. $3\frac{1}{4}$ "; spool width $1\frac{13}{16}$ "; weight 10 oz.Price \$2.50

The *Penn No. 14* deep sea reel is our lowest priced reel without the free spool mechanism. Made in 200 yard size only and is suitable for both deep sea fishing and lake trolling. The gears are spiral cut and double multiplying. The frame is sturdily constructed with three pillars and one piece crossplate. Handle is "S" shaped and well balanced. Any spool end-play can be taken up by an adjustable bearing. A sliding click provides for arresting the spool. Side plates are genuine molded bakelite. Metal parts are made of brass and finished in nickel.

LINEN LINE CAPACITY

No. 9—27 pound test, 200 yards
No. 12—36 pound test, 150 yards

PENN REELS ARE GUARANTEED AGAINST DEFECTS

Penn Level Wind Reel with Lightweight Spool

for Casting and Bay Fishing

» PENN-PEER «

LEVEL WIND STAR DRAG REEL

This new Level Wind Reel is especially designed for the light tackle salt water angler who desires a level wind casting reel combining the features of the salt water reel with the casting ability and lightness of the fresh water reel. This reel is sturdily built, but weighs only 11 ounces. Line capacity is 100 yards No. 9 or 150 yards No. 6 Cuttyhunk line or 100 yards 18-pound test silk casting line. This reel is equipped with our lightweight plastic spool, which gets off to a flying start with very little effort. Also this spool is fitted with a large oversize arbor and it is not necessary to build up the spool with idle filler line, which only adds undesirable weight to the spool and thereby impairs the casting ability of the reel. In addition, this spool is 100% salt waterproof and a great line saver, as the line does not come in contact with any metal. The star drag is designed to tackle game fish and is very powerful, yet the smooth action prevents the breaking of tackle. This drag can be put into operation by the flip of a lever. The gear ratio of this reel is $3\frac{3}{4}$ to 1, which provides for very fast retrieving action. The level wind mechanism is sturdily built and dependable. A spare level wind pawl is furnished with the reel in a magazine on the front plate. All bearings, including worm bearings, can be oiled through waterproof lubricating nipples and the gears can be greased through a grease nipple on front plate. Oil is furnished with every reel. Metal parts are heavily chromium plated to resist salt water corrosion. Reel seat fits salt and fresh water rods. This reel is ideal for light salt water and heavy fresh water fishing.

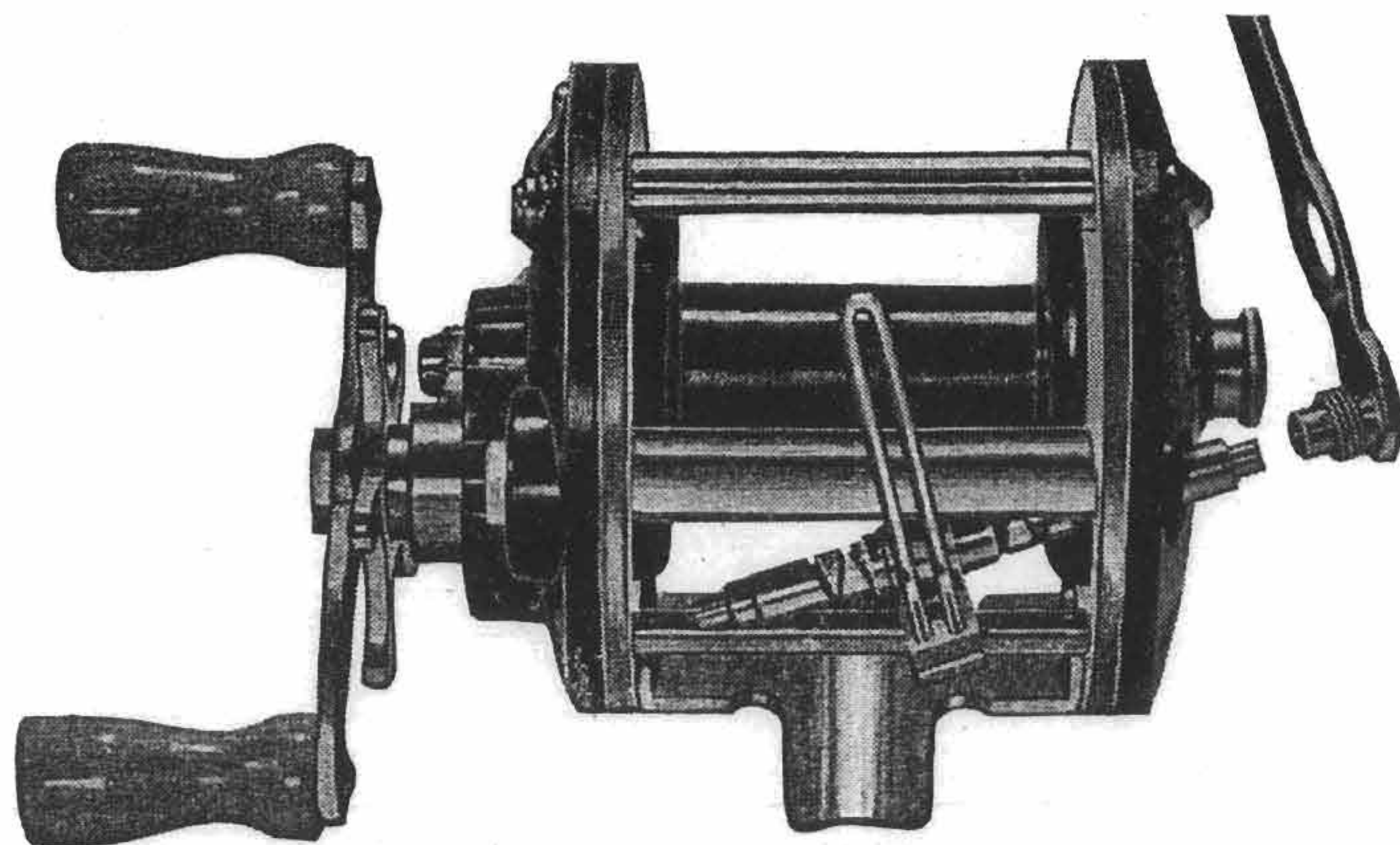
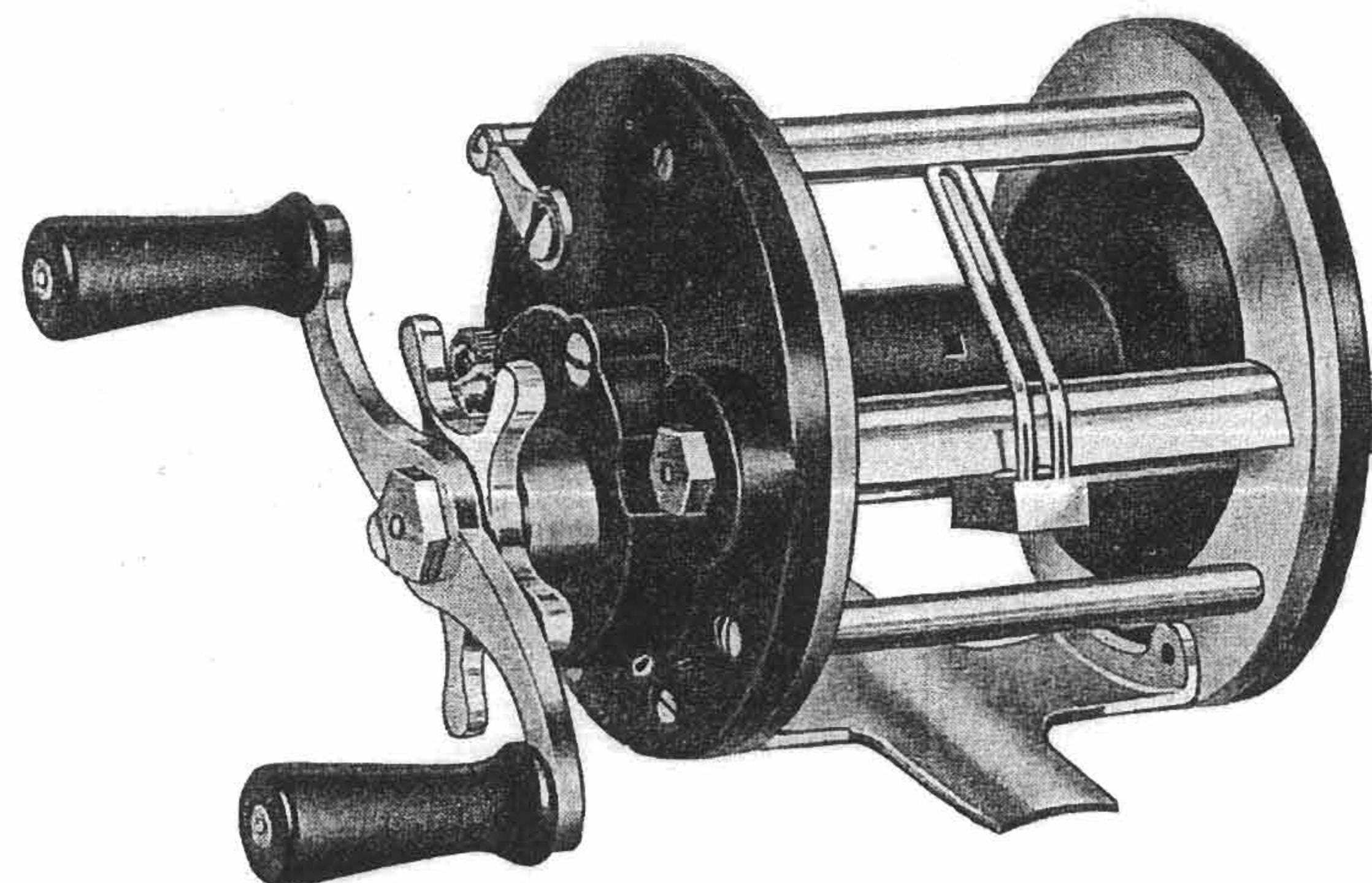


ILLUSTRATION OF LEVEL-WIND TAKE-DOWN FEATURE

To remove the line carriage, unscrew worm bearing on back plate, pull worm out of front plate and slide out. Reel can be used without the level-wind attachment.

» PENN-PEER «
With "EASY-CAST" Spool



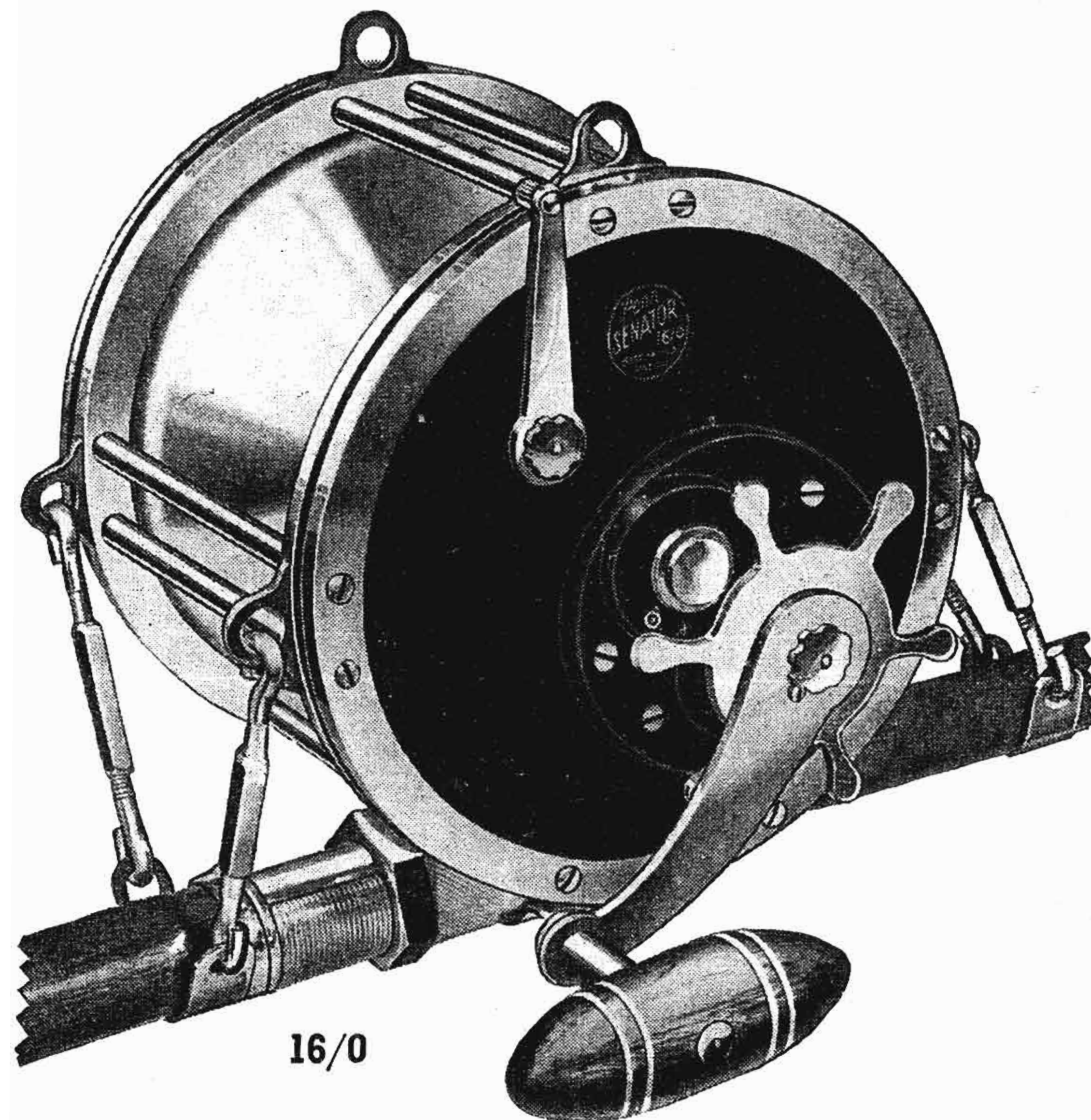
No. 109—Cap. 100 yds.; Weight 11 oz.Price \$11.00

This Level Wind Reel is especially designed for salt water plug casting and bay fishing. Equipped with our powerful star drag, which can be thrown on or off by the flip of a lever. Gear ratio is $3\frac{3}{4}$ to 1 for very fast action. Gears are oversize and designed to withstand hardest usage. This reel is fitted with our LIGHTWEIGHT Plastic Spool and excellent for casting. This spool is 100% salt waterproof and a great line saver. All bearings, including worm bearings, are fitted with our patented waterproof oiling device, and the gears can be greased through a grease nipple on front plate. This reel is of strong construction but very light and weighs only 11 ounces. The small streamlined end plates are $2\frac{9}{16}$ " diameter and spool width is $1\frac{13}{16}$ ". Metal parts are heavily chromium plated. Line capacity is 100 yards 18-pound test silk line or 100 yards No. 9 or 150 yards No. 6 Cuttyhunk line.

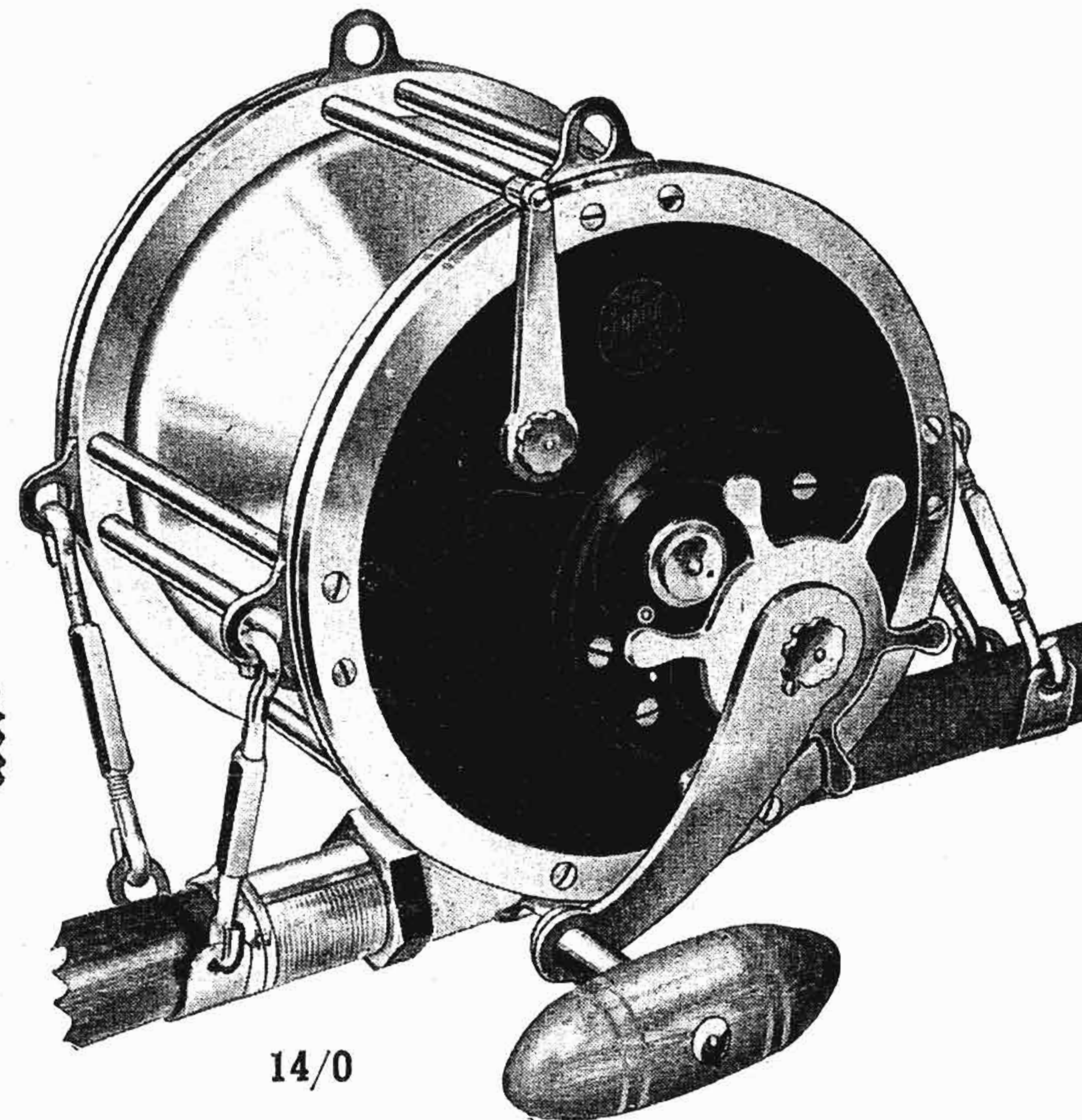
A PENN LUBRICATION SET IS PACKED WITH EVERY REEL

