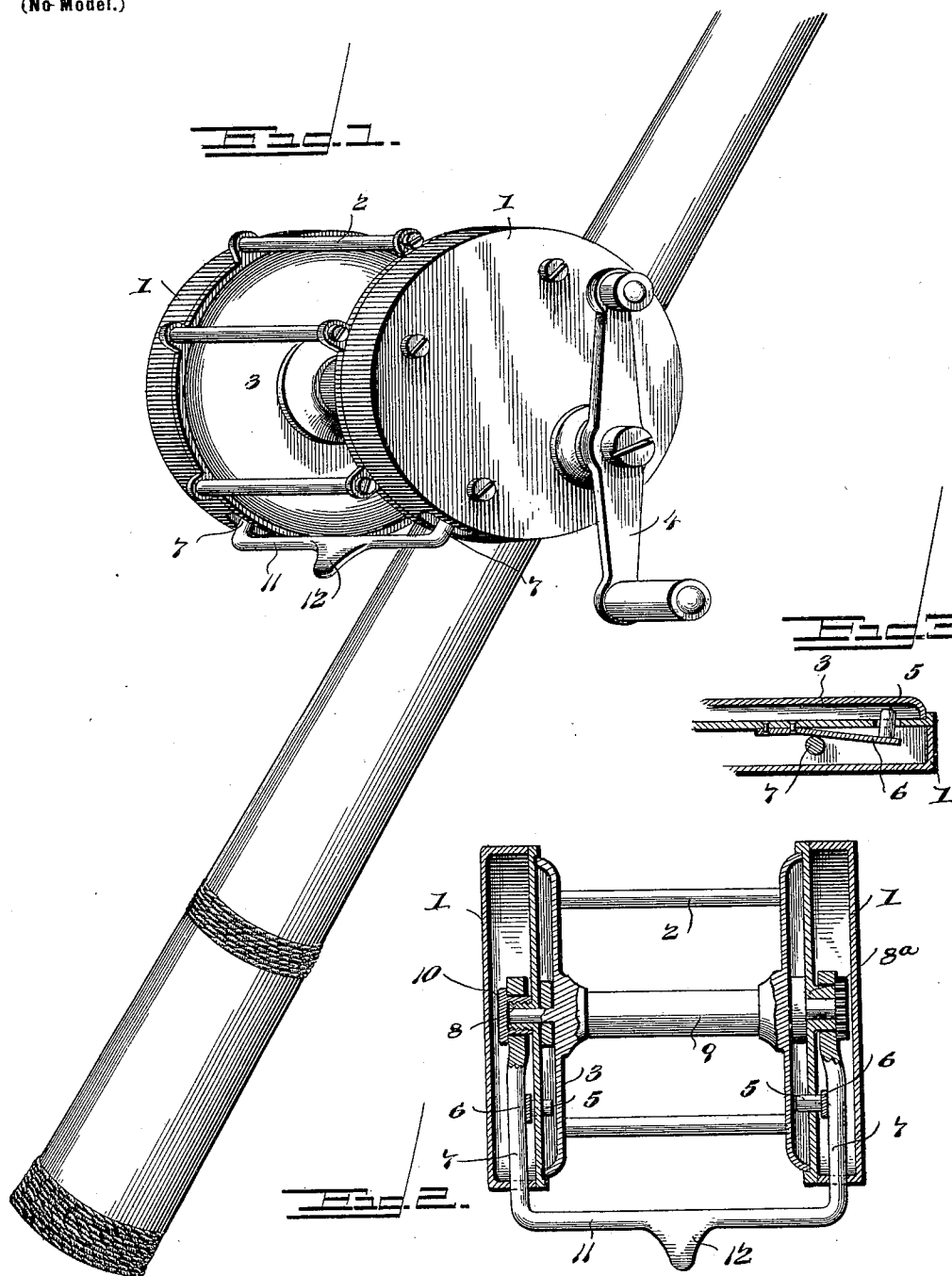


No. 623,718.

Patented Apr. 25, 1899.

H. W. HOWE.
FISHING REEL BRAKE.
(Application filed Mar. 11, 1898.)

(No Model.)



Witnesses

E. F. Stewart
C. E. Howe

By his Attorneys,

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UNITED STATES PATENT OFFICE.

HENRY W. HOWE, OF MEXICO, MEXICO, ASSIGNOR OF ONE-HALF TO
HAMILTON S. DINKINS, OF SAME PLACE.

FISHING-REEL BRAKE.

SPECIFICATION forming part of Letters Patent No. 623,718, dated April 25, 1899.

Application filed March 11, 1898. Serial No. 673,534. (No model.)

To all whom it may concern:

Be it known that I, HENRY W. HOWE, a citizen of the United States, residing at the city of Mexico, in the Republic of Mexico, have invented a new and useful Fishing-Reel Brake, of which the following is a specification.

My invention relates to fishing-reels, and particularly to a brake for use in connection with fishing-reels, the same being so constructed and arranged as to give the fisherman complete control of the line-spool without changing his ordinary grasp upon the pole, whereby the resistance offered by the spool may be accurately controlled to suit the strength of the fish and of the line.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a reel having a brake constructed in accordance with my invention. Fig. 2 is a longitudinal section of the same, taken in the plane of the brake-arms. Fig. 3 is a detail sectional view in the plane of one of the brake-shoe-carrying arms.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The brake embodying my invention is applicable to reels of different constructions with but slight variation in the construction either of the reel or brake; but in order that the application of the invention may be fully understood I have illustrated the same in connection with a reel having heads 1, connected by the usual cross bars or braces 2, a line-spool 3, mounted between said heads, an operating-crank 4, and means for communicating motion from the spindle of the crank to that of the spool.

