

Fishing-Reels.

No. 134,917.

Patented Jan. 14, 1873.

Fig. 1.

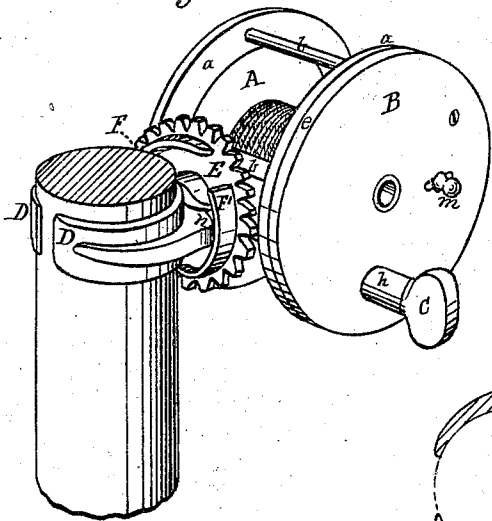


Fig. 2.

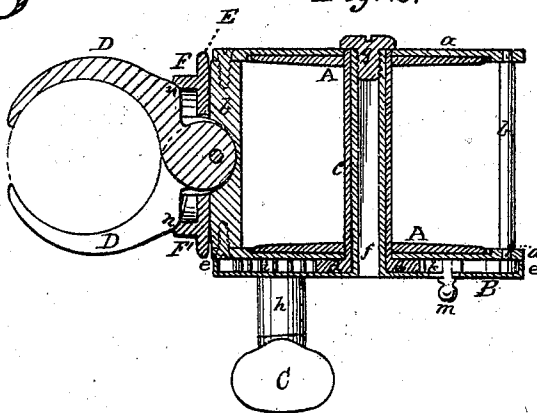


Fig. 3.

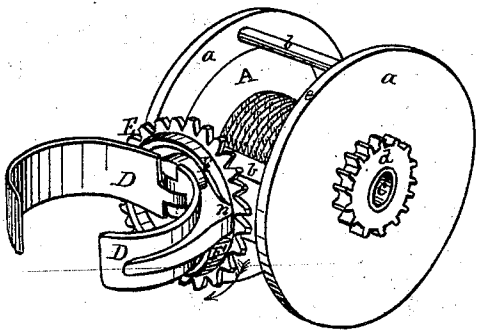
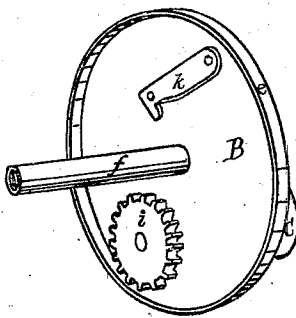


Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE MOONEY, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO HIMSELF AND JAMES SHAW, JR., OF SAME PLACE.

IMPROVEMENT IN FISHING-REELS.

Specification forming part of Letters Patent No. 134,917, dated January 14, 1873.

To all whom it may concern:

Be it known that I, GEORGE MOONEY, of the city and county of Providence, in the State of Rhode Island, have invented a new and useful Fishing-Reel.

My invention consists, first, in a novel combination and arrangement of the crank-pin, gearing, and reel, whereby the latter may be at any time operated in winding without special manipulation preparatory thereto, and also be capable of delivering the line at any desired speed without any objectionable movement of any of its exterior parts; and, secondly, in a novel combination of a curved jaw-clamp and cam-surfaces, whereby the reel may be readily attached to or detached from the fishing-rod; and I do hereby declare that the following specification, taken in connection with the drawing furnished and forming a part of the same, is a clear and true description thereof.

Referring to the drawing, Figure 1 represents, in perspective, one of my reels as if attached to a fishing-rod. Fig. 2 represents the same in horizontal cross-section. Fig. 3 represents the same detached from the pole and with its crank-plate removed. Fig. 4 represents the crank-plate removed and reversed so as to exhibit its interior.