Penn SENATOR Reels

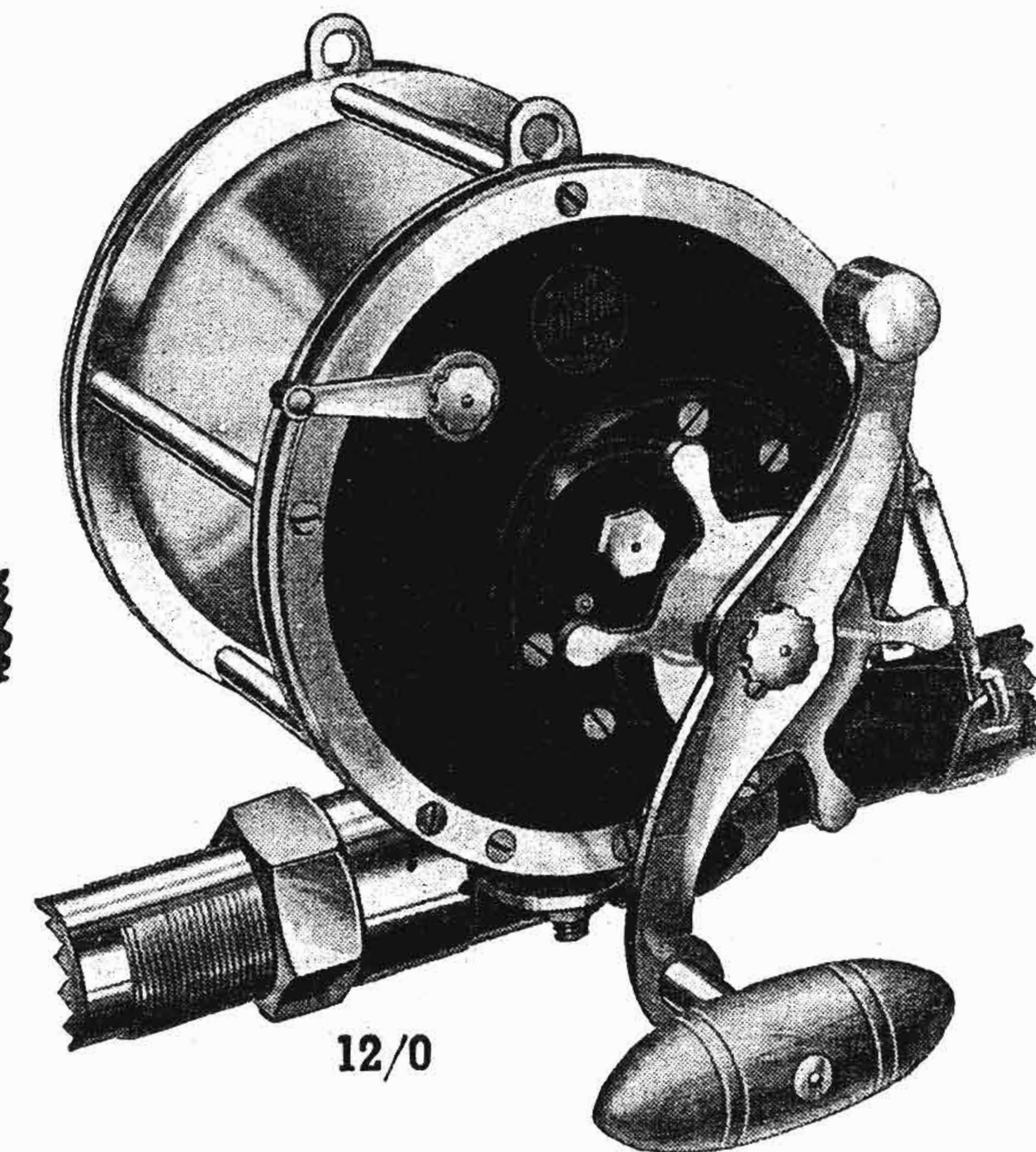
PAT. DECEMBER 19, 1933—MARCH 27, 1934



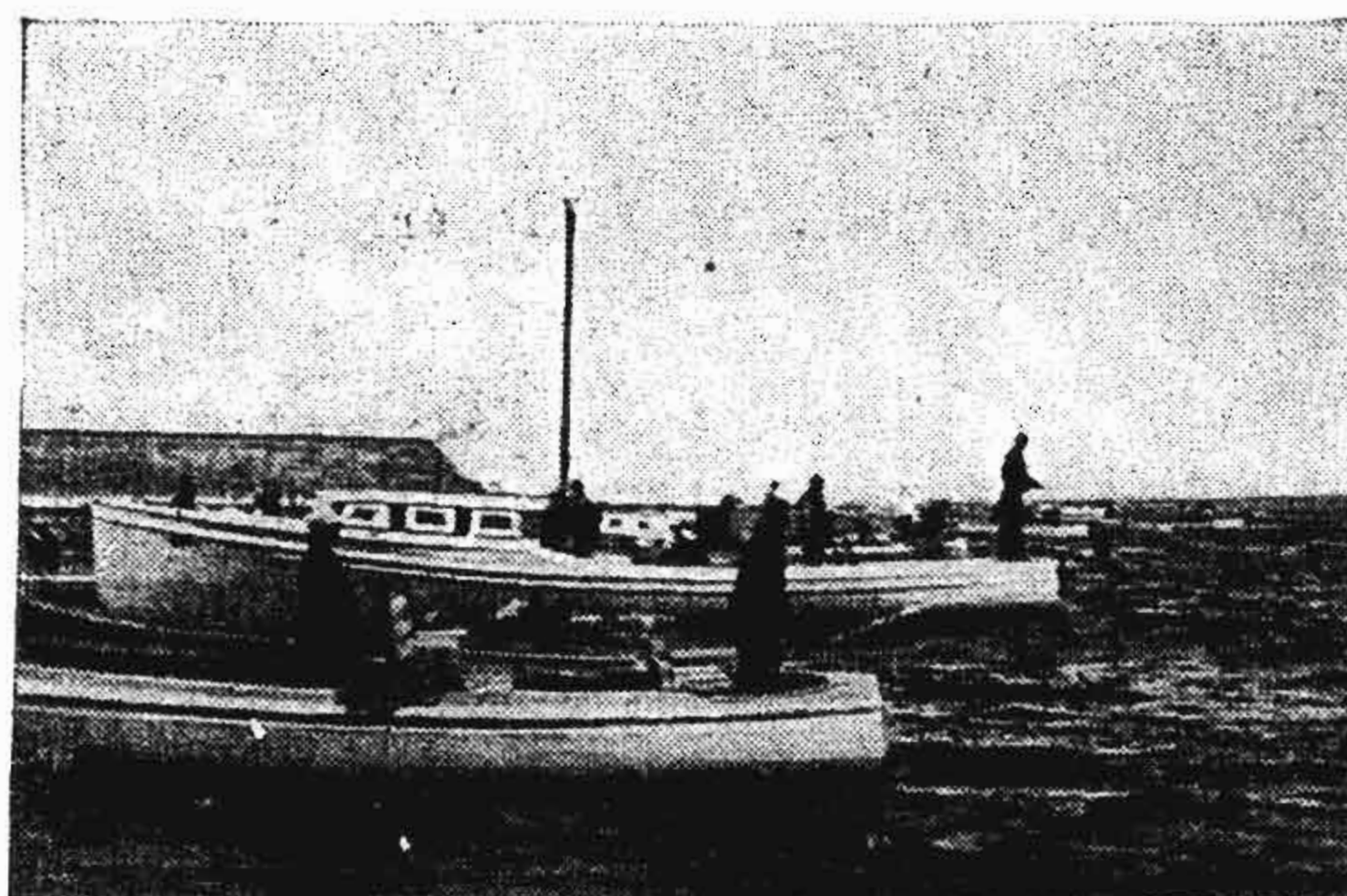
16/0



14/0



12/0



TIDE RIP AT WEDGEPORT, N. S.

To the *Senator* belongs the distinction of bringing game fish trolling within the means of the average fisherman. Heretofore, the high cost of reels had prevented thousands from enjoying this major fishing sport. Today *Senator* reels are standard on charter boats everywhere and the choice of game fish anglers.

Especially designed for game fish trolling, these reels are made in seven sizes to meet all requirements. All models are equipped with harness lugs and rod clamps. Forward rod brace on 9/0, 10/0 and 12/0 sizes. Both rod and butt braces on 14/0 and 16/0 sizes. The spools on the 14/0 and 16/0 models run in *ball bearings*. All reels are equipped with our patented *free spool clutch* and can be thrown into free spool or drag *instantly* and without danger of stripping gears. The powerful drag consists of *automobile brake lining* which cannot burn up, and the brake drum is safeguarded against freezing by an oil-less bearing. (Construction of drag on page 25.) Double multiplying gears consisting of a *hardened steel* driving gear and *stainless steel* pinion. Handles are fitted with our powerful torpedo grip. Frames of nickel-silver, chromium-plated. Patented *One Shot Lubrication* combined with the built-in oil reservoirs safeguard perfect performance and prevent freezing of the reel.

PRICES AND S

No. of Reel	Size of Reel	Style of Trolling
No. 113	4/0	Light
No. 114	6/0	Light
No. 115	9/0	Medium
No. 116A	10/0	Med. Heavy
No. 116	12/0	Heavy
No. 117	14/0	Ex. Heavy
No. 118	16/0	Ex. Heavy

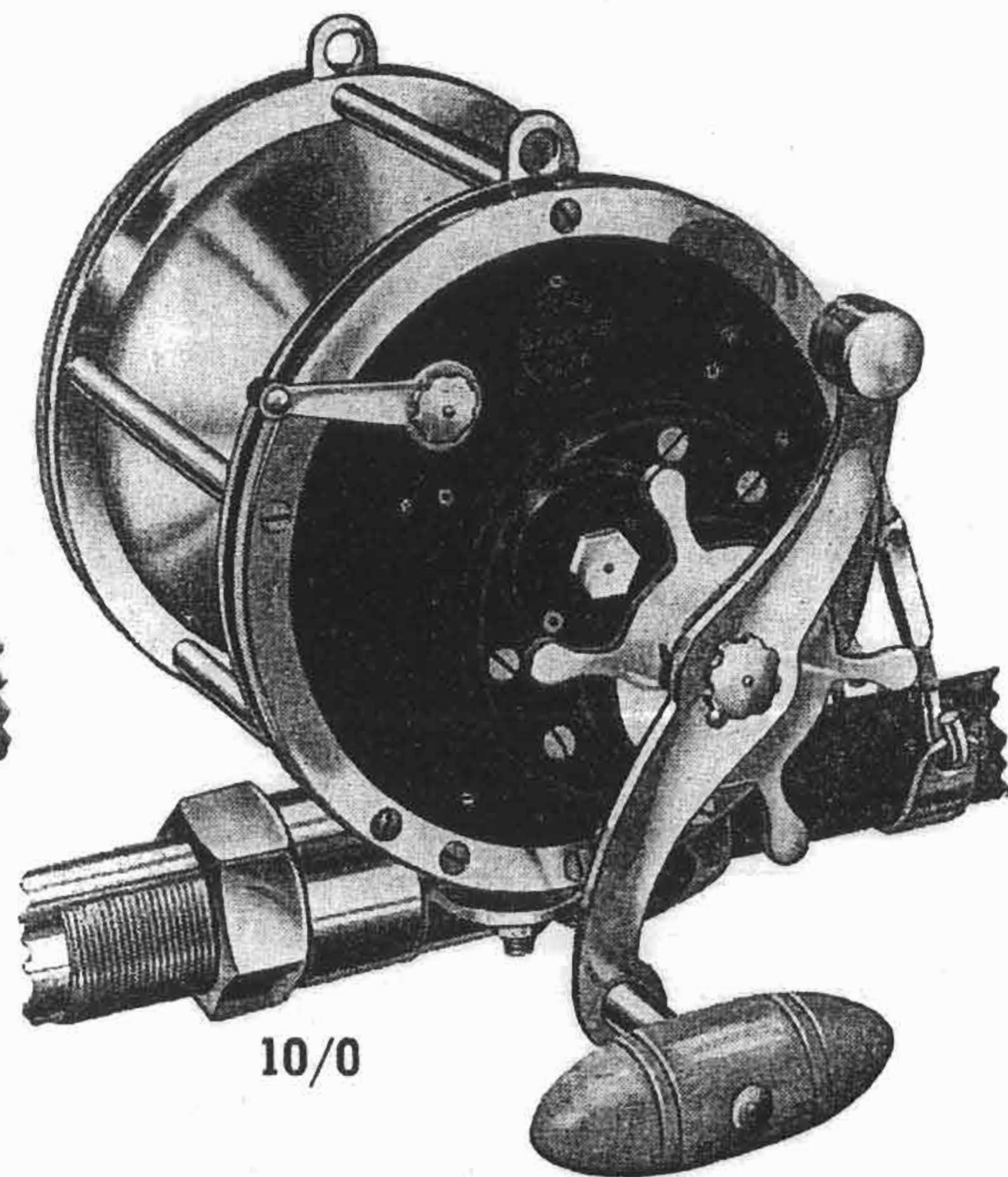
Oversize 1 3/4" Rod Clamp for 12/0, 14/0 and 16/0 models at extra cost of \$2.00.

LINE CAPAC

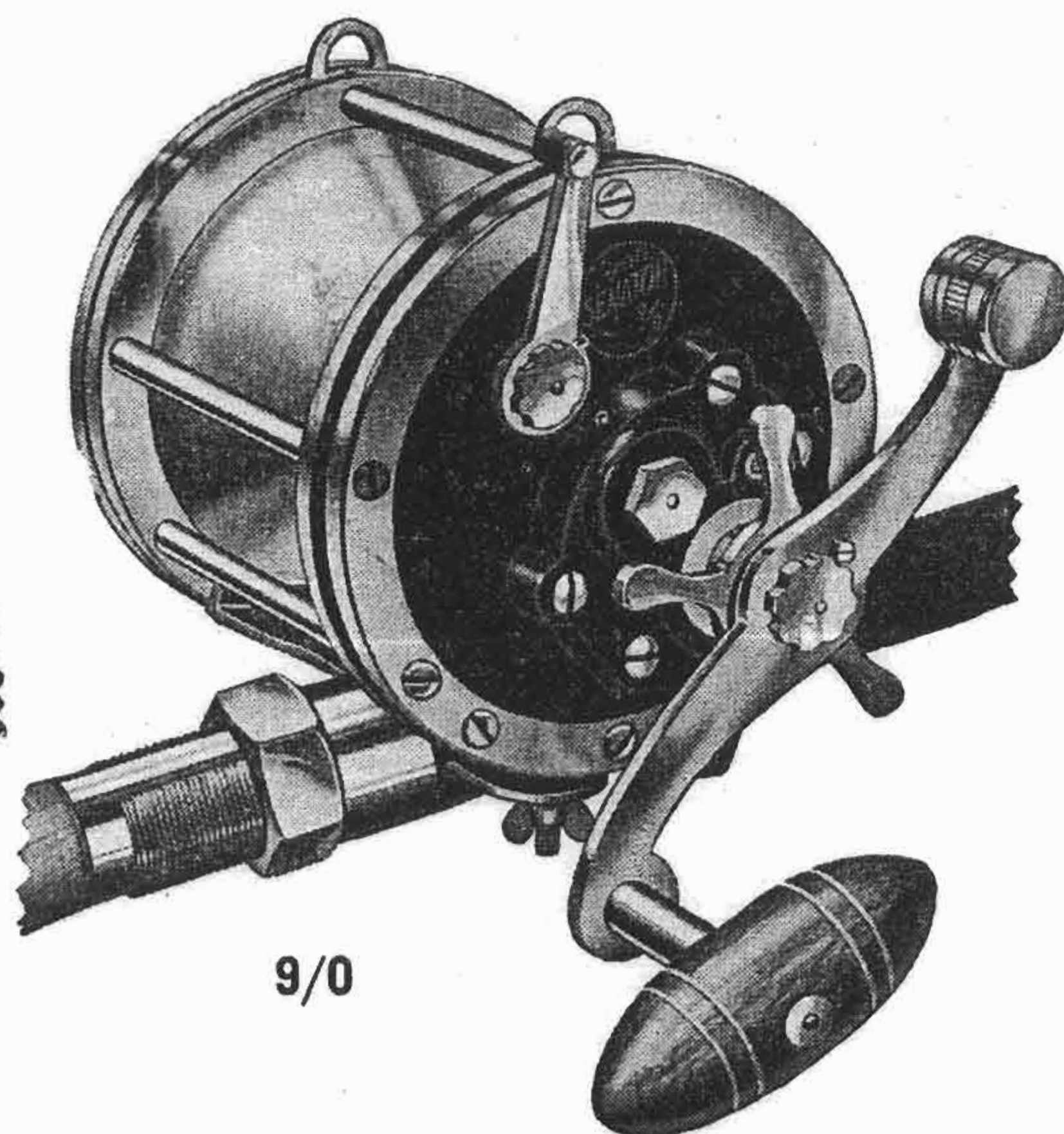
No. and Size of Reel	No. 12	No. 15	No. 18
No. 113—4/0	350	300	250
No. 114—6/0		500	400
No. 115—9/0			600
No. 116A—10/0			
No. 116—12/0			
No. 117—14/0			
No. 118—16/0			

For Big Game Fishing

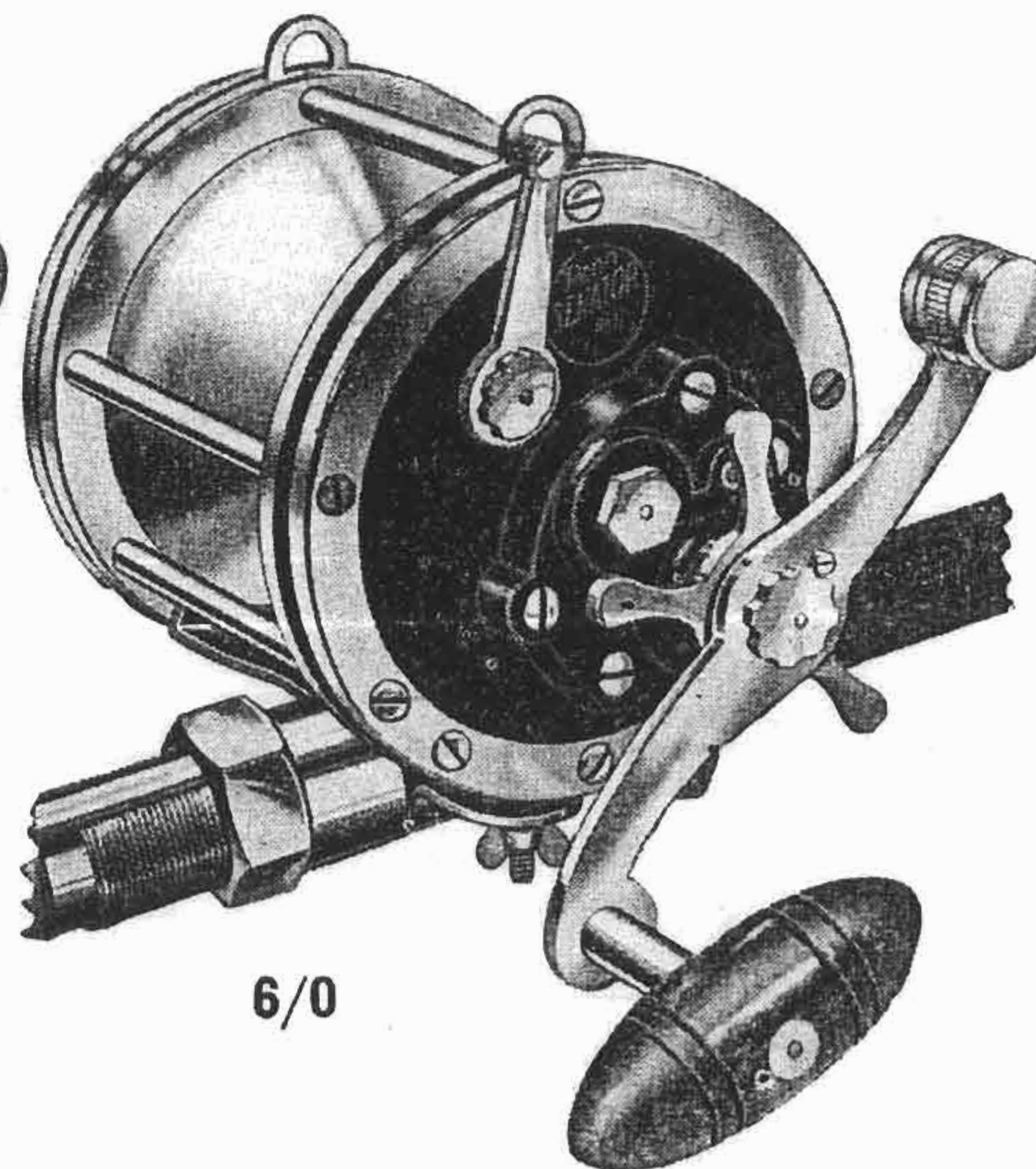
TUNA, BROADBILL, MARLIN, SAILFISH, TARPON



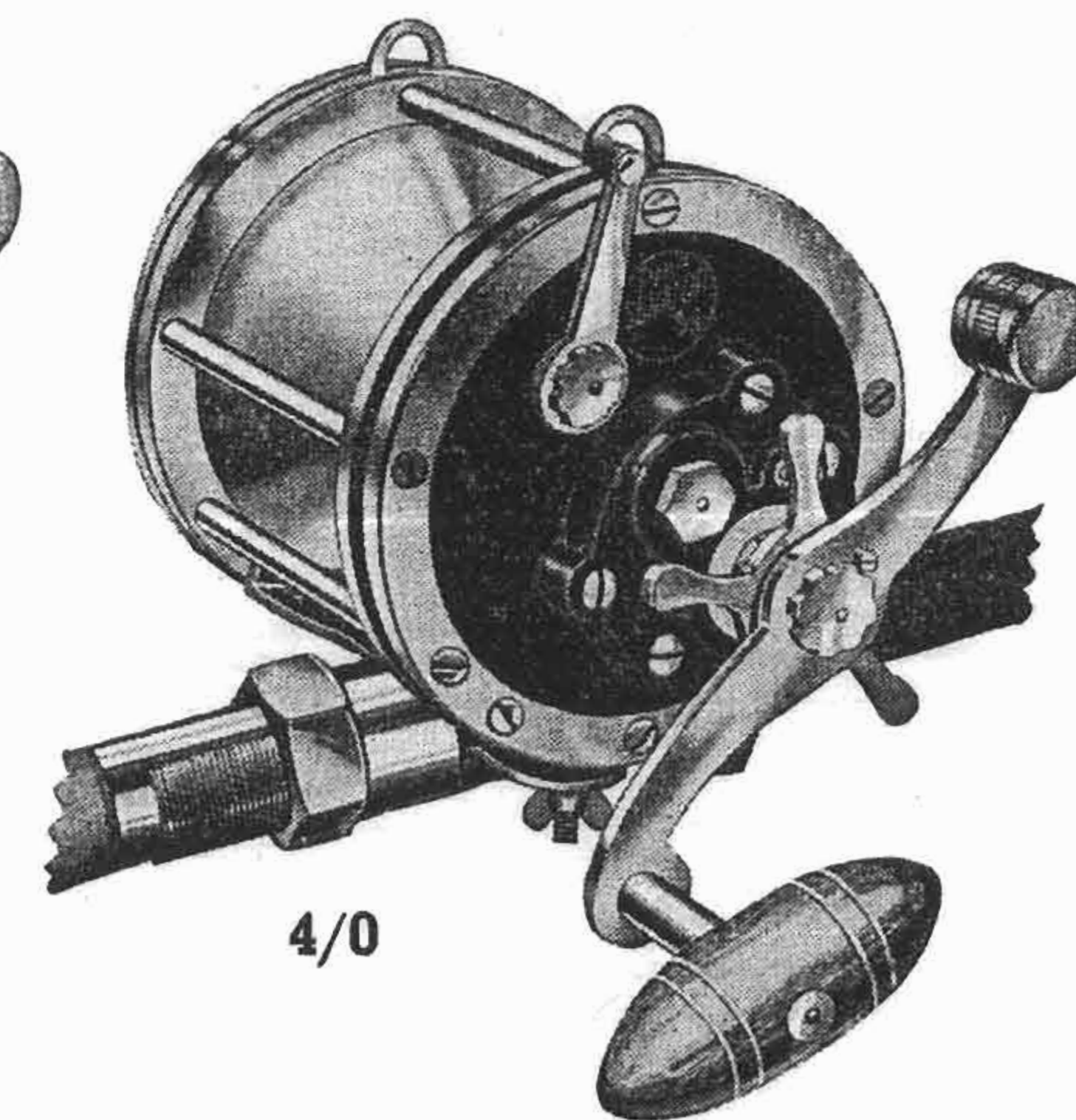
10/0



9/0



6/0



4/0

SPECIFICATIONS

Plate Diam.	Spool Width	Weight of Reel	Price Each
3 5/8"	2 7/16"	1 3/4 lbs.	\$20.00
4 1/8"	2 3/4"	3 lbs.	27.50
4 5/8"	3 1/4"	3 1/2 lbs.	32.50
5 3/4"	3 1/4"	5 1/4 lbs.	50.00
5 3/4"	4"	6 lbs.	60.00
7"	4"	8 1/2 lbs.	80.00
7"	5"	9 lbs.	100.00

and 16/0 models at no extra cost.