In order that braking pressure may be so applied as to avoid straining the bearings of the line-spool and causing irregular wearing thereof, I construct the brake-shoe 5 in duplicate, the same operating, respectively, through the heads or opposite plates of the reel-frame and bearing against the exterior surfaces of the spool-flanges, said brake-shoes, which in the construction illustrated consist of studs

or pins, being carried by spring supporting-arms 6, which are preferably attached permanently to the heads of the frame and incline outwardly or from said heads toward their free brake-shoe-carrying extremities. Thus the brake-shoes are yieldingly held out of contact with the exterior surfaces of the spool-flanges, but are adapted by pressure applied to the exterior surfaces of the supporting-arms to be moved inwardly to bring them in contact with said flanges with the desired force, and thus cause more or less resistance to the rotary movement of the spool. The means which I have illustrated for causing simultaneous operation of these brake-shoes, which are disposed longitudinally opposite each other in order to bear equally in opposite directions upon the spool-flanges at longitudinally-alined points, consists of brake-arms 7, fulcrumed upon the reel-frame heads, preferably coaxially with the line-spool, as upon the journal-boxes 8 and 8^a, in which the reel-spindle 9 is mounted, the journal-box 8 being fitted with a cap 10, whereby the eye at the inner end of the brake-lever mounted thereon is held from displacement. These brake-levers are connected by a cross-bar 11, parallel with the axis of the line-spool and located beyond the edges of the frame-heads, whereby the cross-bar, together with the brake-arms, constitute a yoke. This cross-bar may be provided at an intermediate point with a thumb rest or button 12 to receive the pressure of the thumb of that hand by which the pole is grasped. Thus in operation the button or finger-rest, which is connected with both of the brake-levers, may be depressed by the thumb of the fisherman's hand to apply both of the brakes simultaneously, and as the brake-shoes are arranged to operate in alinement in opposite directions an equal pressure is applied to each of the spool-flanges, whereby the twisting or cramping of the spool in its bearings is avoided. The inclined yielding arms by which the brake-shoes are supported are disposed in the paths, respectively, of the brake-arms, and the brake-arms are preferably cross-sectionally rounded, whereby when the pressure-button is released the brake-arms are elevated or are moved in the opposite direction to that necessary to apply

the brakes by the outward pressure of the inclined surfaces of the supporting-arms upon the rounded surfaces of the brake-arms. Thus the springs by which the brake-shoes are yield-
 5 ingly held in their inoperative positions also serve to return the brake-arms to their normal or inoperative positions, while pressure upon the rest or button promptly brings the inner ends of the brake-shoes into contact
 10 with the exterior surfaces of the spool-flanges.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this
 15 invention.

Having described my invention, what I claim is—

1. In a fishing-reel, the combination with a line-spool, of duplicate spring-repressed
 20 brake-shoes arranged in operative relation with the spool for movement in opposite directions toward the same, and connected brake-arms arranged in operative relation with the brake-shoes, for simultaneously actuating the
 25 same, substantially as specified.

2. In a fishing-reel, the combination with a line-spool, of duplicate spring-supported brake-shoes arranged in operative relation with the extremities of the spool, and con-
 30 nected brake-arms arranged in operative relation with the brake-shoes for simultaneously actuating the same, to apply pressure in opposite directions to the spool, substantially as specified.

3. In a fishing-reel, the combination with a line-spool, of brake-shoes having inclined spring-supporting arms, and connected swing-
 35 ing brake-arms in the paths of which the brake-shoe-supporting arms are respectively arranged, substantially as specified.

4. In a fishing-reel, the combination with a line-spool, of brake-shoes having supporting devices provided with inclined faces, and

yieldingly held in their normal positions to maintain the brake-shoes out of contact with
 45 the line-spool, and connected brake-arms in the paths of which the inclined faces of the brake-shoe-supporting devices are respectively arranged, substantially as specified.

5. In a fishing-reel, the combination with
 50 a line-spool, of brake-shoes having inclined yielding supporting-arms, swinging brake-arms in the paths of which the supporting-arms are respectively arranged, and a cross-bar connecting the brake-arms for simultane-
 55 ous movement, substantially as specified.

6. In a fishing-reel, the combination with a line-spool, of brake-shoes having inclined yielding supporting-arms, swinging brake-
 60 arms in the paths of which said supporting-arms are respectively disposed, and a single pressure-button or rest operatively connected with both brake-arms, substantially as speci-
 fied.

7. In a fishing-reel, the combination with
 65 a line-spool, of brake-shoes having inclined yielding supporting-arms for normally maintaining said shoes out of contact with the line-spool, and cross-sectionally rounded
 70 brake-arms mounted for swinging movement upon the reel-frame and having superficial contact with the inclined surfaces of the sup-
 porting-arms, and means for simultaneously actuating the brake-arms to depress the
 75 brake-shoes, said supporting-arms being adapted, when the brake-arms are relieved of pressure, to return the latter to their normal or inoperative positions, substantially as specified.

In testimony that I claim the foregoing as
 80 my own I have hereto affixed my signature in the presence of two witnesses.

HENRY W. HOWE.

Witnesses:

C. H. MY. AGRAMONTE,
 T. W. WAMPLER.