

(No Model.)

C. H. MILLER.
FISHING REEL.

No. 463,319.

Patented Nov. 17, 1891.

Fig. 1-

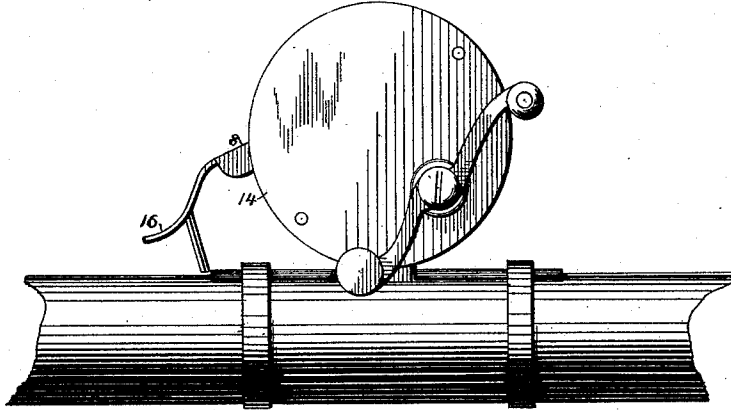


Fig. 2

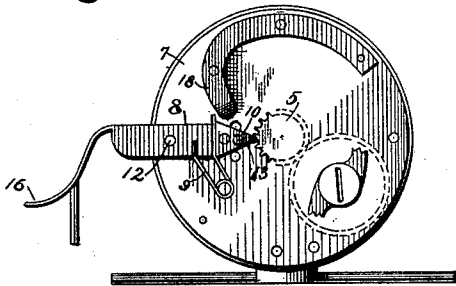


Fig. 3.

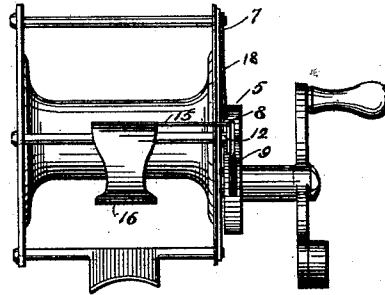
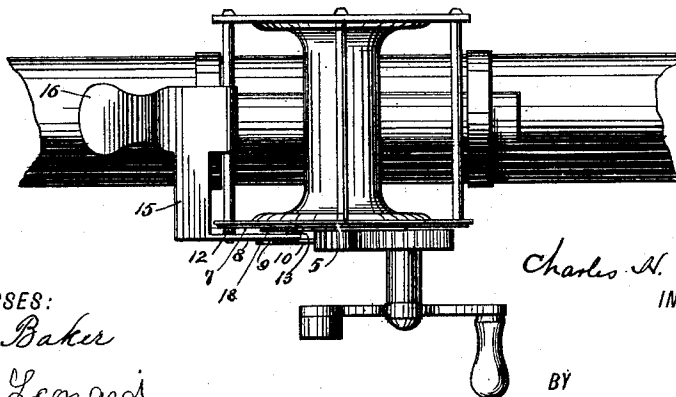


Fig. 4.



WITNESSES:

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CHARLES H. MILLER, OF FORT WAYNE, INDIANA.

FISHING-REEL.

SPECIFICATION forming part of Letters Patent No. 463,319, dated November 17, 1891.

Application filed March 18, 1891. Serial No. 385,326. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. MILLER, a citizen of the United States, residing at the city of Fort Wayne, in the county of Allen, in the State of Indiana, have invented certain new and useful Improvements in Fishing-Reels; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in fishing-reels which have attachments thereto known as the "drag" and the "click;" and its objects are to provide an improved construction whereby the click, the drag, and the free running of the reel shall be operated by one lever within easy and convenient reach of the operator without removing his hand from the pole to which the reel is attached and with the same hand which grasps the pole. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side view of a reel containing my devices attached to a pole, showing position of lever. Fig. 2 is a side view of the lever and its attachments in place on a reel, having its cap removed to show the mechanism. Fig. 3 is an end view of Fig. 2, and Fig. 4 is a top view of the reel attached to a pole and having the cap removed.

Similar numerals refer to similar parts throughout the several views.