CAPACITY IN YARDS

Size of Line					
18	No. 21	No. 24	No. 36	No. 54	No. 72
	350 500 700	450 600 900	4" 0 600 800 1100	400 600 750	450 600

BALANCED TACKLE FOR GAME FISH TROLLING

Size of Reel	Size of Line Capacity of Reel	Weight of Tip	Species of Fish
4/0	300 Yds. No. 15	10 oz.	Bluefish, Bonita, Small School Tuna, Albacore, Dolphin, Sailfish up to 50 lbs.
6/0	400 Yds. No. 18	12 oz.	Sailfish, Tarpon, School Tuna, Marlin, Wahoo and others from 25 to 100 lbs.
9/0	500 Yds. No. 21	14 oz.	White Marlin, Tuna, Swordfish, Tarpon and others from 50 to 200 lbs.
10/0	600 Yds. No. 24	16 oz.	Striped, Black and Blue Marlin, Tuna, Swordfish and others from 100 to 300 lbs.
12/0	600 Yds. No. 36	22 oz.	Black, Blue and Striped Marlin, Tuna, Broadbill, Swordfish from 300 lbs. up.
14/0	600 Yds. No. 54	30 oz.	All game fish of more than 400 lbs. when fishing under difficult conditions.
16/0	750 Yds. No. 54	30 oz.	All game fish of more than 400 lbs. when fishing in extremely deep water.



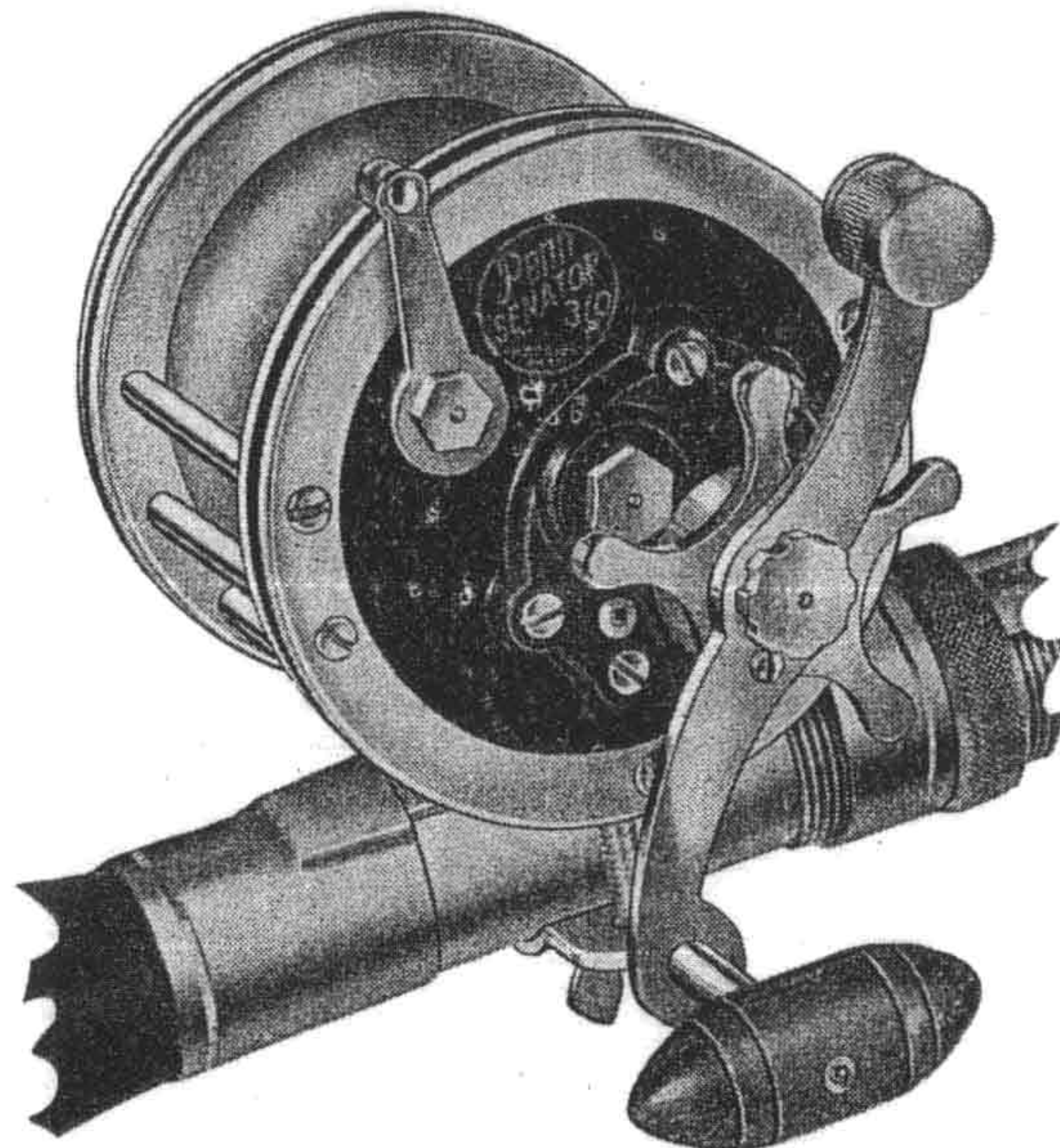
BOATING 712 LB. TUNA

MANUFACTURERS OF SALT WATER REELS EXCLUSIVELY

Penn SENATOR Reels

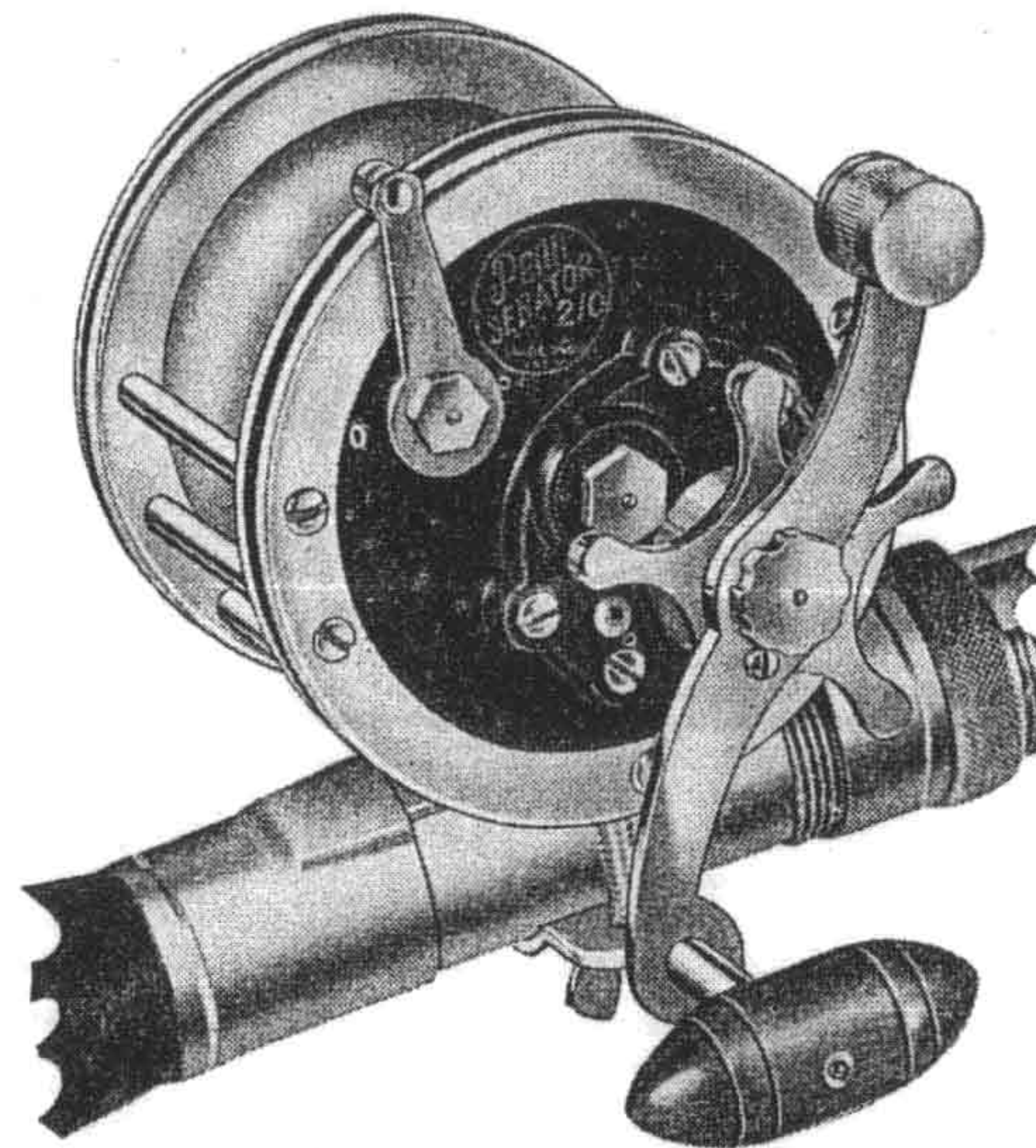
For Light Tackle Trolling

6-12 Tackle



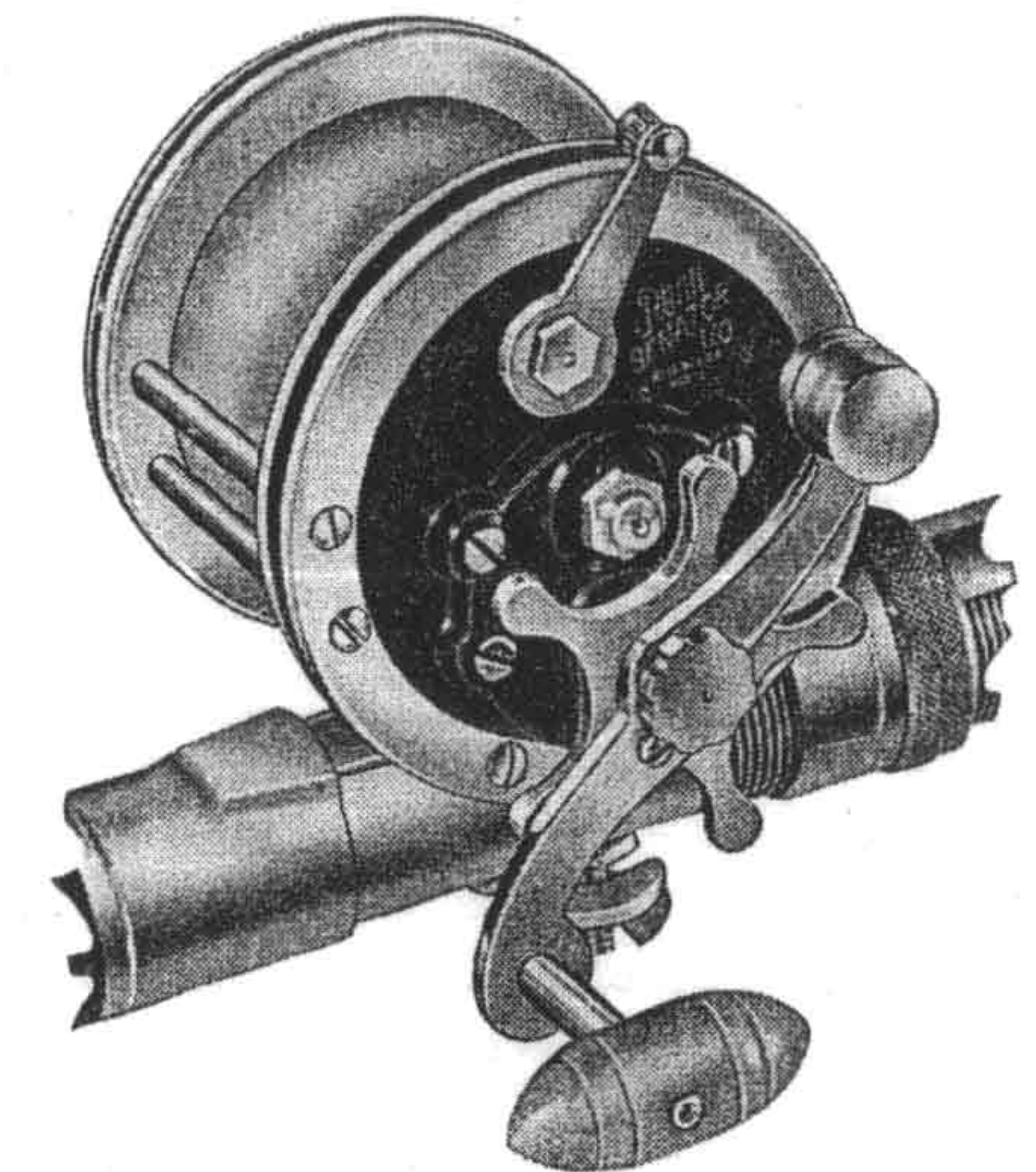
3/0

5-9 Tackle



2/0

4-6 Tackle



1/0

These smaller sizes of our Senator reels are especially designed for light tackle Game Fish trolling. Made in 3 sizes to meet the requirements of Four-Six, Five-Nine and Six-Twelve light tackle fishing. Equipped with our patented free spool clutch and can be thrown into free spool or drag instantly and without danger of stripping gears. The extra heavy drag of very smooth action safeguards against breaking of lighter lines. Gears are made of steel to withstand hardest usage. End plates are re-enforced with double metal bands. Handles are fitted with our torpedo grip. Crossplate is fitted with an attached rod clamp to insure rigidity of the reel under all conditions. Frame is made of nickel-silver, hand polished and chromium-plated-100% rust-proof. Patented One-Shot Lubrication combined with the built-in oil reservoirs safeguard perfect performance and prevent freezing of the reel.

PRICES AND SPECIFICATIONS

No. and Size of Reel	Style of Tackle	Plate Diam.	Spool Width	Weight of Reel	Price Each
No. 110—1/0	4-6	3 1/16"	1 5/8"	18 oz.	\$12.50
No. 111—2/0	5-9	3 1/4"	1 13/16"	22 oz.	15.00
No. 112—3/0	6-12	3 1/4"	2 1/16"	26 oz.	17.00

Left Hand Model \$1.00 Extra.

LINE CAPACITY IN YARDS

No. and Size of Reel	Size of Line—50's Lea				
	No. 6	No. 9	No. 12	No. 15	No. 18
No. 110—1/0	250	150	125		
No. 111—2/0	350	250	190	150	
No. 112—3/0		400	300	225	200

