(No Model.)

G. RITTER.

FISHING TACKLE.

No. 342,844. Patented June 1, 1886.

Fig. 1.

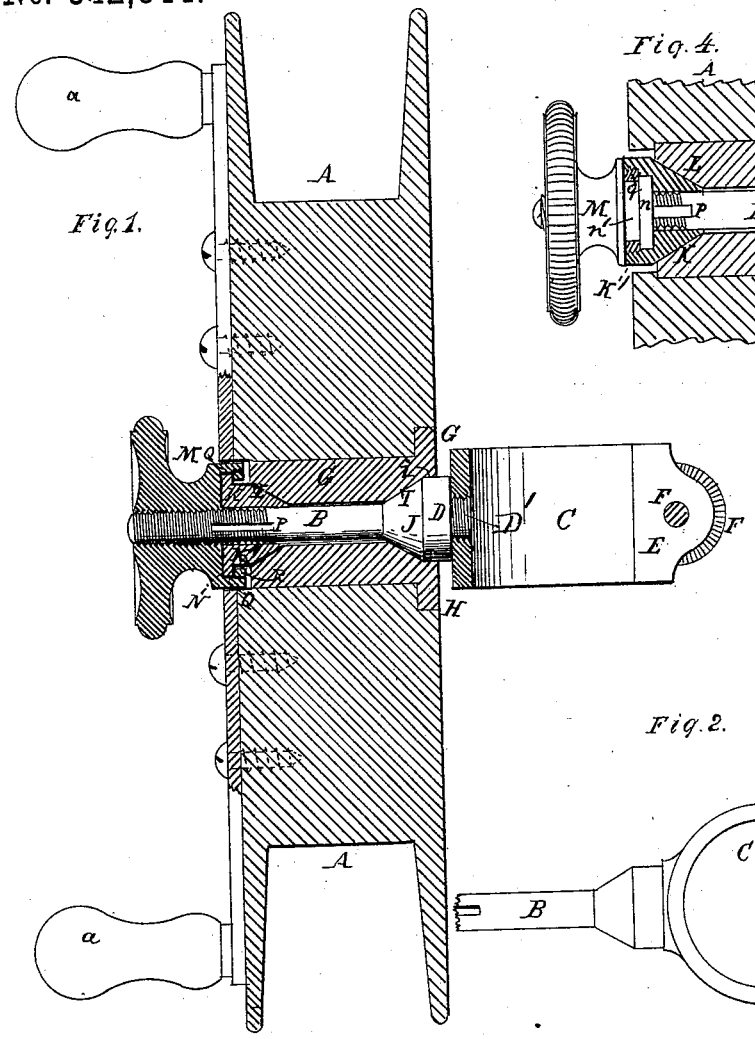
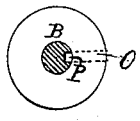


Fig. 4.

Fig. 2.

Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

GUSTAV RITTER, OF NEW YORK, N. Y.

FISHING-TACKLE.

SPECIFICATION forming part of Letters Patent No. 342,844, dated June 1, 1886.

Application filed December 3, 1884. Renewed April 5, 1886. Serial No. 197,925. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV RITTER, a citizen of the United States of America, and a resident of the city, county, and State of New York, have invented a new and useful Improvement in Fishing Reels and Tackle, of which the following is a specification.

The invention relates to improvements in fishing-reels, and in the means whereby they are secured to fishing-rods; and it consists in the construction and novel arrangement of parts hereinafter described, and pointed out in the claims appended.

In the drawings, Figure 1 represents a diametrical section of a fishing-reel having a clamp-sleeve for attachment to the rod secured to it. Fig. 2 is a detail view of the clamp-sleeve attached to the reel-spindle. Fig. 3 shows a transverse section of the reel-spindle with parts connected therewith. Fig. 4 represents a sectional detail view of a modification of the device.

Referring to the accompanying drawings by letters, A designates the reel, of wood or other suitable material, provided with the usual handles, *a a*, and having the metal bushing G running transversely through its center, the bushing being provided on the side next the rod with a circumferential flange, H, which fits in a recess in the reel, and keeps the bushing in place. The bushing is somewhat shorter than the thickness of the reel, and has the ends of its bore countersunk, so as to form the conical recesses I and L, as shown, the recess I being adjacent to the rod, and having a cylindrical recess, *i*, at its base.

B is the reel-spindle, having formed upon it near its end next the rod the conical bearing-shoulder J, which enters the recess I, and the cylindrical portion D, which turns in the recess *i*. The opposite end of the spindle protrudes out of the reel, and is properly threaded to engage a threaded central opening in the nut M.

Q is an inwardly-standing flange on the inner surface of the nut M, which flange enters the central bore of the reel to the outer side of the end of the bushing.

K is a hollow conical piece of metal, adapted to fit in the recess L and surround and turn loosely on the spindle B. The piece K has a central cylindrical part, K′, and a circumferential flange, N, on its outer end, which fits within the flange Q of the nut and rests against the inner surface of the latter, being held there by a ring, R, secured within it against the inner surface of the flange Q. The piece K is prevented from rotating on the spindle B with the nut M by a longitudinal slot, P, made in the spindle, and a pin, O, entering said slot from the piece, as shown in detail, Fig. 3.

D′ is a threaded nipple or stem, standing centrally from the base of the portion D of the reel-spindle, and C is a clamp-sleeve screwed to the same, as shown. If desired, the clamp-sleeve and reel-spindle may be permanently united. The side of the clamp-sleeve opposite its connection with the spindle is provided with the parallel outstanding ears E E, through proper openings in which passes the set-screw F, of usual construction.

In the modification shown in Fig. 4 the piece L has no flange N, but the nut M has a neck, *n′*, standing inward from its base, and a flange, *n*, on this neck. A ring, *g*, is secured on the neck, and is held in place by the flange *n*. The ring may be either soldered on the neck, or may be a cut ring and sprung in place, so as to be removable. The outer surface of the ring is threaded, and engages the threaded bore of the piece K, the flange *n* resting against a shoulder within the bore, as shown.

It is evident that the combination of the sleeve-clamp with the reel makes the latter adjustable upon the rod to any convenient or necessary point, and is a great advantage. It is also evident that by screwing or unscrewing the nut M the conical parts J and K are tightened or loosened in their bearing, so that the reel will rotate more or less freely as the line runs out, and the latter will give the necessary resistance to the fish.

Having described my invention, I claim—

1. The combination of a reel-bored transversely through its center, and having the ends of its bore formed into conical recesses with their bases outward, a spindle turning in said bore, provided with a conical enlargement on one end to fit into one of the conical recesses of the bore, and having its opposite end threaded, a conical piece turning loosely on the spindle and adapted to fit into the ad-

jacent conical recess of the reel, and a nut engaging the threaded end of the spindle and adapted to move the conical piece inward and outward, substantially as specified.

2. The combination of the reel, the bushing provided with conical recesses, the spindle provided with the conical enlargement, the conical piece turning freely on the spindle, and the nut adapted to move the said piece inward and outward on the spindle, substantially as specified.

3. The combination of the reel A, bushing G, provided with the conical recesses I and L, spindle B, provided with the conical enlargement J, conical piece K, provided with the flange N, and nut M, provided with the flange Q and ring R, all constructed substantially as and for the purpose specified.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnessess, this 14th day of November, 1884.

GUSTAV RITTER.

Witnesses:
JOHN ELLENBERGER,
CHARLES MEYER.