The lever 8 is pivoted upon the face-plate, preferably upon a projection of one of the brace-rods 12 of the reel inside of its cap 14, one end extending outside the reel-line nearly parallel with the pole. An arm 15 extends out laterally from the outside end of the lever 8 to a thumb-piece 16, which is extended to and hinged upon the brace-rod 12, as shown in Fig. 3, for convenience in operating the lever. The other end of the lever 8 extends near to the central cog-wheel 5 of the reel, but does not impinge against it. On this end of the lever I attach any suitable clicking device. A preferred construction of such device is to pivot a triangular piece of metal 10 on one side of the lever, so that one of its angles shall extend

into or between the cogs of the central wheel 5. To hold it in place against the cogs, I attach a spring 9, bearing against it and preferably consisting of a spring-wire 9, formed in loop shape with a spiral at the lower end of the loop. One of the upper ends of the loop is firmly attached to the lever 8 and the other is left free for motion and impinges against one of the sides of the triangular click 10. The tension of the spring is adjusted to keep this click in position with its point between the cogs with sufficient force to cause a clicking sound when the point is moved in and out of the cogs by the revolution of the wheel 5. The drag is in the usual form and connected to the other parts of the reel in the usual manner in this class of reels. The lower end 18 of this drag I form curved shape, extending so as to be within reach of the lever, which, moving over it, presses it down against the surface of the plate 7, causing its pin to impinge against the spool and the wheels to run heavily, and in technical phrase the drag is then "on," such being the usual construction. As now constructed the drag and the click are operated by separate push-buttons upon the outside of the cap 14, which necessitates using both hands—one to hold the pole and the other to adjust the reel—to operate them, and more or less distracts the attention of the fisherman from watching his line and the movements of the fish. My device obviates this difficulty.

On the inner side of the lever 8, at its end, I attach a short dowel-pin 13, and in the face-plate 7 I make three dowel-holes for this pin to rest in, arranging their location so that when the dowel-pin 13 rests in the center dowel-hole the end of the click 10 rests between the cogs of the wheel 5 in the position to be operated, and when the lever is raised up, so that the dowel-pin rests in the upper dowel-hole, the end of the lever is thereby moved over upon the end 18 of the drag, pressing it down, and thereby putting on the drag, and when the lever 8 is lowered, so that the dowel-pin rests in the lowermost dowel-hole, both the drag and the click are then entirely out of connection, so that the reel runs freely. The lever 8 from the point of its pivoting upon the brace 12 to its end where this dowel-pin is placed has a slight spring, whereby the

dowel-pin remains fixed in its hole, so that some force is required at the other end of the lever to cause it to raise out and pass to another position. There is a slot cut in the cap 5 14 at the place where the lever passes through it opposite the brace 12 of sufficient length to permit and limit the raising and lowering of the lever 8, as described, and its width is adjusted to permit such movement.

10 The operation is as follows: The reel being in place on the pole, the operator grasps the pole with one hand near the reel and in position to place his thumb upon the thumb part of the arm 16. By pressing down upon 15 this thumb part until the lever is raised, so that the dowel-pin rests in the upper dowel-hole, its end impinges upon and presses down the end 18 of the drag and remains in that position, thus putting on the drag, the slot 20 in the cover limiting the further motion of the lever. By raising the thumb part up until the dowel-pin of the lever strikes in the center one of the dowel-holes and rests there the click 10 is thereby held in place, as shown 25 in Fig. 1, and the click is then on. Raising the thumb part still higher, moving the lever until the dowel-pin 13 rests in the lower dowel-hole, the click is thereby thrown down and out of connection and the reel runs free, the 30 slot in the cap limiting and stopping the lever at this place.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a fishing-reel having a cog-wheel upon 35 its center axle and the usual drag attachments, the combination of a lever pivoted upon the face-plate of the reel, one end extending outside the reel nearly parallel with the pole to which the reel is attached and near thereto, 40 the other end extending near to the cog-wheel and provided with a dowel-pin upon its inner side and adapted to press inwardly, a clicking device attached to the end of the lever and adapted to engage and be operated by 45 such cog-wheel when it is revolved, a curved end upon the drag-lever extending it near to the said lever and adapted to be operated by the end of the lever passing upon it, three 50 dowel-holes in the face-plate, the upper one adapted to receive the dowel-pin of the lever and hold the lever in position over the said curved end of the drag, the center one adapted to receive the said dowel-pin and hold the 55 lever and the click attached thereto in position for the click to be operated, and the third dowel-hole adapted to receive the said dowel-pin and hold the lever and its attachments 60 out of connection with the drag and the cog-wheel.

In testimony whereof I hereunto subscribe my name, in the presence of two witnesses, this 7th day of March, A. D. 1891.

CHARLES H. MILLER.

Witnesses:

JOHN W. MATHEWS,
H. C. HARTMAN.