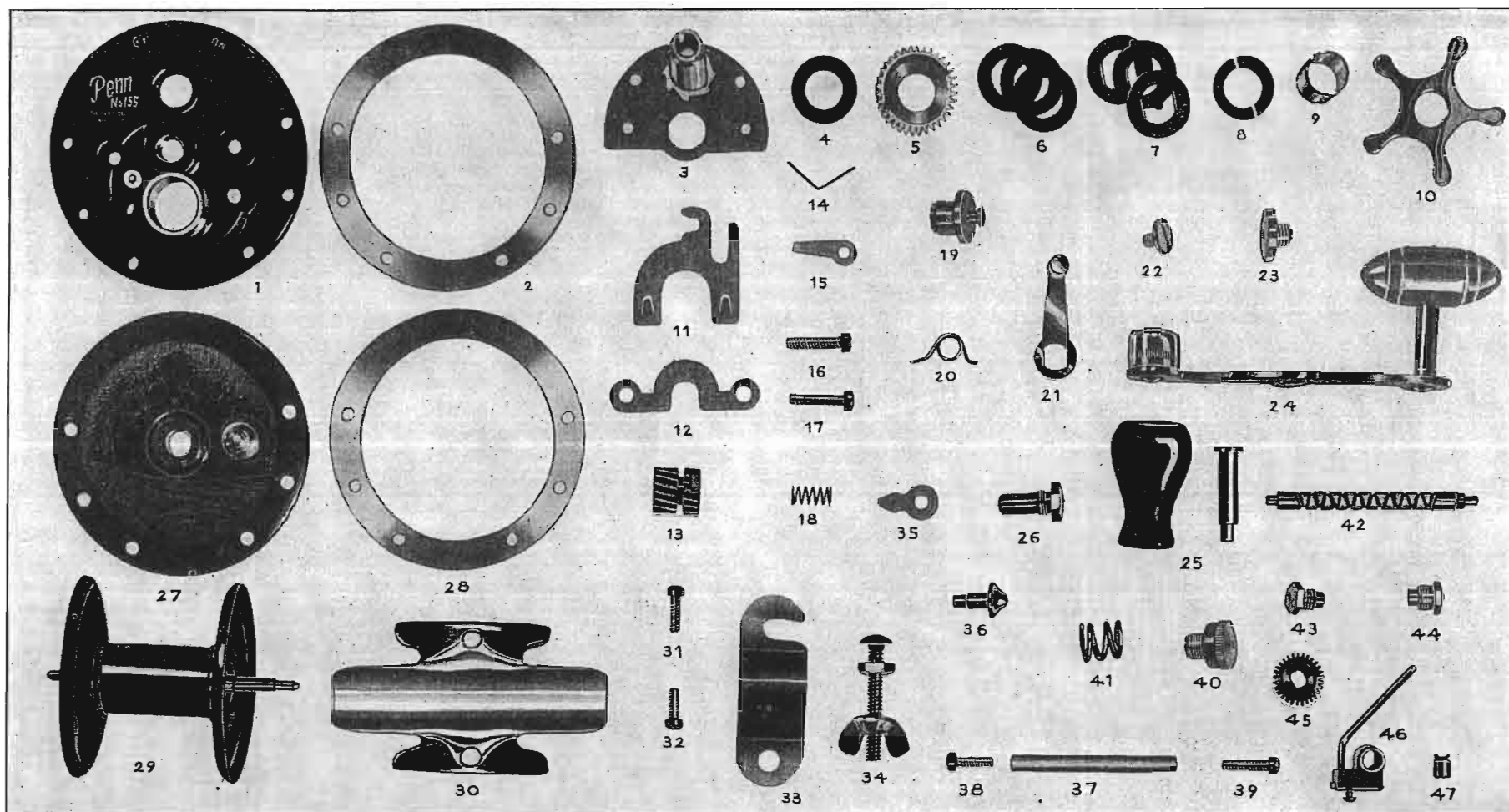
PENN REELS HOLD MANY WORLD RECORDS

PARTS AND PRICES FOR SENATOR REELS

Name of Part	No. 110—1/0		No. 111—2/0		No. 112—3/0		No. 113—4/0		No. 114—6/0		No. 115—9/0		No. 116A—10/0		No. 116—12/0		No. 117—14/0		No. 118—16/0	
	No.	Price	No.	Price	No.	Price	No.	Price	No.	Price	No.	Price	No.	Price	No.	Price	No.	Price	No.	Price
End Plate—Front	101	.60	201	.75	301	.75	401	1.00	601	1.50	901	2.00	1001	2.50	1201	2.50	1401	3.00	1601	3.00
Plate Ring—Front	102	.40	202	.50	202	.50	402	.60	602	.70	902	.80	1002	.90	1002	.90	1402	1.00	1402	1.00
Gear Plate with Drag Ratchet	103	.40	203	.50	203	.50	403	.60	603	.75	903	1.00	1003	1.25	1003	1.25	1403	1.50	1403	1.50
Red Fibre Washer	104	.10	104	.10	104	.10	104	.10	604	.15	904	.15	1004	.20	1004	.20	1004	.20	1004	.20
Main Driving Gear	105	.30	205	.30	205	.30	405	.50	605	.75	905	1.00	1005	1.25	1005	1.25	1405	1.50	1405	1.50
Drag Friction Washer	106	.10	106	.10	106	.10	106	.10	606	.40	906	.50	1006	.75	1006	.75	1406	1.00	1406	1.00
Drag Metal Discs—Set	107	.10	107	.20	107	.20	107	.20	607	.20	907	.30	1007	.40	1007	.40	1407	.50	1407	.50
Drag Tension Spring	108	.05	108	.05	108	.05	108	.05	608	.10	608	.10	1008	.15	1008	.15	1408	.15	1408	.15
Drag Spacing Sleeve	109	.05	209	.05	209	.05	209	.05	609	.10	609	.10								
Drag Adjusting Star	110	.40	210	.40	210	.40	210	.40	610	.60	610	.60	1010	1.00	1010	1.00	1410	1.00	1410	1.00
Eccentric Jack	111	.15	211	.15	211	.15	411	.20	611	.25	911	.30	1011	.40	1011	.40	1011	.50	1011	.50
Pinion Yoke	112	.10	212	.10	212	.10	412	.10	612	.20	612	.20	1012	.30	1012	.30	1012	.40	1012	.40
Pinion	113	.20	213	.20	313	.20	413	.30	613	.40	613	.50	1013	.60	1013	.60	1413	.75	1413	.75
Drag Ratchet Dog Spring.....doz.	114	.10	114	.10	114	.10	114	.10	614	.20	614	.20	1014	.20	1014	.20	1414	.20	1414	.20
Drag Ratchet Dog	115	.05	115	.05	115	.05	115	.05	615	.10	915	.10	1015	.15	1015	.15	1415	.15	1415	.15
Gear Plate Screw—Lower	116	.25	116	.25	116	.25	116	.25	616	.50	616	.50	616	.50	616	.50	616	.50	616	.50
Gear Plate Screw—Upper	117	.25	117	.25	117	.25	117	.25	617	.50	617	.50	617	.50	617	.50	617	.50	617	.50
Clutch Spring	118	.20	118	.20	118	.20	118	.20	618	.40	618	.40	618	.40	618	.40	618	.40	618	.40
Eccentric	119	.20	119	.20	119	.20	119	.20	619	.40	919	.40	919	.40	919	.40	919	.40	919	.40
Eccentric Spring	120	.20	120	.20	120	.20	120	.20	620	.40	620	.40	620	.40	620	.40	620	.40	620	.40
Eccentric Lever	121	.30	121	.30	121	.30	121	.30	621	.40	621	.40	621	.40	621	.40	1421	.50	1421	.50
Eccentric Screw	122	.15	122	.15	122	.15	122	.15	622	.20	622	.20	622	.20	622	.20	622	.20	622	.20
Handle Screw and Lock Screw	123	.15	123	.15	123	.15	123	.15	623	.20	623	.20	1023	.25	1023	.25	1023	.25	1023	.25
Handle Complete	124	1.00	224	1.00	224	1.00	424	1.25	624	1.50	924	1.75	1024	2.00	1024	2.00	1424	2.25	1424	2.25
Handle Knob and Rivet	125	.40	225	.50	225	.50	425	.60	625	.70	925	.80	1025	.90	1025	.90	1425	1.00	1425	1.00
Spool Bearing—Front	126	.20	226	.20	326	.20	326	.20	626	.40	626	.40	1026	.40	1026	.40	1426	3.00	1426	3.00
End Plate—Back	127	.60	227	.75	227	.75	427	1.00	627	1.50	927	2.00	1027	2.50	1027	2.50	1427	3.00	1427	3.00
Plate Ring—Back	128	.40	228	.50	228	.50	428	.60	628	.70	928	.80	1028	.90	1028	.90	1428	1.00	1428	1.00
Spool	129	1.00	229	1.00	329	1.25	429	2.00	629	4.00	929	6.00	1029	8.00	1229	10.00	1429	17.50	1629	20.00
Crossplate	130	2.00	230	2.00	330	2.00	430	2.00	630	2.50	930	3.00	1030	3.50	1230	4.00	1430	4.50	1630	5.00
Crossplate Screw—Front	131	.20	131	.20	131	.20	131	.20	631	.40	931	.40	1031	.40	1031	.40	1431	.40	1431	.40
Crossplate Screw—Back	132	.20	132	.20	132	.20	132	.20	632	.40	932	.40	1032	.40	1232	.40	1432	.40	1432	.40
Rod Clamp	133	.25	233	.25	233	.25	233	.25	633	.40	633	.40	633	.40	1233	.40	1233	.50	1233	.50
Rod Clamp Screw—Set	134	.15	134	.15	134	.15	134	.15	134	.15	134	.15	134	.15	1234	.15	1234	.30	1234	.30
Click Tongue	135	.05	135	.05	135	.05	135	.05	635	.10	935	.10	935	.10	935	.10	935	.10	935	.10
Click Button	136	.05	136	.05	136	.05	136	.05	636	.15	936	.15	936	.15	936	.15	936	.15	936	.15
Frame Post	137	.20	237	.20	337	.20	437	.20	637	.25	937	.30	937	.30	1237	.35	1237	.35	1637	.40
Post Screw—Back	138	.20	138	.20	138	.20	138	.20	638	.40	638	.40	638	.40	638	.40	638	.40	638	.40
Post Screw—Front	139	.20	139	.20	139	.20	139	.20	639	.40	639	.40	639	.40	639	.40	639	.40	639	.40
Spool Bearing—Back	140	.20	140	.20	140	.20	140	.20	640	.40	640	.40	1040	.40	1040	.40	1440	3.00	1440	3.00
Bearing Adjusting Spring	141	.05	141	.05	141	.05	141	.05	641	.10	641	.10	641	.10	641	.10				
Rod Brace									942	2.00	1042	2.00	1042	2.00	1042	2.00	1042	2.00	1042	2.00
Rod Brace Lug									444	.20	444	.20	444	.20	444	.20	1443	.40	1443	.40
Harness Lug									444	.20	444	.20	1044	.30	1044	.30	1443	.40	1443	.40

WHEN ORDERING REFER TO NUMBER OF PART (SEE ILLUSTRATION ON PAGE 20)

ILLUSTRATION OF PARTS FOR PENN REELS



No. Name of Part

1. End Plate—Front
2. Plate Ring—Front
3. Gear Plate with Drag Ratchet
4. Red Fibre Washer
5. Main Driving Gear
6. Drag Friction Washer—Leather
7. Drag Metal Discs—Set
8. Drag Tension Spring
9. Drag Spacing Sleeve
10. Drag Adjusting Star
11. Eccentric Jack
12. Pinion Yoke

No. Name of Part

13. Pinion Gear
14. Drag Ratchet Dog Spring
15. Drag Ratchet Dog
16. Gear Plate Screw—Lower
17. Gear Plate Screw—Upper
18. Pinion Yoke Spring
19. Eccentric
20. Eccentric Spring
21. Eccentric Lever
22. Eccentric Lever Screw
23. Handle Screw
24. Handle Complete

No. Name of Part

25. Handle Knob and Rivet
26. Spool Bearing—Front
27. End Plate—Back
28. Plate Ring—Back
29. Spool
30. Crossplate
31. Crossplate Screw—Front
32. Crossplate Screw—Back
33. Rod Clamp
34. Rod Clamp Screw
35. Click Tongue
36. Click Button

No. Name of Part

37. Frame Post
38. Post Screw—Back
39. Post Screw—Front
40. Spool Bearing—Back
41. Bearing Adjusting Spring
42. Level Wind Worm
43. Worm Bearing—Front
44. Worm Bearing—Back
45. Worm Gear
46. Line Guide
47. Line Guide Pawl

PARTS AND PRICES FOR PENN REELS

Name of Part	No.	NUMBER OF REEL (ON FRONT PLATE)								
		140	150	155	49	249	60	80	109	66
			200	160	149		65	85		67
			250	180			285	190		68
				185				14		
Name of Part	No.	Price	Price	Price	Price	Price	Price	Price	Price	Price
End Plate—Front	1	1.00	1.00	.50	.60	.50	.50	.40	.50	.60
Plate Ring—Front	2	.75	.75	.30	.40		.30		.30	.40
Gear Plate with Drag Ratchet	3	.60	.60	.40	.50		.40	.40	.40	.40
Red Fibre Washer	4	.10	.10	.10	.10		.10	.10	.10	.10
Main Driving Gear	5	.40	.40	.30	.40	.30	.30	.25	.30	.30
Drag Friction Washer	6	.10	.10	.10	.15		.10	.10	.10	.10
Drag Metal Discs—Set	7	.10	.10	.10	.15		.10	.10	.10	.15
Drag Tension Spring	8	.05	.05	.05	.05		.05	.05	.05	.05
Drag Spacing Sleeve	9	.05	.05	.05	.05		.05	.05	.05	.05
Drag Adjusting Star	10	.40	.40	.30	.30		.30	.25	.30	.30
Eccentric Jack	11	.15	.15	.15	.15		.15	.15		.15
Pinion Yoke	12	.10	.10	.10	.10		.10	.10		.10
Pinion Gear	13	.30	.30	.30	.20	.20	.20	.20	.20	.20
Drag Ratchet Dog Spring	14	.10	.10	.10	.10		.10	.10	.20	.10
Drag Ratchet Dog	15	.10	.05	.05	.10		.05	.05	.10	.05
Gear Plate Screw—Lower	16	.25	.25	.25	.25		.25	.20		.25
Gear Plate Screw—Upper	17	.25	.25	.25	.25		.25	.20	.25	.25
Clutch Spring	18	.20	.20	.20	.20		.20	.20		.20
Eccentric	19	.20	.20	.20	.20		.20	.20	.20	.20
Eccentric Spring	20	.25	.25	.25	.25		.25	.25	.25	.25
Eccentric Lever	21	.30	.30	.25	.25		.25	.20		.25
Eccentric Lever Screw	22	.15	.15	.05	.05		.05	.05	.05	.05
Handle Screw and Lock Screw	23	.15	.15	.15	.15		.15	.05	.10	.15
Handle Complete	24	1.00	1.00	1.00	1.00	1.00	1.00	.75	1.00	1.25
Handle Knob and Rivet	25	.40	.40	.40	.40	.20	.40	.20	.20	.40
Spool Bearing—Front	26	3.00	.20	.20	.20	.15	.20	.15	.20	.20
End Plate—Back	27	.60	.50	.50	.60	.50	.50	.40	.50	.50
Plate Ring—Back	28	.40	.40	.30	.40		.30		.30	.30
Spool	29	1.00	1.00	1.00	1.25	1.25	1.00	1.00	1.00	1.25
Crossplate	30	2.00	2.00	1.00	1.00	.60	1.00	.60	.75	2.00
Crossplate Screw—Front	31	.20	.20	.20	.20	.15	.20	.15	.20	.20
Crossplate Screw—Back	32	.20	.20	.20	.20	.15	.20	.15	.20	.20
Rod Clamp	33	.25	.25		.25					
Rod Clamp Screw—Set	34	.15	.15		.15					
Click Tongue	35	.05	.05	.05	.05	.05	.05	.05	.05	.05
Click Button	36	.05	.05	.05	.05	.05	.05	.05	.05	.05
Frame Post	37	.20	.20	.15	.15	.15	.15	.10	.15	.15
Post Screw—Back	38	.20	.20	.20	.20	.15	.20	.15	.20	.20
Post Screw—Front	39	.20	.20	.20	.20	.15	.20	.15	.20	.20
Spool Bearing—Back	40	3.50	.20	.20	.20	.20	.20	.15	.20	.20
Bearing Adjusting Spring	41		.05	.05	.05	.05	.05	.05	.05	.05
Level Wind Worm	42								.30	
Worm Bearing—Front	43								.20	
Worm Bearing—Back	44								.20	
Worm Gear	45								.25	
Line Guide	46								.40	
Line Guide Pawl	47								.10	

HOW TO ORDER PARTS

The illustration shows parts for No. 160 Reel and level-wind parts with a number under each part. Parts for other than No. 160 Reel are similar in design. To find the price, look up the number in the parts price list and under the corresponding Reel number column you find the cost of the part. If you are unable to decide what part is needed, send us the part or the complete Reel.

It is not always necessary to order parts from us, as most Fishing Tackle Stores carry Penn Reel Parts in stock.

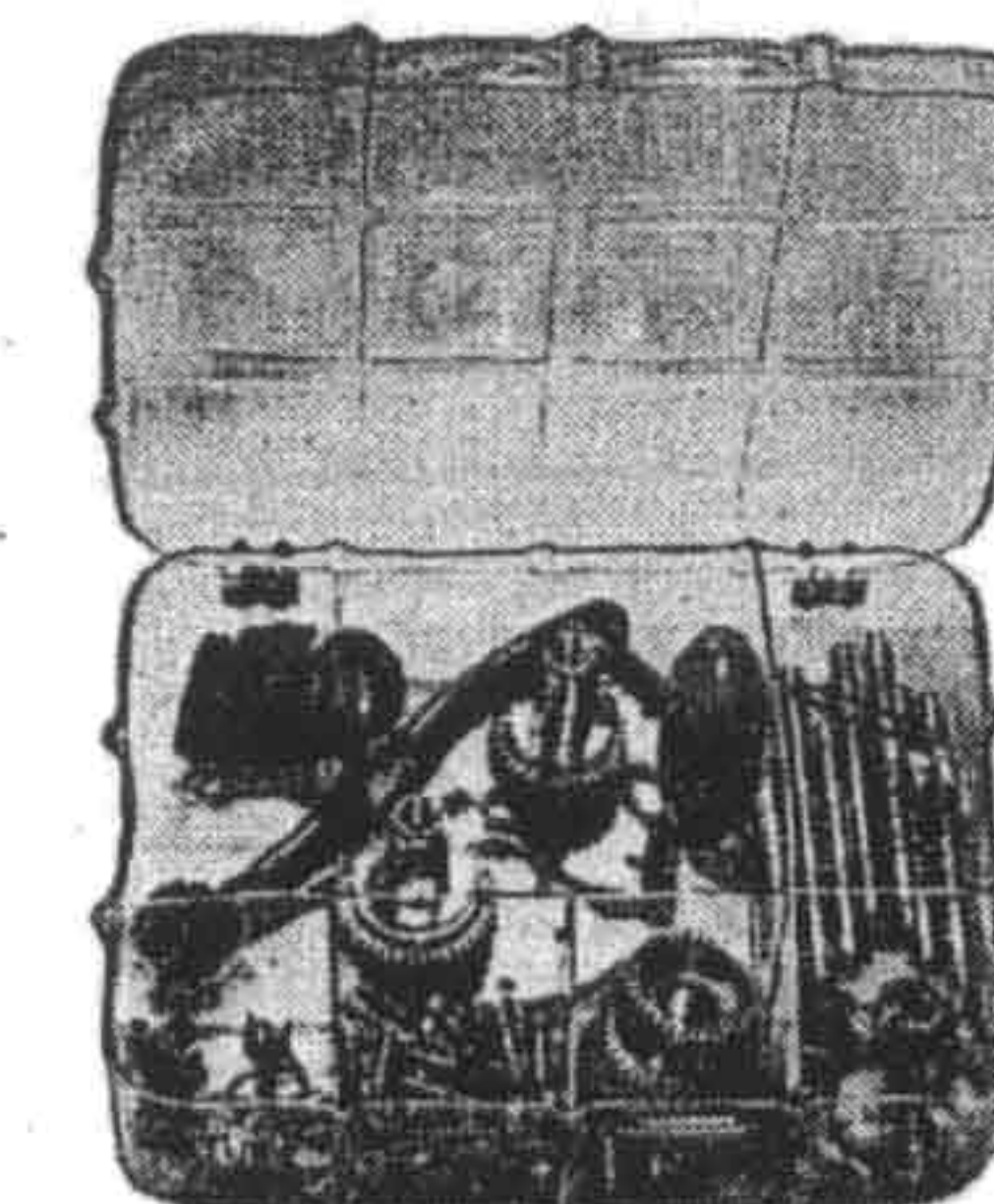
NOTE WHEN ORDERING PARTS

1. Give the number of the part and the number of the Reel (number stamped on front plate). Enclose check, money order or stamps plus parcel post charges, which is usually five to ten cents. If your remittance is in excess of the cost, we will refund the difference.
2. Where the remittance is not enclosed with order, shipment will be made C.O.D., for which the Post Office collects an additional fee of 15 cents minimum.
3. Minimum charge for a repair part is twenty-five cents.
4. It is very important to use our full address and your complete name and address. Please print plainly. Lack of complete address is often the cause of delay and lost mail.

WHEN SENDING REEL FOR REPAIR

1. It might not be necessary to send the Reel to us as many Penn Reel distributors maintain a Repair Department. If no local service is available, send the Reel to us with a letter.
2. Do not enclose your letter with the Reel, but send separate, or paste on the outside of the package and state what repairs seem to be necessary. Give the number of the Reel. If you want an estimate of repair cost, please state so, as work will be started upon receipt of the Reel.
3. Print your name and address plainly on the package and in your letter to avoid delay.
4. Reels sent to us for repair will be returned by Parcel Post insured, and any costs will be charged C.O.D.

PENN REPAIRMAN'S KIT No. 5



Price \$15.00

This handy Parts Kit contains a small assortment of parts for Penn Reels,* including level-wind parts. Enables the repairman to render quick and satisfactory service. Saves time and expense by eliminating sending Reel back to factory for repair or ordering parts.

* This parts assortment does not include parts for Penn Senator Reels size 6/0 to 16/0.

WHEN ORDERING REFER TO NO. OF PART AND NO. OF REEL ON FRONT PLATE

MISCELLANEOUS ITEMS



OVERSIZE CROSSPLATE

For Senator Reels

This crossplate is fitted with an oversized rod clamp and fits reel seats up to 1 1/4" diameter. Interchangeable with standard crossplates on reels. Made in 4" and 5" widths to fit 12/0, 14/0 and 16/0 reels.

Price \$5.00



ROD BRACE

For Senator reels, made in 2 sizes for 9/0 and 12/0 to 16/0 models.

Price \$2.00



CROSSPLATE WITH CLAMP

This crossplate is interchangeable with the standard crossplate without rod clamp. Made in 1 5/8", 1-13/16", 2 1/8" and 2-7/16" width.

Price \$2.00



LIGHT WEIGHT SPOOL

for Surfmaster and Squidder reels. Made in 1 5/8", 2 1/8" and 2-7/16" width.

Price \$1.00



PENN REEL LUBRICANT

This handy tube contains a combination lubricant which is equally effective for gears, shafts and ball bearings. All Penn Reels are equipped with self-sealing lubricating nipples to easily and thoroughly lubricate your Penn Reel. Simply insert the spout of the tube into the lubricating nipples and by squeezing the collapsible tube at the bottom end, the lubricant is forced under pressure to all the vital points in the Reel. This Penn lubricating system eliminates all guesswork and safeguards perfect performance and long life of the Reel. Use often and sparingly. You do not have to flood your Reel to properly lubricate it.

No. 24—Price, 10c each

Packed one dozen in display carton



No. 20—FISHSCALER

Price, 10 cents each

Made of heavy gauge rust-proofed steel for your tackle box and for kitchen use. Packed one dozen in carton.

OVERSIZE REEL HANDLE

No. 12—Price \$1.00

This handle is 5 inches overall in length and fitted with our slip-proof torpedo grip. Takes the strain out of winding and safeguards your knuckles. This handle fits all of our reels from 100 yd. to 500 yd. size.



PENN STANDARD REEL HANDLES

With Torpedo Grip

150 yd. size, length 3 1/2"	\$0.80	6/0 size, length 5"	\$1.50
250 yd. size, length 4"	.90	9/0 size, length 5 1/4"	1.75
400 yd. size, length 4 5/8"	1.00	12/0 size, length 6 1/4"	2.00
4/0 size, length 4 5/8"	1.25	14/0 size, length 4 1/2"	2.25

TACKLE SPECIFICATIONS

TUNA CLUB, AVALON, CALIFORNIA

Heavy Tackle—Rod to be of wood or cane, with usual mountings, and shall consist of butt and tip and shall be not shorter than 6 feet 9 inches over all. Tip shall not be less than 5 feet in length and shall weigh not more than 16 ounces. Line shall not exceed standard 24-thread linen line and shall have a maximum breaking strain when dry not to exceed 66 pounds.

Light Tackle—Rod to be of wood or cane, with usual mountings, and shall consist of butt and tip and shall be not shorter than 6 feet over all. Butt shall not exceed 14 inches in length. Tip shall be not less than 5 feet in length and shall weigh not more than 6 ounces. Line shall not exceed standard 9-thread linen line and shall have a maximum breaking strain, when dry, not to exceed 26 pounds.

Three-Six Tackle—Rod to be of wood or cane with usual mountings, and shall consist of butt and tip and shall not be shorter than 6 feet over all. Butt shall not exceed 14 inches in length. Tip shall be not less than 5 feet in length and shall weigh not more than 4½ ounces. Line shall not exceed standard 6-thread linen line and shall have a maximum breaking strain, when dry, not to exceed 16 pounds.

ROD AND REEL CLUB, MIAMI BEACH, FLORIDA

Tackle	4-6	5-9	6-12
Maximum butt length	15 inches	18 inches	21 inches
Maximum tip weight	4 ounces	5 ounces	6 ounces
Maximum tip length	5 feet	5 feet	5 feet
Maximum line size	6 thread	9 thread	12 thread

Heavy Tackle—There shall be no restrictions on rods. Leaders and double line shall not exceed 20 feet each in length. The ratio of pounds of fish to thread of line shall determine eligibility of entries. Although any size of line may be used, the minimum size for computation of eligibility in contests shall be based on 15 threads.

ATLANTIC TUNA CLUB, BLOCK ISLAND, R. I.

Tuna and Swordfish Class—Rod to be of wood, consisting of a butt and tip, and to be not shorter than 6 feet 9 inches over all. Tip not less than 5 feet in length, and to weigh not more than 16 ounces. Line not to exceed standard 24-thread. For heavy-class tuna and swordfish 36-thread line may be used.

Light Tackle Class—Rod to be of wood, consisting of a butt and tip, and to be not shorter than 6 feet overall. Butt to be not over 18 inches in length. Tip not less than 5 feet in length, and to weigh not more than 6 ounces. Line not to exceed standard 9-thread.

Three-Six Class—Rod to be of wood or cane, with usual mountings, and shall consist of butt and tip (butt may be of metal) and shall be not shorter than 6 feet over all. Butt to be 12 inches in length. Weight of entire rod shall not exceed 6 ounces. Line shall not exceed 6 threads of 50-lea linen.

ATLANTIC CITY TUNA CLUB, ATLANTIC CITY, N. J.

Heavy—Tip not less than 5-foot. Tip weight not more than 16 ounces. Butt not more than 22 inches in length. Length over all not less than 72 inches. 24-thread line.

Medium—Tip not less than 5-foot. Tip weight not more than 12 ounces. Butt not more than 20 inches. Length over all not less than 68 inches. 15-thread line.

Light—Tip not less than 5-foot. Tip weight not more than 9 ounces. Butt not more than 18 inches. Length over all not less than 64 inches. 9-thread line.

Three-Six—6-foot overall. Entire rod, including butt, not to weigh more than 6 ounces. 6-thread line.

