SILAS B. TERRY.

Improvement in Fishing Reels.

No. 121,020. Patented Nov. 14, 1871.

fig 1

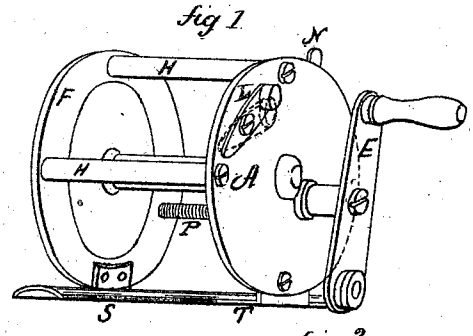


fig 2

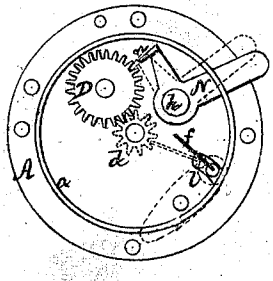


fig 3

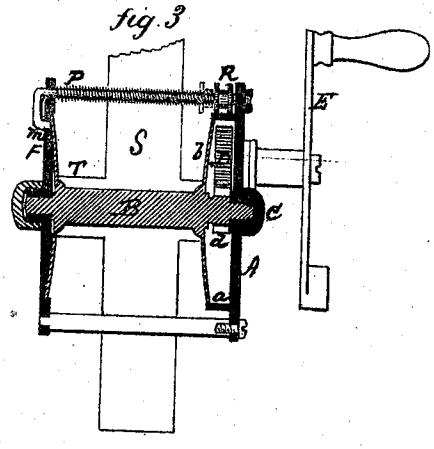
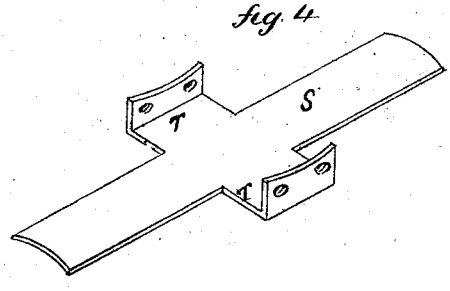


fig 4



Witnesses

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UNITED STATES PATENT OFFICE.

SILAS B. TERRY, OF WATERBURY, CONNECTICUT, ASSIGNOR TO TERRY CLOCK COMPANY, OF SAME PLACE.

IMPROVEMENT IN FISHING-REELS.

Specification forming part of Letters Patent No. 121,020, dated November 14, 1871.

To all whom it may concern:

Be it known that I, SILAS B. TERRY, of Waterbury in the county of New Haven and State of Connecticut, have invented a new Improvement in Fishing-Reels; and I do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents in—

Figure 1, a perspective view; Fig. 2, an inside view of the principal head; Fig. 3, a longitudinal central section; and in Fig. 4, the bridge detached.

This invention relates to an improvement in fishing-reels, the object being to simplify the construction and adjustment of the reel; and it consists in the several parts constructed and applied, as more fully hereinafter described.

Heretofore the head within which is arranged the gearing has been made from two plates or plate and cap, so as to leave a space between the two and the head of the spool inside the second plate.

To simplify this construction, I form the head A with an internal flange, *a*, the internal diameter of the said flange corresponding to the diameter of the head *b* of the spool, as seen in Fig. 3, so that the said head lying within the said flange, the spool B, being supported in the bearing C, forms a chamber within the said head A. On the shaft of the spool, within the said chamber, I fix a pinion, *d*, denoted in broken lines, Fig. 2, and within the same chamber a multiplying-wheel, D, upon the shaft of the crank E, so that by turning the said crank the spool is revolved accordingly. By this construction the second head or cap, or portion of the head, heretofore employed is dispensed with, and this constitutes the first part of my invention. The other head F is attached to the head A by rods or pillars H in the usual or any other convenient manner. As a click for the reel, in place of the lever and double-acting pawl, as heretofore constructed, I arrange upon the outside a lever, L, which extends through the plates, working in a slot, *l*, as seen in Fig. 2; and in this projection, within the chamber, I fix a metal spring, *f*, so that when the lever is pressed downward, as denoted in broken lines, Figs. 1 and 2, the spring *f* engages in the teeth of the pinion *d*, but so as to allow the turning of the spool in either direction, the spring yielding accordingly, the spool being proportionately retarded and the desired "click" produced by the spring. As a stop, by which to secure the spool in any position, I arrange within the chamber, on a fulcrum, *h*, a lever, N, extending up, as seen in Fig. 1, so that by the projection the lever may be moved back and forth. The other arm of the lever is provided with a jaw, *n*, which, as the lever is moved to the position denoted in broken lines, Fig. 2, will strike into one of the spaces in the wheel D and firmly lock and prevent the spool from turning until released by the return of the lever. As a frictional device I arrange a rod, P, by preference extending from one head to the other, as seen in Fig. 3, and through the outside of the head F turned down and its end *m* turned inward, a spring being arranged upon the rod, between the heads, the tendency of which is to force the end *m* against the spool to create a friction when desired to prevent the too easy turning of the spool. To throw off or adjust the pressure I arrange upon the rod P a nut, R, the rod and nut being correspondingly threaded, so that by turning the said nut the rod may be thrown to the left, removing or adjusting the pressure to the desired extent. By this arrangement the pressure is constant and even; and while I prefer the arrangement of the spring and nut described, the end *m* of the rod may be made to operate by any different but equivalent arrangement whereby an adjustable pressure is brought to bear thereon.

Heretofore the bridge has been formed by making a cross-bar extending from one head to the other and then riveting or soldering the bearing-plate thereto, or cast solid. By my invention this piece is constructed from a single piece of sheet metal struck into form, without soldering or brazing. S is the plate, from each side of which extends an arm, T, the extremes of these two arms turned up, as seen in Fig. 4, the length of the cross-piece T corresponding with the distance between the two heads so as to fit therein, and secured in place by screws or otherwise.

By these general improvements I am enabled to produce a better reel than has heretofore been done, and at a reduced cost of manufacture.

I claim—

1. The principal head A of a reel constructed

with an internal flange, *a*, having a spool-head arranged therein, substantially as described, in place of the plate or cap usually employed.

2. The lever L, extending through the head A, and provided with a spring, *f*, to act in connection with the pinion *d*, substantially as and for the purpose specified.

3. The lever N arranged within the chamber of the head, extending therefrom to afford a means of operating, and provided with a jaw, *n*, to engage with the pinion D, substantially as and for the purpose set forth.

4. The frictional device for fishing-reels, consisting of the projection *m*, to extend through the head of the reel, and combined with an adjustable spring-pressure, substantially as and for the purpose specified.

Witnesses: SILAS B. TERRY.

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