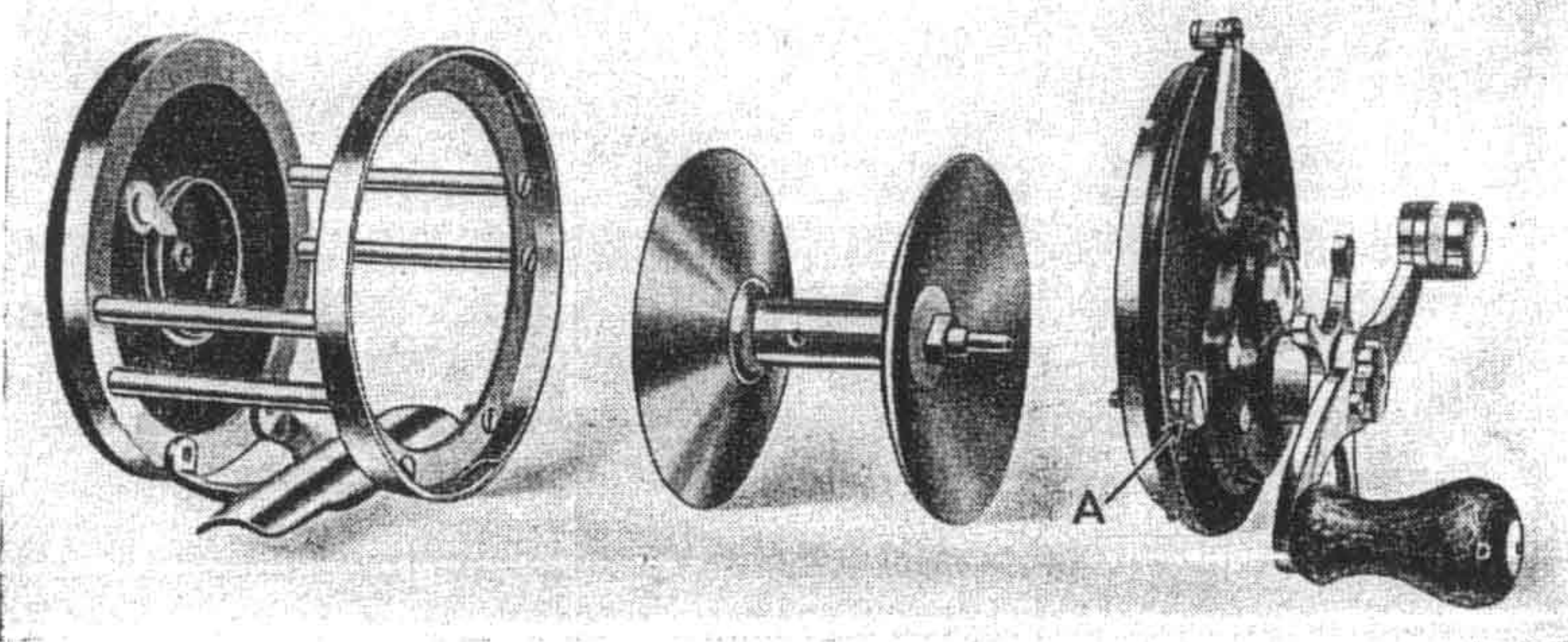
SAILFISH CLUB OF FLORIDA, PALM BEACH, FLORIDA

The rod must have a butt not over 20 inches in length. The tip of the rod must not be less than 60 inches in length and must not weigh over 6 ounces overall. The line used must not be over 12-thread and the wire leader must not be over 12 feet in length.

CONSTRUCTION OF PENN FISHING REELS

DETAILS OF CONSTRUCTION

PENN Salt Water Reels are built to fulfill perfectly the requirements of all styles of salt water fishing. Many patented improvements are built into these reels to give the angler complete satisfaction. Our *Take Apart* feature, *Free Spool Clutch*, powerful *Star Drag*, handle screw *Locking Device*, *Non-Strip Gears* and *One Shot Lubrication* are just a few of the outstanding features of PENN reels. We specialize in the manufacturing of salt water reels and our aim at all times is to produce the most perfect brand of reels at the lowest possible price.



TAKE APART CONSTRUCTION

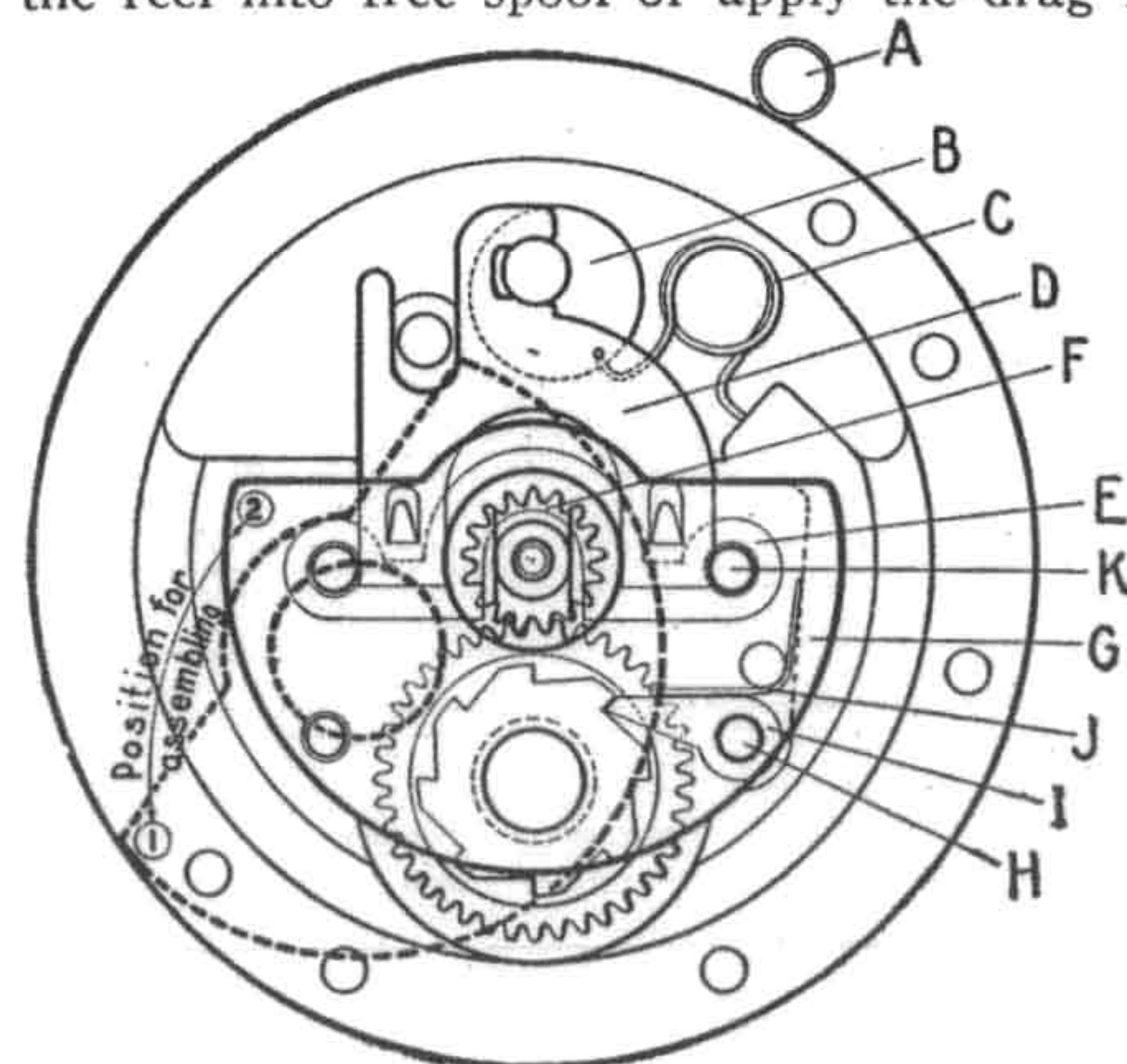
By means of our very rugged *Take Apart* device, our reels with this feature can easily be taken apart for cleaning. Unscrew and pull back knurled thumbscrew (A), turn front plate slightly to the left and pull away from the reel frame. Reverse operations for assembling.

FREE SPOOL CLUTCH

Patent No. 1952756—March 27, 1934

We employ our patented Free Spool Clutch to engage gear train. The free spool *Snap* lever is conveniently located on rim and enables the fisherman to throw the reel into free spool or apply the drag instantly and without danger, as the gears always remain in mesh and cannot strip.

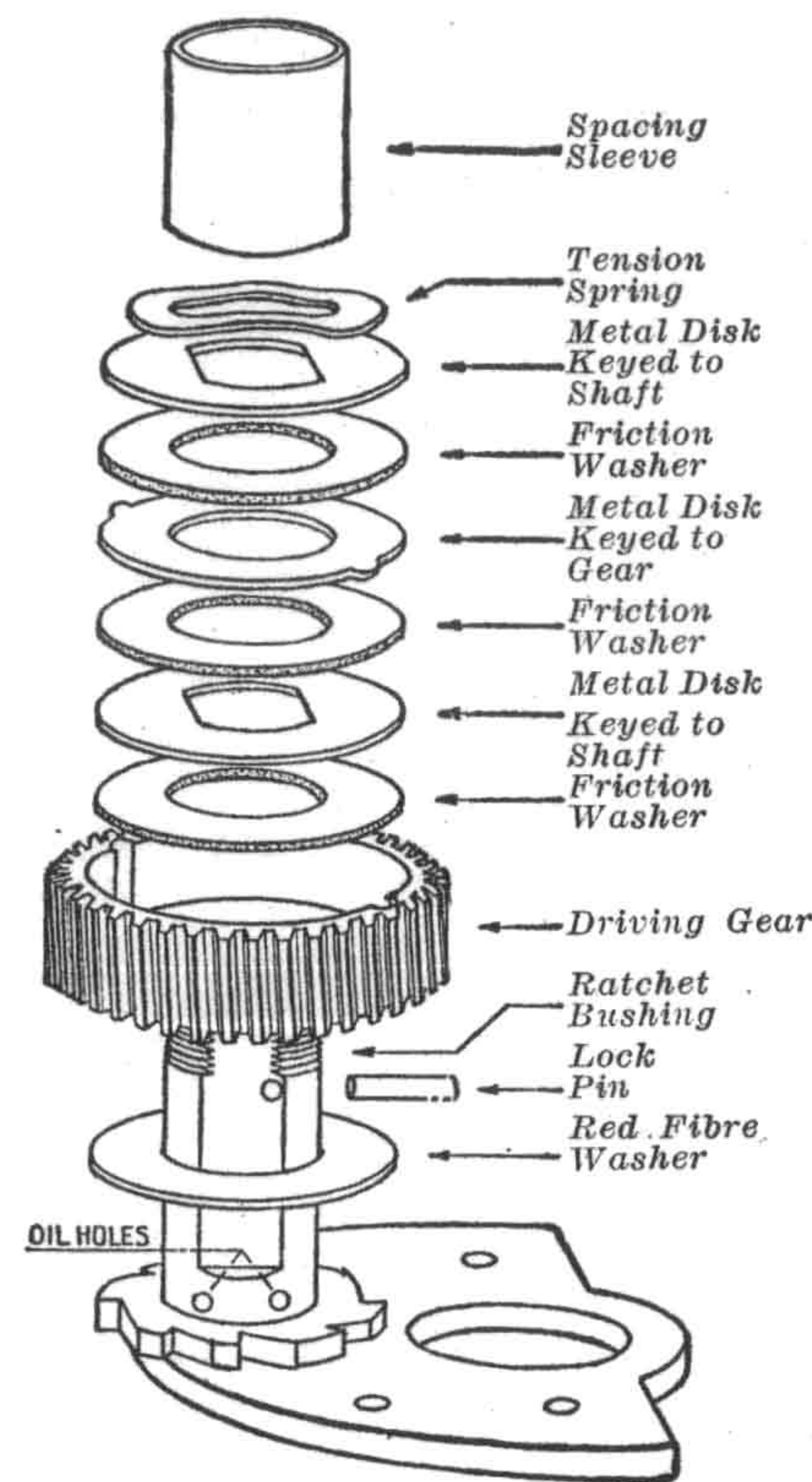
Free spool *Snap* lever (A) locked in its extreme end positions by stainless steel spring (C). Eccentric (B) operates jack (D), which raises or lowers spring pressed clutch yoke (E), which in turn engages or disengages pinion (F) with spool.



DIRECTIONS FOR ASSEMBLING

After re-assembling Star Drag mechanism, (see illustration) place gear bridge (G) in position (1) as indicated by dotted line (slightly turned to the left for replacing ratchet pawl and spring). Grip plate with your left hand and with your thumb press gear bridge against plate. Insert bridge screw (H—long threaded) into plate hole and replace ratchet pawl (I) and pawl spring (J). Then without releasing pressure slide gear bridge to the right in position (2) and tighten bridge screws (H) and clutch yoke guide screws (K—short threaded).

Free spool *Snap* lever (A) locked in its extreme end positions by stainless steel spring (C). Eccentric (B) operates jack (D), which raises or lowers spring pressed clutch yoke (E), which in turn engages or disengages pinion (F) with spool.



STAR DRAG (Operation)

The star drag is an adjustable drag and indispensable when fighting big game fish. The action of the brake is against the fish only, as the handle is prevented from turning backwards by a built in ratchet. Adjustment of the drag is made by a star wheel on handle. To check the amount of drag, put the reel in gear and pull line off the spool. Care should be taken not to have any more drag on the reel than the line or rod will stand. The purpose of the drag is to have a steady tension on the line rather than to stop the run of a fish. Too much drag on the line might only result in breaking tackle or pulling out the hook.

CONVERTIBLE STAR DRAG

Patent No. 220482

With a Standard Star Drag Reel the drag is always on and therefore requires shifting the reel in and out of gear for letting out and retrieving the line. With our CONVERTIBLE Star Drag feature the drag can be thrown off by shifting the lower lever forward. This allows letting out line while the reel is still in gear and full handle control by the fisherman for hooking fish, yet when needed, drag can be engaged instantly by flipping lever downwards. Adjustment of drag is the same as Standard drag.

"Fish with a free spool reel and fight the fish with a star drag."

DIRECTIONS FOR ASSEMBLING

Our drag mechanism consists of a number of metal disks alternately keyed to shaft and gear and between which friction washers are located. If assembled in the wrong manner, drag will not work satisfactorily. To avoid this, the drag assembly must always be in the order shown in drawing. Friction washers work best dry and should not be lubricated.



OILING SYSTEM

Patent No. 1952756

All our reels are equipped with dustproof and waterproof lubricating nipples on the outside, from which by means of an intricate system of oil channels, the lubricant is forced under pressure to the vital points. Built-in oil reservoirs provide for complete safety. A tube of PENN REEL LUBRICANT is furnished with every reel, it is an easy matter to thoroughly lubricate the reel. Simply insert the spout of the tube into the sealing lubricating nipples and by squeezing the collapsible tube the lubricant is forced under pressure to the bearings and gears. This PENN oiling system eliminates all guesswork in lubricating and safeguards good performance and long life of the reel.

PENN REEL PARTS ARE STANDARDIZED AND INTERCHANGEABLE

CONSTRUCTION OF PENN FISHING REELS

THE SENATOR STAR DRAG

To fight the powerful and speedy rushes of a big game fish requires a drag with *tremendous* braking power and able to stand up for many hours at a time without the danger of slipping or freezing. Considering this, it is easily understood that the drag is the *most important* part in a big game fish reel. At the left is shown a cut of our drag mechanism. The five friction washers are made of *indestructible* automobile brake lining and needless of any attention. The brake drum is fitted with an *oilless* bearing and can not run hot and freeze through lack of oil. The drag has *tremendous* braking power combined with *very smooth* action, thus removing danger of breaking line or rod. Drag is adjustable to a very fine degree by star wheel on handle. Entire drag mechanism can be oiled from the outside by means of oil channels from ball oiler on handle screw.

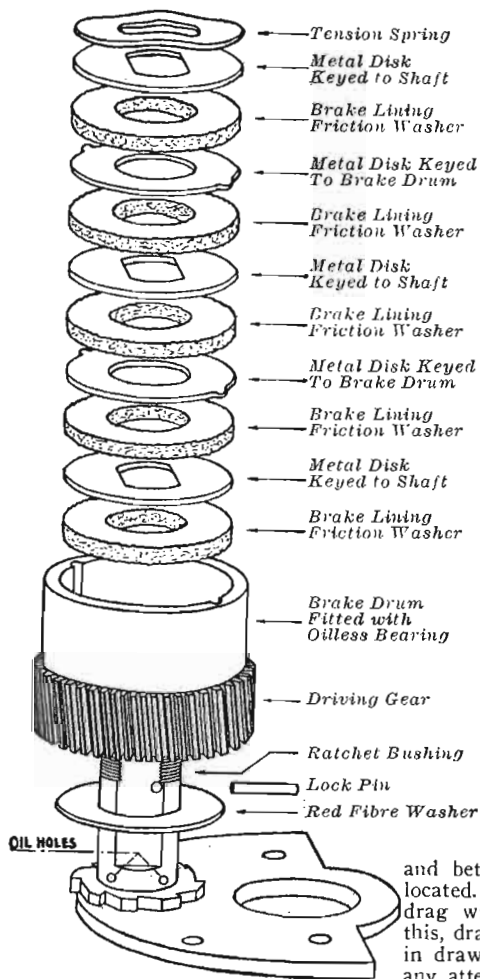
DIRECTIONS FOR ASSEMBLING

Our drag assembly consists of a number of metal disks alternately keyed to shaft and brake drum, and between which the friction washers are located. If assembled in the wrong manner, drag will not work satisfactorily. To avoid this, drag must always be assembled as shown in drawing. The friction washers don't need any attention and should *not* be lubricated as they work best dry.

TO REMOVE FRICTION WASHERS

Without taking reel apart

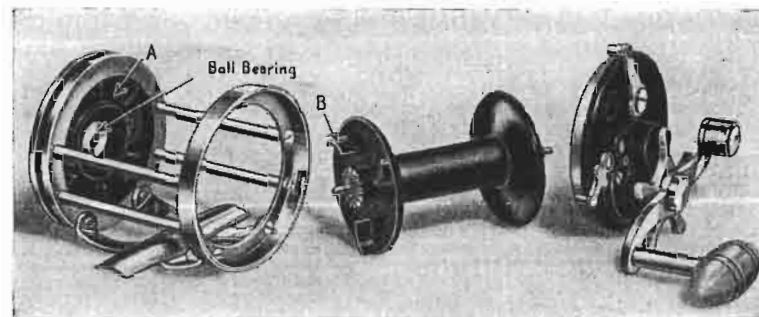
Take off handle, unscrew the star wheel and the friction washers can be removed for inspection or replacing. The asbestos friction washers cannot burn up and don't need any attention. Should it ever be necessary to take up on the star wheel due to wearing down of the brake lining, this is easily done by the addition of an extra washer, either asbestos or metal. Do *not* lubricate the friction washers, as they work best dry. An oily brake will cause a slipping and jerking drag.



PENN "SYNCHRONIZED" SPOOL

Numerous anti-backlash devices have been tried for many years. They are of the mechanical brake type that tend to retard the casting ability of the reel and on account of the moving parts are apt to get out of order quickly.

The patented *Penn Spool "Air-Brake"* is the most forward step in reel construction since the advent of the Star Drag. Over-running of the spool and consequent backlash are reduced by synchronizing the spool speed with that of the sinker or squid. No moving parts or projections and no friction to impede the flying start of the spool. Details of construction below.



CONSTRUCTION OF PENN "AIR BRAKE"

(Patent No. 2190786)

The inside of the spool bell is equipped with the fan blades (*B*) (see illustration). Opposite these fan blades are the air chambers (*A*). In casting, when the spool is rotating at too high a speed, the action of the spool fan blades (*B*) generate air pressure, which is caught in the air chambers (*A*). In trying to escape, this air pressure acts as a brake against the rotating spool, which results in cutting down the speed of the spool sufficiently to prevent over-running and the consequent backlash. As this air pressure is in direct relation to the revolutions of the spool, the braking effect diminishes with the spool losing speed, therefore allowing a free travel of the line to the very end of the cast.

CASTING WITH "SYNCHRONIZED" SPOOL

Cast as usual. Put reel in free spool, hold line with your thumb, cast and release spool. As soon as the sinker is off to a flying start, hold your thumb only very lightly against the spool to be able to stop the spool instantly as soon as your bait is over the desired spot or the sinker hits the water. The light weight spool will get off to a flying start and is very sensitive to thumbing. However, it is important to wind the line tightly and evenly on the spool as a loose line will dig in and cause backlashes. A good practice is to wind the last few turns crosswise from end to end on the spool. A new line is very stiff and sticky and requires a few days using to get good results in casting.

EVERY PENN REEL PART IS MADE IN OUR OWN FACTORY

Care of your reel

With reasonable care, your reel will last a lifetime, unless you are so fortunate as to be able to do a great deal of fishing.

Oil and grease your reel at least once a week, or still better shoot a drop of oil into the bearings after a day's fishing. This will refill the built-in oil reservoirs, which act as *safeguards* of the reel.

LUBRICATING WITHOUT TAKING REEL APART

With our patented *One Shot Lubrication* (See page 24) it is an easy matter to thoroughly oil and grease your reel. A tube of PENN REEL LUBRICANT is furnished *free* with every PENN reel. Simply insert the spout of the tube into the sealing ball oilers and by squeezing the tube at the bottom the oil is *forced under pressure* to the bearings, thus eliminating all guesswork in lubrication.

Use lubricant on spool bearings, handle shaft, click button, free spool lever and handle knob. To grease the driving gears, shoot lubricant into nipple on front plate marked *grease*. Use oil and grease sparingly. You don't have to flood your reel to properly lubricate it. After using, fold tube over at the bottom.

Considering the fact that a reel, when casting, is making 5000 to 8000 revolutions per minute, it is easily understood how important it is to keep the bearings well oiled. Also, salt water is very injurious to metals, unless the reel is very thoroughly oiled and greased to combat corrosion. Our *One Shot Lubrication*, combined with the built-in oil reservoirs safeguards perfect performance and long life of the reel.

CLEANING THE REEL

Should sand get into your reel, take the reel apart and wash the parts with gasoline or kerosene, allowing them to dry before oiling. Our *Take Apart* reels can easily be taken apart (See instructions on page 24). On all other models remove the plate screws and the reel will come apart. A combination wrench and screw driver is packed with every PENN reel. For reassembling, see instructions on page 24.

THE SERVICING OF THE REEL

Due to the watch-like mechanism of our reels, we do not advise taking reel apart for any other purpose than cleaning. For repairs, we recommend taking the reel to an experienced repairman or sending the reel back to the factory. We will gladly replace parts and put the reel in perfect working condition at a very low cost. For the expert our instructions on pages 24 and 25 will be very helpful.

REPAIR PARTS

Greatest care is given to standardization of all parts wherever possible. Therefore, most parts are standard size and *interchangeable* regardless of type or size of the reel—a feature which has never before been accomplished in the reel industry. This factor is of utmost importance in the servicing and economy of the reel. For the repairman our assortment of parts listed on page 21 is very helpful.

THE CARE OF THE LINE

When used daily, the line does not need any attention, but do not allow the line to dry on the reel, as salt water is very injurious to lines. Wash the line in fresh water and allow to dry before putting back on reel. Break off a few feet to eliminate any weakness on the end.

Selecting your tackle

The intention of this article is to assist in the careful selection of the proper tackle, but as the simple words *fishing tackle* cover such a multitude of items varying with local conditions and seasons, we recommend your local *fishing tackle dealer* who will gladly assist you in blending the different tackle items into a harmonious and well balanced outfit, that will bring thrills and joys into the angler's heart. Many a fisherman has equipped himself with the wrong tackle with the result of getting discouraged and missing the enjoyment of the sport.

THE LINE

The length and size of the line is the most decisive factor in selecting a well balanced and satisfactory fishing outfit. Lines are made from 6-thread to 72-thread and in any required length. Selection depends largely on the style of fishing and local conditions. For bay fishing 100 yards to 150 yards of either 6-thread or 9-thread is sufficient. Surf fishing requires 200 yards of 9-thread to 12-thread. For offshore bottom fishing, lines commonly used are 100 to 200 yards of from 12-thread to 15-thread, selection depending largely on the depth of water and tide currents. Off-shore trolling lines run all the way from 200 yards of 12-thread up to 1000 yards or more of 72-thread. For trolling, we refer you to our chart on page 17.

THE REEL

A fishing reel has to fulfill the dual purpose of holding the proper length and size of line and to assist in a specific style of fishing. Reels are made in many distinctive types, and while the number of these may seem bewildering at first glance, they are developed to meet the specific needs of the many different types of fishing. The many sizes in which reels are made make it possible to select just the right size and make it needless to use a big, heavy and clumsy reel for light tackle fishing, or conversely as in game fishing of getting into trouble by not having the necessary length and size of line on your spool. For light tackle fishing, a light weight reel of from 100 yards to 150 yards capacity is ideal. Surf casting requires 200 yards capacity of either 9-thread or 12-thread line. Most important in casting is a light weight spool of small diameter for distance and for reducing backlashes. An extra spool for using different size lines is also very helpful. Preferably, the reel should be equipped with a Star Drag and the take-apart feature. For squidding or jigging, in addition to being a good casting reel, a three-to-one gear ratio is necessary. For offshore bottom fishing almost any sturdy reel of adequate line capacity will do, but for extremely deep water, a fast action reel will be very convenient. Most important in offshore game fish trolling is a sturdy Star Drag and the necessary line capacity. For details see our chart on page 17.

RODS

Much of the thrill of the sport is lost by using rods much too heavy. Light tackle, surf, boat and game fishing rods are made in many different lengths and weights, thereby making it possible to blend line, reel and rod into a harmonious and well balanced outfit that will give the angler the utmost satisfaction.

END TACKLE

If there is a great variety in lines, reels and rods, there is still a much greater variety in hooks, leaders, sinkers, baits, squids, feathers and many other lures; in fact, too great a variety to go into details. We recommend your local *fishing tackle dealer* for advice, and also to get information right on the fishing spot, from your brother anglers, who will gladly assist you with their knowledge and experience.

Helpful tips for the Fisherman

TO FIND LINE CAPACITY OF THE REEL

When the line capacity of the reel of a certain size of line is known, it is an easy matter to find the line capacity of a different size of line, providing that the lines are of approximately the same grade, as there are lesser grades of lines on the market which are much heavier and take up more space than the better grade lines having the same breaking test. Simply multiply the known line capacity in yards by the number of thread known, then divide the product by the number of threads of the line required. The answer is the reel capacity in yards. Example as follows:

You know reel holds 300 yds. of number 9 line.
You want to find the capacity of number 12 line.
Multiply 300 by 9=2700 divided by 12=225 yds.

EMERGENCY REPAIRING OF BROKEN LINE

No knot equals a spliced line, but as many fishermen are not familiar with splicing, or in case a hurried job has to be done on a fishing trip, the following method will give satisfactory results. This tying can also be used for doubling the line or making a loop. Tests have shown that this tying does not weaken the line as other knots do.



Place at least six slip knots about $\frac{1}{4}$ inch apart on each end of the line as shown. Start at the center and pull each knot tight before placing the next one. Wet the line thoroughly before tying.

FISHERMEN'S KNOTS

For ordinary fishing almost any knot might do, but when fishing amounts to a real test for your tackle, a good knot will make all the difference between landing or losing a big one. Faulty knots cut and will cause the line to part at a fraction of its tested strength. Below we show a few of the many variations of knots useful to the fisherman. For tying line to swivel, the wedge is considered by many as the strongest knot. A snap swivel is of great advantage, as it enables the angler to change baits or other tackle quickly. The gut leader or line must be well soaked before tying.



Turtle knot
For eyed hooks



Loop
Tie at least six slip knots about $\frac{1}{4}$ " apart.
Pull each knot tight before
placing next one.



Twist knot
For tying gut leader



Wedge
For tying line to swivel

LEFT HANDED FISHERMEN

Old model reels could be used either right or left handed, but this is impossible with today's modern construction. Reels intended for left handed use have to be reversed, as the driving gears will slip out of mesh when used the wrong way. Some of our reels are listed in the left handed models, but when not listed, they have to be ordered special for LEFT HAND use.

ESTIMATING WEIGHT OF FISH

When there is no scale on hand, the approximate weight of the fish can be figured by multiplying the square of the girth (at the widest point) by the length (point of mouth to crotch of tail) and divide by 800. All measurements to be in inches.

THE BACKLASHER

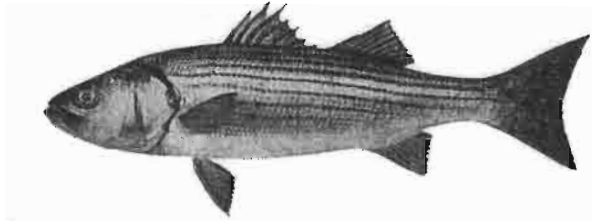
Many a beautiful cast was started with the intention of throwing the lead far out into the breakers, only to see the sinker stop suddenly in midair and leave the line on the spool in a tangled mass, the so-called bird's nest. The cause of this is an over-running spool, which means that the spool is paying out more line than the flying sinker requires, with the result that the loose line will get reversely wound on the spool and cause the backlash. In casting, the sinker is losing speed rapidly due to air resistance and the pull of the line, whereas the spool running in almost frictionless bearings, will keep on running at the original speed, which results in loose line on the spool, and the backlash. The only remedy is to reduce the speed of the spool by thumbing and letting the spool pay out only as much line as is required by the sinker. This proper thumbing might seem very difficult to the beginner, but by watching the line as it leaves the spool and starting thumbing as soon as loose line develops on the spool, backlashing will be eliminated. Also, the beginner will do well by not trying to use brute strength in casting, but rather concentrate on the acquiring of good casting form first, then gradually increasing the force on the rod, as a jerky cast increases the danger of backlashes.

Another point is to wind the line evenly and tightly on the spool, as a loose line will dig in and cause backlash. To wet the line before casting, a short preliminary cast is the best way. Do not dip your reel into the ocean, as you only get the inside of the reel wet and not much of the line.

LIGHT WEIGHT SPOOLS

By far the greatest improvement in casting reels is the developing of the light weight spools. A thoughtless fisherman will pick up a reel, spin the spool and watch it run for a minute and will be convinced that it is a good casting reel, but actually it is a potential backlasher. A heavy spool will run forever, but as only a few seconds are necessary to complete the cast, this heavy spool will not slow down in time and the result is over-running and backlash. Also a heavy spool consumes more power in starting and thereby cuts down the casting distance. Equally important in casting, is the weight of the line and therefore the length and size of the line should be held to the minimum requirements to save weight. Not only the total weight of spool and line is important, but also the momentum of the spool should be further reduced by using a wide spool, thereby keeping the line closer to the arbor. The importance of this is proved best by the fact that the tournament casters use special built wide and light weight spools and special light lines in attaining their great casting distance. If the light line will not stand the strain of casting a heavy sinker, doubling the line or using a heavier line on the end will prevent snapping.

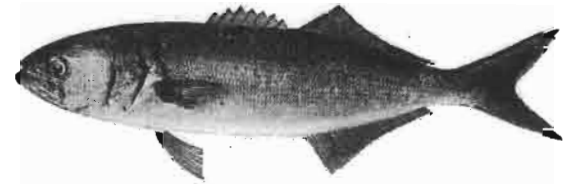
Know your salt water fish



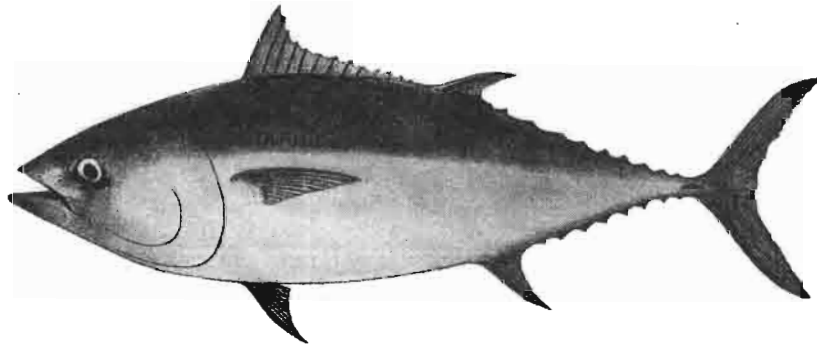
STRIPED BASS (Rock Fish)
Record Weight 73 lbs.



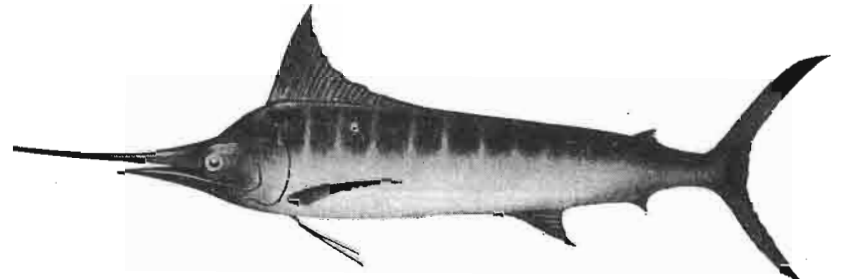
PORGY
Record Weight 5 lbs.



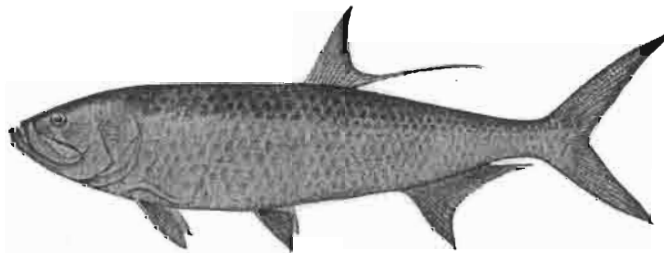
BLUEFISH
Record Weight 25 lbs.



BLUEFIN TUNA
Record Weight 927 lbs.



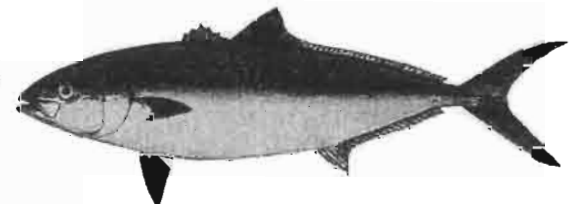
MARLIN (Striped)
Record Weight 1040 lbs.



TARPON (Silver King)
Record Weight 242 lbs.

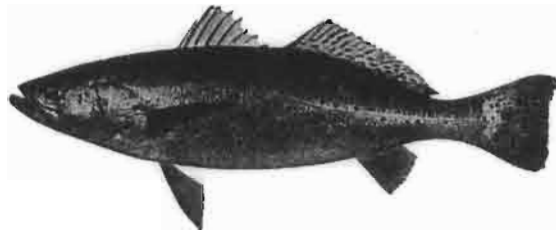


BARRACUDA (Sea Tiger)
Record Weight 103 lbs.

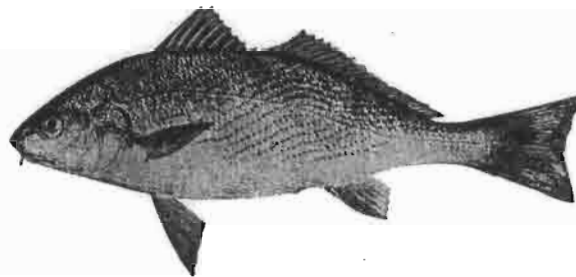


YELLOWTAIL
Record Weight 111 lbs.

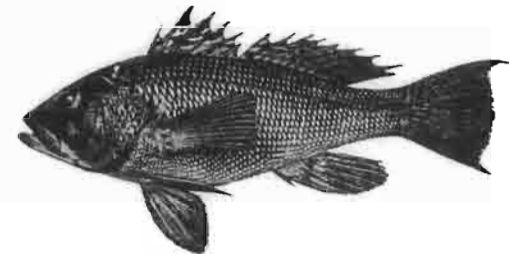
Know your salt water fish



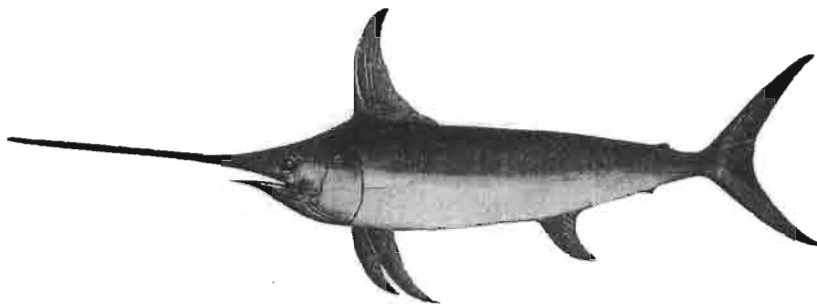
WEAKFISH (Sea Trout)
Record Weight 17 lbs.



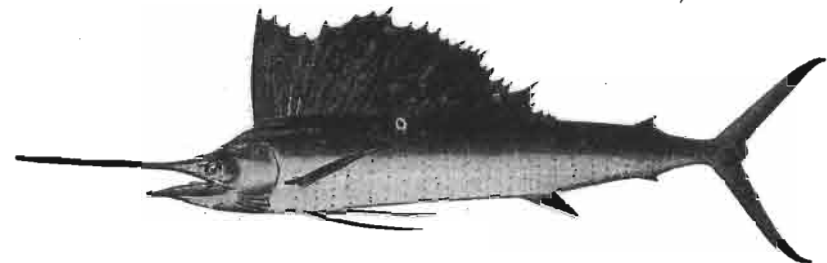
CROAKER (Hardhead)
Record Weight 7 lbs.



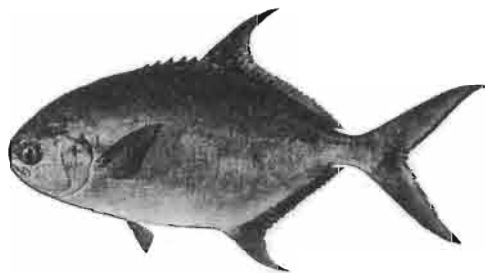
SEA BASS
Record Weight 8 lbs.



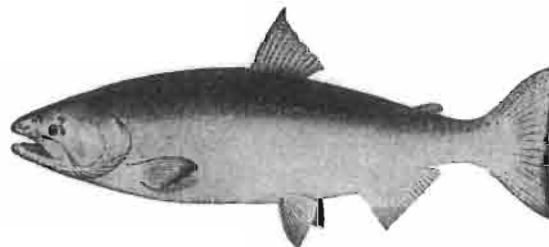
BROADBILL SWORDFISH
Record Weight 842 lbs.



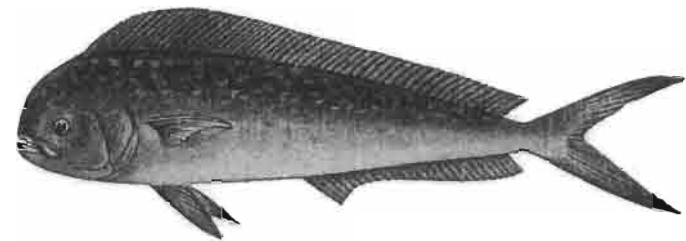
SAILFISH
Record Weight 215 lbs.



POMPANO
Record Weight 30 lbs.

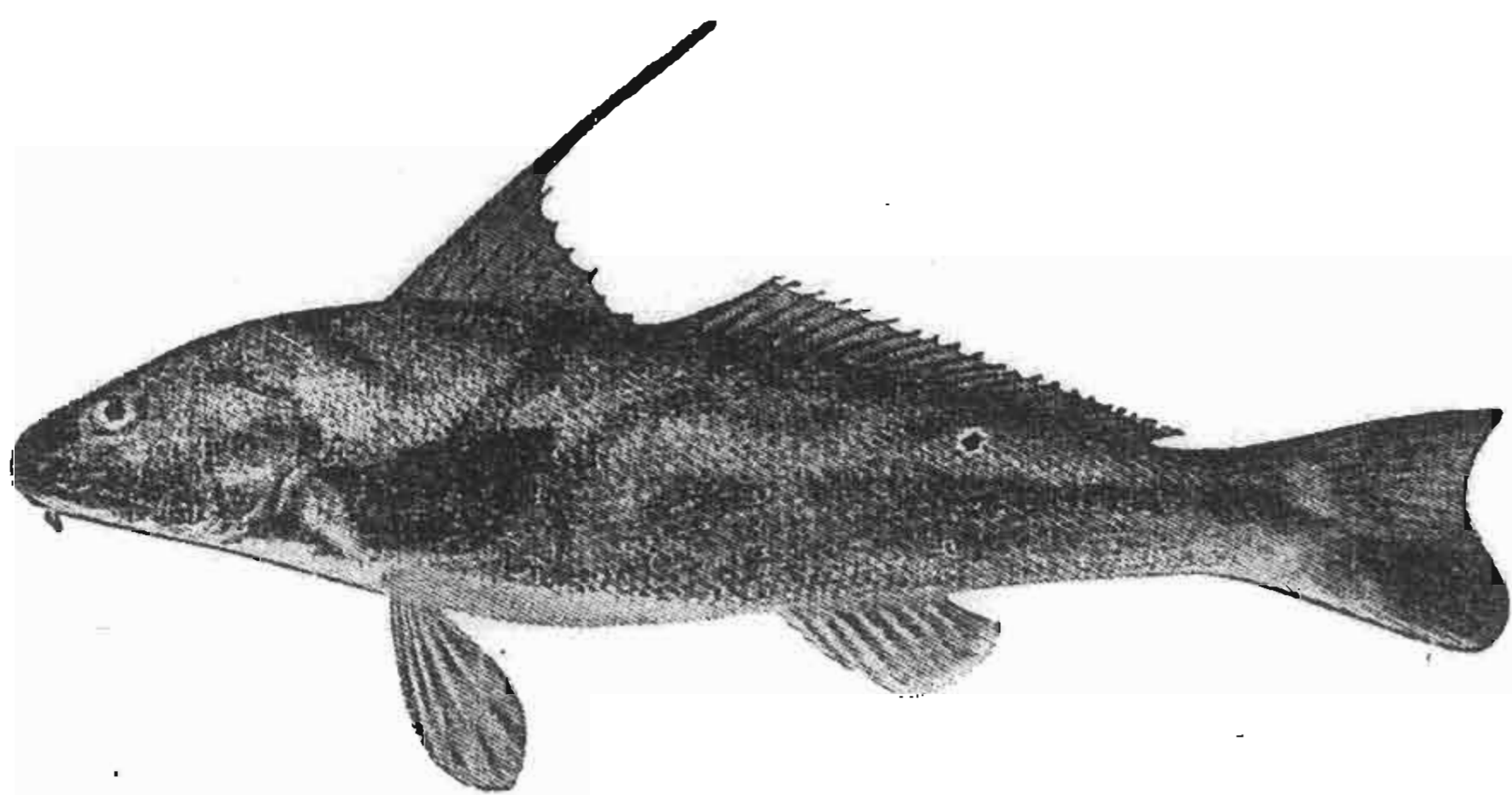


CHINOOK SALMON
Record Weight 83 lbs.

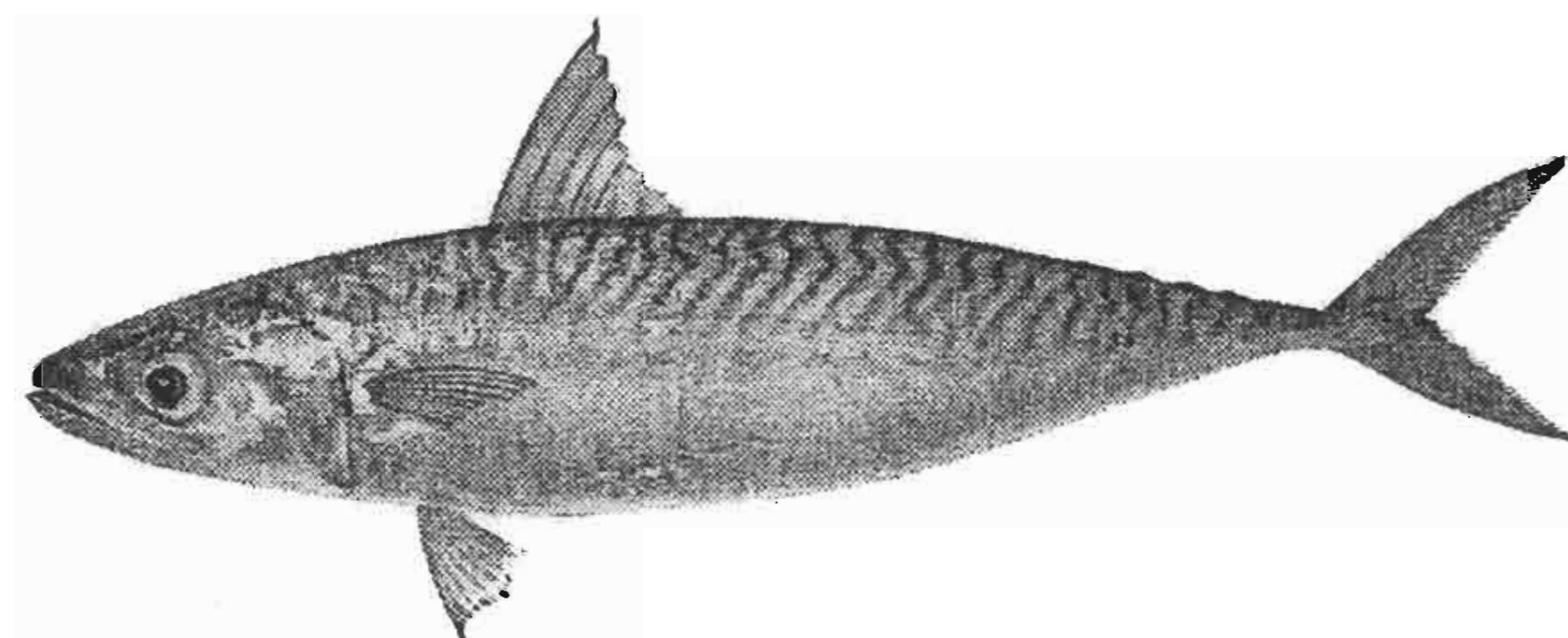


DOLPHIN (Dorado)
Record Weight 63 lbs.

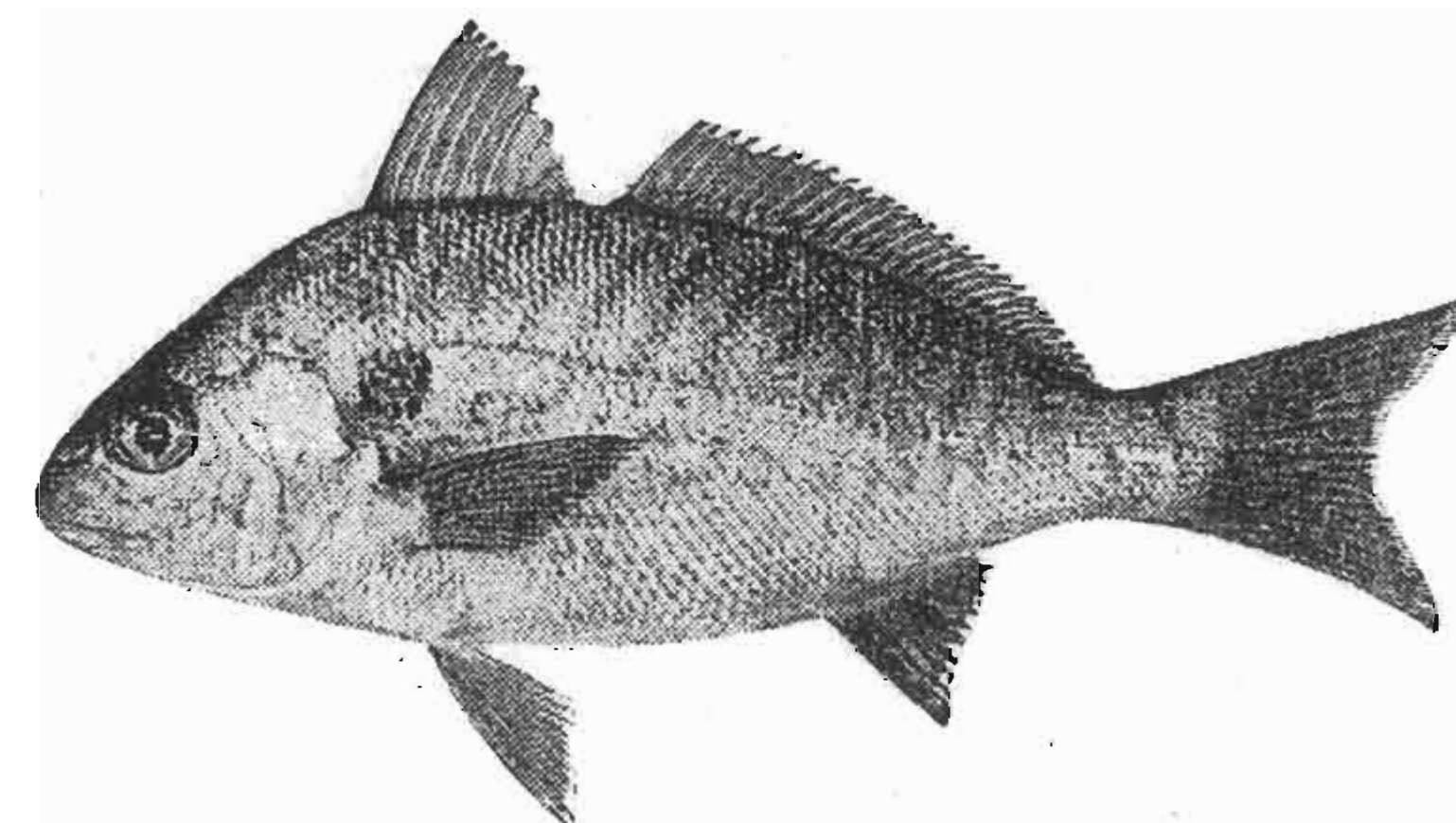
Know your salt water fish



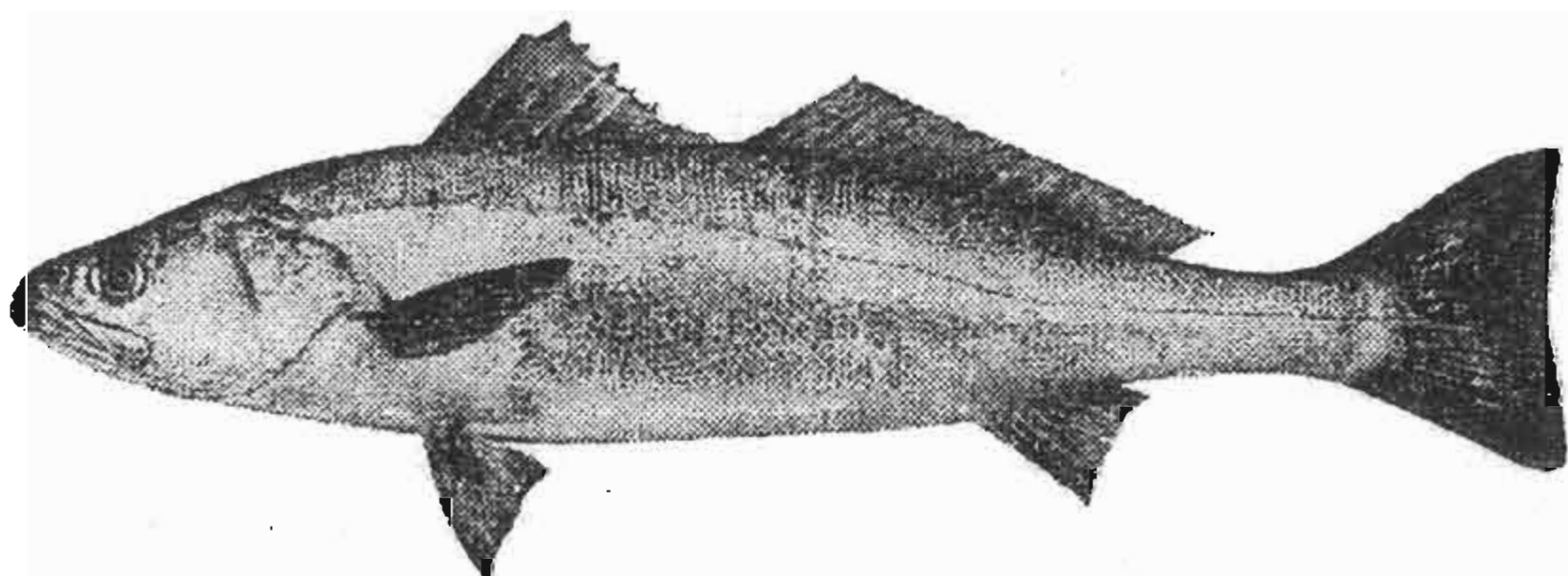
KINGFISH
Record Weight 6 lbs.



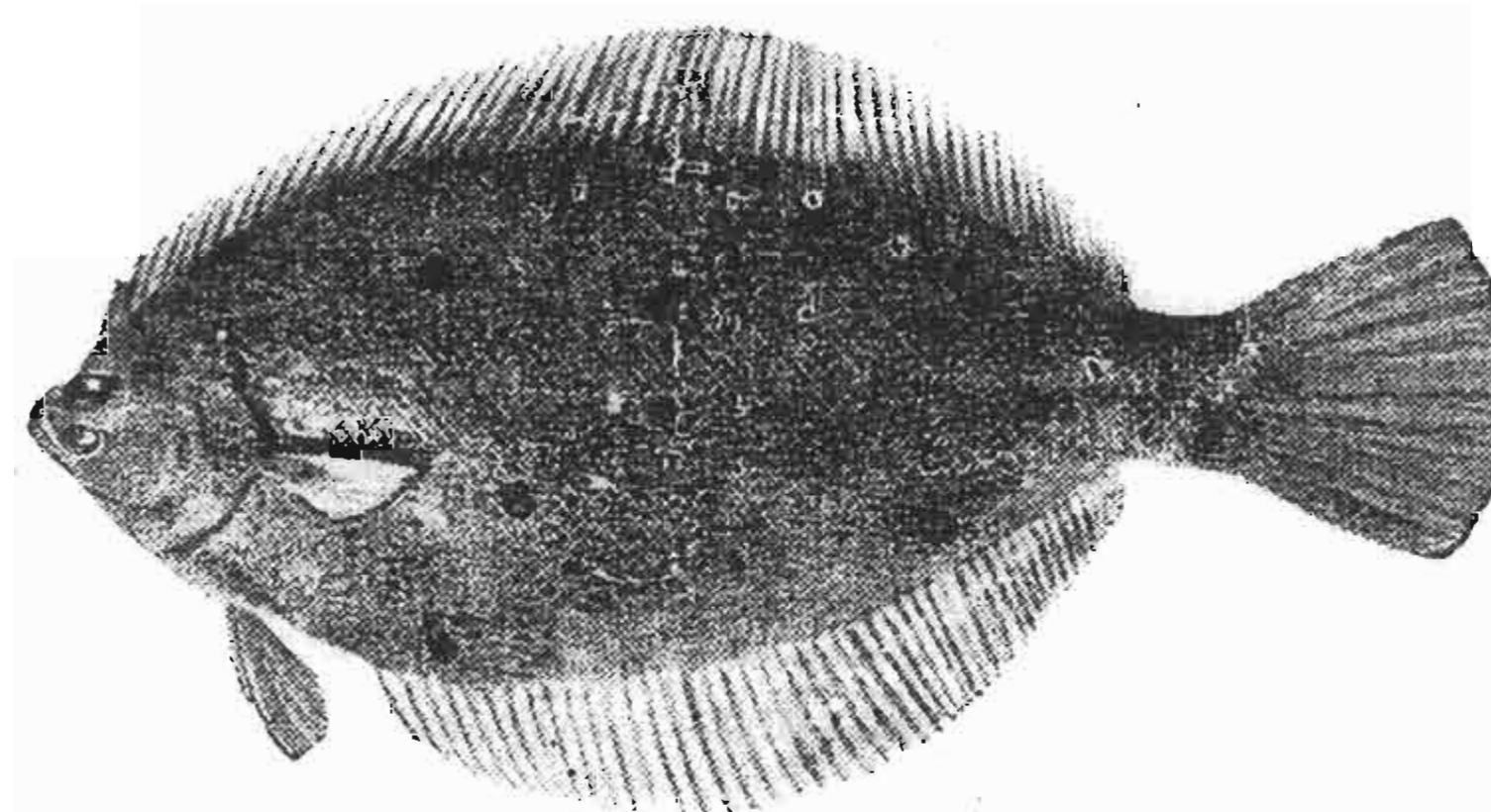
MACKEREL
Record Weight 8 lbs.



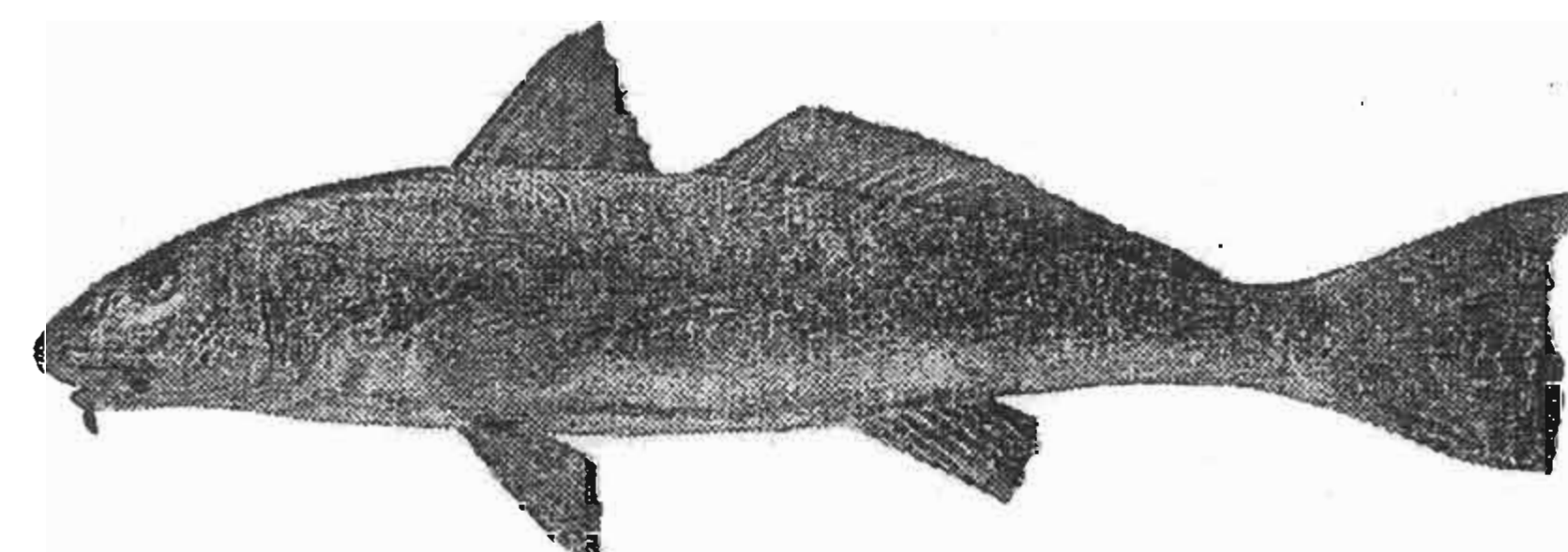
SPOT
Record Weight 1½ lbs.



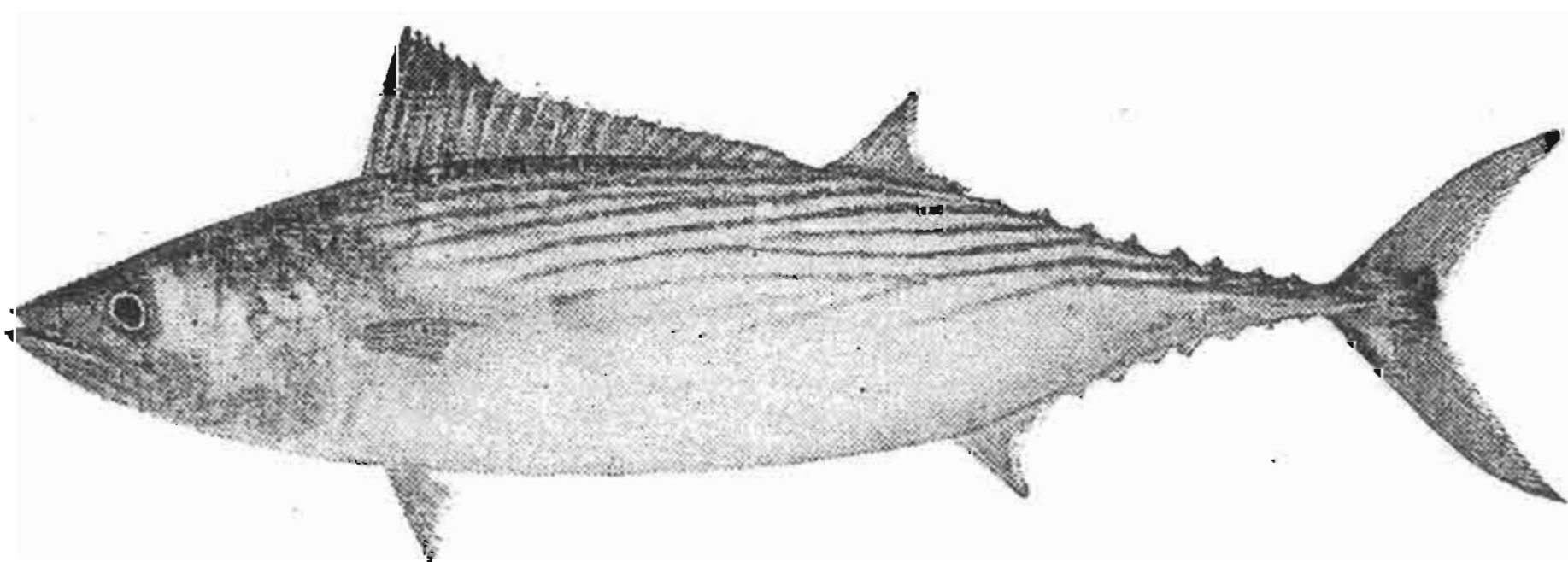
WHITE SEA BASS
Record Weight 68 lbs.



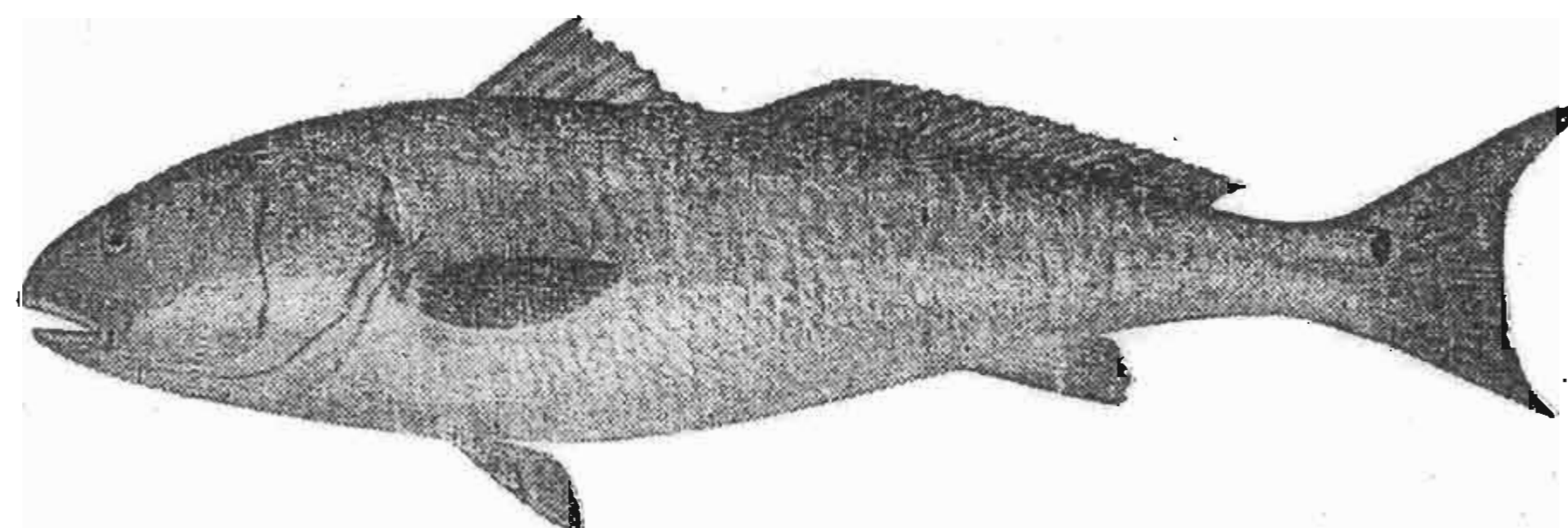
FLOUNDER
Record Weight 19 lbs.



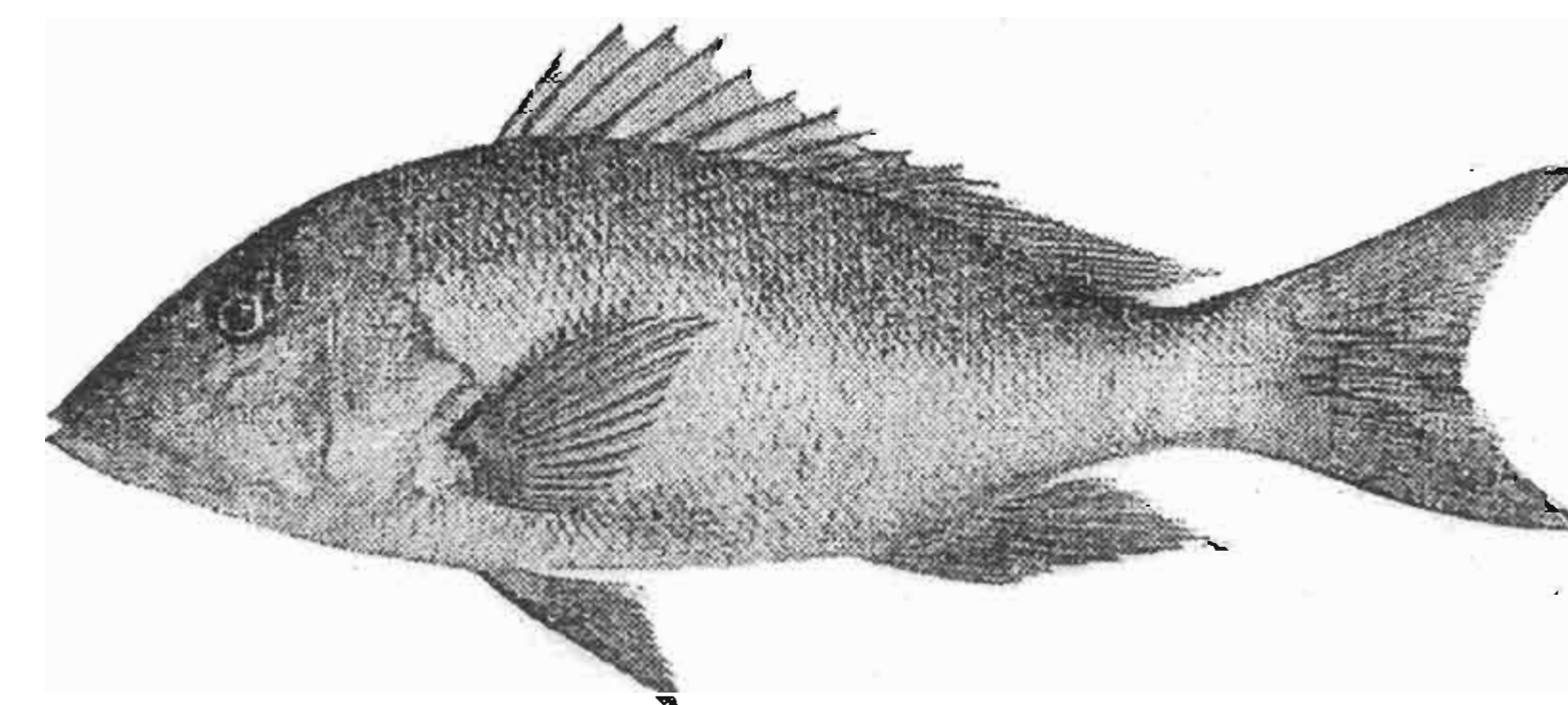
CORBINA
Record Weight 9 lbs.



BONITO
Record Weight 18 lbs.



CHANNEL BASS (Red Drum)
Record Weight 74 lbs.



RED SNAPPER
Record Weight 12 lbs.

Penn Reel Catches



Wm. E. Bagley of Yakima, Wash. caught these 14 and 13 lb. Steelheads on Spinners using Penn Reels.



8' Sail landed by M. E. Mahavlen at Port Isabel, Tex. with 4/0 Penn Reel, 9 thread line and 6 oz. tip.



4 out of 17 Striped Bass taken at Cape Cod Canal by Roy French and Ned Watson, Sagamore, Mass.



6' prize Tarpon caught by M. E. Mahavien at Port Aransas Rodeo with 4/0 Penn Reel and 6 thread line.



King Mackerel caught by Mr. Jack Martin Thorne, Miami, Fla. with Penn Long Beach Reel.



402 lb. black Sea Bass caught off Long Beach, Calif. by Chester Kellems, Arcadia, Calif. with Penn Long Beach Reel.



White Marlin, 8'-114 lb., caught at Ocean City, Md. by Mr. Alan Ferguson on 4/0 Penn Reel and 6-9 tackle.

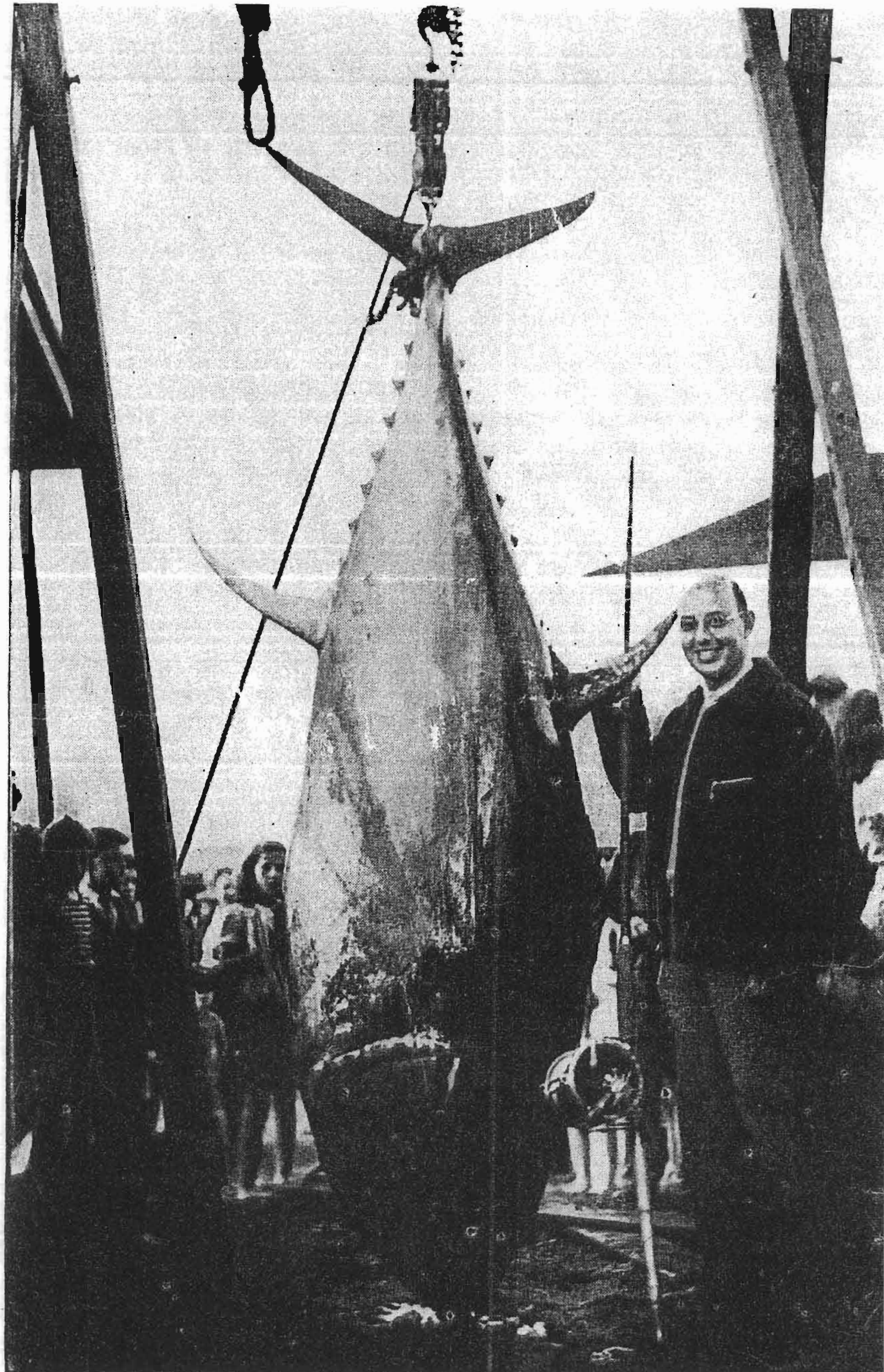


Port bound with 705 lb. black Marlin caught by Mr. Hans Hinrichs, N. Y. C., off the Coast of Peru.



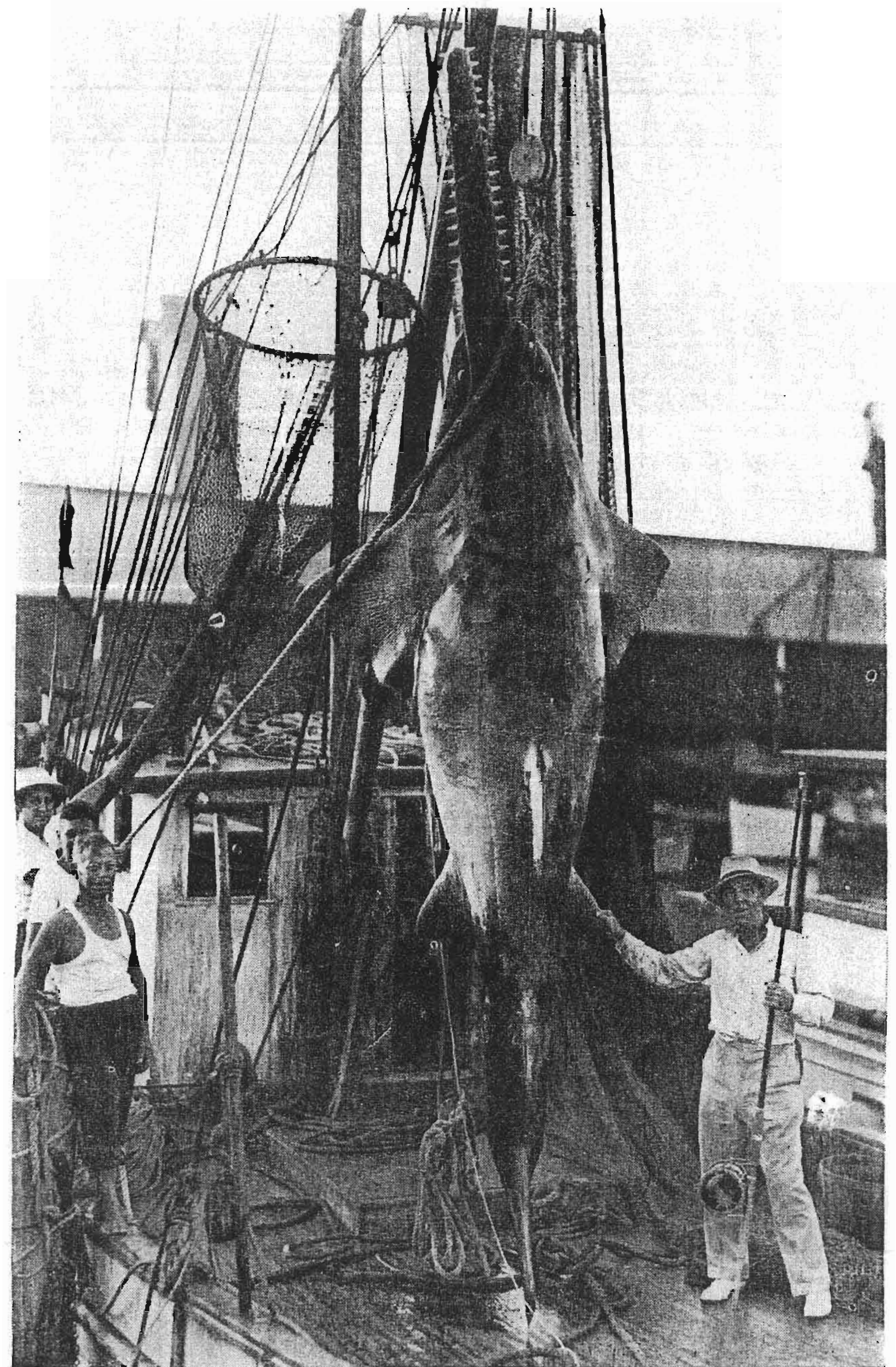
Mr. C. O. Morrell, Los Angeles, Calif. landed this 282 lb. Broadbill with Penn Senator Reel.

WORLD RECORD TUNA 927 LBS.



927 lb. record Tuna, 10 feet in length, caught Aug. 25th, 1940, in Ipswich Bay, Mass., by Dr. John B. Vernaglia of Medford, Mass., with Penn Reel.

WORLD RECORD SAWFISH 1300 LBS.



1300 lb. record Sawfish, 17 feet in length, caught Sept. 1st, 1940, off Galveston by Ernie Reid of Houston, Tex., with Penn 16/0 Senator Reel.

WORLD'S RECORD SALT WATER FISH

SPECIES	Scientific Name	Caught with Rod and Reel						Caught by Any Method					
		Weight	Length	Girth	Where Caught	Date Caught	By Whom Caught	Weight	Length	Girth	Where Caught	Date Caught	By Whom Caught
ALBACORE	<i>Germo alalunga</i>	66 lbs. 4 oz.	...	...	Santa Catalina, Cal.	1912	Frank Kelly	Same	...	...	...	...	...
AMBERJACK	<i>Seriola lalandi</i>	106 lbs.	5' 8½"	...	Pass-a-Grille, Fla.	1937	Harvey Harker	146 lbs.	6½'	...	Bermuda	Nov. 9, 1938	Handled by H. J. Tucker
BARRACUDA (Great)	<i>Sphyrna barracuda</i>	103¼ lbs.	5½'	31¼"	Bahama Islands	1932	Chester E. Benet	Same	...	...	...	...	...
CASS (Cal. Black Sea)	<i>Stereolepis gyas</i>	515 lbs.	...	...	Santa Catalina, Cal.	1916	Wallace Beery	300 lbs.	...	...	Avalon, Cal.	1902	...
BASS (Cal. White Sea)	<i>Cynoscion nobilis</i>	74 lb. 4 oz.	76"	30"	Playa de Rey, California	March 8 1941	W. M. Farnes	Same	...	...	...	...	...
CASS (Channel)	<i>Sciaenops ocellatus</i>	75 lb. 8 oz.	64¾"	41"	Cape Hatteras, N. C.	Nov. 20 1941	Ca. t. R. B. Ballance	75 lbs.	5'	...	...	...	Reported by Jordan & Evermann
BASS (Sea)	<i>Centropristis striatus</i>	8 lbs. 2 oz.	...	...	Banks off New York	...	Peter Volkman	Same	...	...	...	...	...
BASS (Striped)	<i>Roccus tneatus</i>	73 lbs.	60"	30½"	Vineyard Sound, Mass.	Aug. 17 1913	Chas. B. Church	125 lbs.	...	...	Edenport, N. C.	April 1 1891	Netted by fishermen
BLACKFISH	<i>Tautoga onitis</i>	21 lbs. 2 oz.	30"	21¼"	Sheepshead Bay, L. I.	Nov. 30 1937	A. von Kleist	22½ lbs.	36½"	...	Near New York	July 1876	U. S. National Museum
BLUEFISH	<i>Pomatomus saltatrix</i>	25 lbs.	Est. 42"	...	Cohasset Narrows, Mass.	June 16 1874	L. Hathaway	27 lbs.	45"	...	Nantucket, Mass.	Sept. 1903	Nelson P. Emor
BONEFISH	<i>Albula vulpes</i>	13¾ lbs.	31"	17"	Bimini, Bahamas	Mar. 9 1919	B. F. Peek	Same	...	...	...	...	...
CERO (or Florida Kingfish)	<i>Scamberomus cavalla</i>	73½ lbs.	62"	32"	Bimini, Bahamas	Feb. 1935	Leonard B. Harrison	100 lbs.	...	...	...	...	Reported by Jordan & Evermann
DOLPHIN	<i>Coryphæna hippurus</i>	67 lb. 8 oz.	68½"	37½"	Oahu, Hawaii	Aug. 19 1940	Fred McNamara	Same	...	...	...	...	...
DRUM (Black)	<i>Pogonias cromis</i>	90 lbs.	...	...	Surf City, N. J.	June 21 1925	Capt. Jack Inman	140 lbs.	...	...	St. Augustine, Fla.	...	Reported by Jordan & Evermann
FLOUNDER (Summer)	<i>Paralichthys dentatus</i>	12 lbs.	...	...	Banks off New York	c. 1895	Fred Foster	26 lbs.	Est. 46"	...	Noank, Conn.	June	Reported by Goode in "Amer. Fishes"
JEWFISH	<i>Prometopops guttatus</i>	542 lbs.	...	...	Sarasota, Florida	May 1923	W. E. Lincoln	Same	...	...	...	...	...
MARLIN (Blue or Cuban Blue)	<i>Makaira nigricans ampla</i>	737 lbs.	157"	72"	Bimini, Bahamas	July 16 1941	J. V. Martin	Est. 1,200 lbs.	...	...	Havana, Cuba	Sept. 1937	Handled by fishermen
MARLIN (Pacific Black)	<i>Makaira nigricans maritima</i>	976 lbs.	152"	74"	Bay of Islands, N. Z.	Feb. 25 1926	Capt. Laurie Mitchell	Same	...	...	...	...	...
MARLIN (Silver or Tahitian Black)	<i>Makaira nigricans tahitiensis</i>	618 lbs.	...	...	Tahiti	March 1930	Zane Grey	Same	...	...	...	...	...
MARLIN (Striped)	<i>Makaira mitsukurini</i>	692 lbs.	161"	...	Balboa, California	Aug. 18 1931	A. Hamann	Same	...	...	...	...	...
MARLIN (White)	<i>Makaira albida</i>	161 lbs.	9' 3"	...	Miami, Fla.	Mar. 21 1938	L. F. Hooper	Same	...	...	...	...	...
SAILFISH (Atlantic)	<i>Istiophorus americanus</i>	106 lbs.	...	...	Miami Beach, Florida	1929	Wm. Bonnell	Same	...	...	...	...	...
SAILFISH (Pacific)	<i>Istiophorus greyi</i>	215 lbs.	11' 1"	...	Acapulco, Mexico	Sept. 20 1938	A. B. Pullen	Same	...	...	...	...	...
SAWFISH	<i>Pristis pectinatus</i>	1,300 lbs.	17' 4½"	...	Galveston, Texas	Sept. 1 1940	Ernie Reid	1,500 lbs.	18'	...	Aranas Pass, Tex.	May 23 1917	Handled by E. W. Brown
SHARK (Man-eater or White)	<i>Carcharodon carcharias</i>	1,919 lbs.	176"	66½"	Kangaroo Island, Aus.	May 12 1941	G. R. Cowell	2,176 lbs.	13' 3"	3' 0"	Cape Province, S. Africa	June 1928	W. R. Selkirk
SHARK (New Zealand Mako)	<i>Isurus paucus</i>	1,000 lbs.	144"	...	Mayor Island, N. Z.	Mar. 14 1943	D. B. H. Ross	Same	...	...	...	...	...
SHARK (Porbeagle or "Mako")	<i>Lamna</i>	1,009 lbs.	10' 6"	6'	Egmont Key, Fla.	Mar. 2 1936	Al. Hack	Same	...	...	...	...	...
SHARK (Thresher)	<i>Alopias vulpinus</i>	922 lbs.	...	...	Ouehel Bay, Bay of Islands, N. Z.	Mar. 21 1937	W. W. Dowling	Same	...	...	...	...	...
SHARK (Tiger)	<i>Galeocerdo tigrinus</i>	1,382 lbs.	13' 10"	7' 9"	Sydney Head, Australia	Feb. 22 1939	Lyle Bagnard	Same	...	...	...	...	...
SWORDFISH (Broadbill)	<i>Xiphias gladius</i>	860 lbs.	...	...	Tocopilla, Chile	April 28 1940	W. E. S. Tucker	Est. 1,000 lbs.	...	...	New England	...	Capt. Hillman
TARPON	<i>Tarpon atlanticus</i>	247 lbs.	80½"	...	Panuco R., Mexico	Mar. 24 1938	H. W. Sedgwick	Est. 350 lbs.	8' 2"	...	Hillsboro R. Inlet, Fla.	Aug. 6 1912	Netted by fishermen
TUNA (Bluefin)	<i>Thunnus thynnus</i>	927 lbs.	10' 3"	6' 8"	Ipswich Bay, Mass.	August 25 1940	Dr. John B. Vernaglia	1,800 lbs.	...	...	Wedgeport, N. S.	1934	Harpooned by fishermen
TUNA (Dog-toothed)	<i>Gymnosarda nana</i>	151 ½ lbs.	...	...	Tahiti	Feb. 15 1936	Dr. Serge Rabinovitch	Same	...	...	...	...	...
WAHOO	<i>Acanthocybium solandri</i>	133 lb. 8 oz.	53"	31"	Greer Cay, Bahamas	June 16 1943	K. L. Ames, Jr.	Same	...	...	...	...	...
WEAKFISH	<i>Cynoscion regalis</i>	17 lbs. 8 oz.	46"	19"	Mulla River, New Jersey	Sept. 30 1944	A. Wels-Lecker, Jr.	30 lbs.	...	...	New Jersey	...	Reported by Goode in "Amer. Fishes"
WEAKFISH (Spotted)	<i>Erisicton nebulosus</i>	12 lbs. 12 oz.	35"	16½"	Cocoa, Florida	Mar. 7 1944	A. W. Rowe	13½ lbs.	...	...	Indian River, Fla.	...	Reported by Jordan & Evermann
YELLOWTAIL	<i>Seriola dorsalis</i>	88 lbs.	64"	31"	Bermagui, Australia	Apr. 23 1938	Clive Firth	Same	...	...	...	...	...