A denotes the reel proper; it is of the usual spool-like character, and is mounted in a frame composed of two circular recessed sides *a* and several connecting-bars *b*. The axle *c* of the spool is a hollow shaft, and one of its ends projects through one of the recessed sides *a*. To the projecting end of this shaft *c* a pinion, *d*, is secured. B denotes the crank-plate; it is in this instance circular in form, and in size corresponds with the sides *a* of the frame. It is provided with a flange, *e*, which, when the crank-plate is in position, causes an annular recess between the inner surface of the crank-plate and the adjacent surface of the reel-frame side *a*. The crank-plate is rigidly attached to a hollow shaft, *f*, which, when in position, passes through the spool-shaft or axle *c*, and is secured therein by a screw, *g*, entering from the opposite side of the reel. C denotes the crank-pin; it is loosely fitted to the crank-plate, so that it can freely revolve independent of it, and is provided with a loosely-

fitting sleeve, *h*, which prevents any undue rocking movement thereof. The inner end of the crank-pin is rigidly attached to a pinion, *i*, which is fitted to engage with the pinion *d*, and corresponds therewith in size and teeth in this instance. A stop, *k*, is attached to the inner face of the crank-plate and provided with a knob, *m*, which projects outward through a slot in the crank-plate. This stop is so set with relation to the pinion *d* that it can, from the exterior, be made to engage with the teeth of the said pinion, and form a temporary union between it and the crank-plate when desired.

When the several parts are in position, as shown in Figs. 1 and 2, the reel can be rotated, if desirable, by three distinct and separate movements and operations, which will be described as follows: First, by simply turning the crank-pin after the manner of a thumb-screw, by which, to every revolution of the pin, one revolution of the pinions and the reel will be effected; secondly, by causing the stop *k* to engage with the pinion *d*, which will unite the reel, the pinions, the crank-plate, and the crank-pin, practically, into one piece, and, therefore, by every turn of the crank-plate, the reel will be rotated once; thirdly, (which is the most desirable method,) by disengaging the stop from the pinion *d* and rotating the crank-plate by the crank-pin, and preventing the latter from revolving by the grasp thereon, the result will be two complete revolutions of the reel to every single revolution of the crank-plate. When allowing a light fish to run, the crank-plate will not revolve, but the crank-pin only will make one revolution to every turn of the reel. When it is desirable to "snub" a light fish while running, it can be done by momentary grasps of the crank-pin, and, as soon as direction is changed, the slack can be rapidly drawn in. When it is desirable to hold the line in check the stop *k* may be put into contact with the pinion *d*; by the holding the thumb of the left hand, for instance, in contact with the crank-pin, all movement of the reel can be prevented. If a run with a heavy fish is desired while the stop is so engaged, it may be permitted, and the crank-plate will then be rotated. About twice as much draft in power on the line is requisite for rotating the reel and crank-plate as is re-

quired for simply rotating the reel and crank-pin independent of the crank-plate. The second part of my invention consists in a novel clamp by which the reel may be secured to the fishing-rod. My improved clamp consists of a pair of semicircular jaws, D, which are pivoted to one side of the reel-frame, and arranged to swing on their pivot in a plane parallel with the axis of the reel. Each jaw, near its pivoted end, is provided with an abutment, *n*. It is desirable that each jaw be lined with leather or rubber, in order that a firmer hold may be secured between the rotating clamp and rod than can be maintained with the metal surface alone. E denotes a cam-plate, the eye of which encircles the shanks of both jaws between their pivot and their abutments *n*, and can be freely rotated thereon; it is provided with a serrated edge, in order that it may the more readily be grasped between the thumb and fingers. Projecting outward from the face of the cam-plate, at right angles thereto, are two semi-annular edge-cams F and F'. Each edge-cam widens gradually from one end to the other, and the end of one is adjacent to the beginning of the other, with space enough between them to receive the abutments *n* on the jaws D. The operation of the clamp will be readily understood by reference to Fig. 3. The jaws are represented as if extended; the abutments *n* are between the ends of the edge-cams F and F'. By turning the cam-plate E in the direction of the arrow the edge-cams, coming in contact with the abutments *n*, bring the outer ends of the jaws toward each other, and cause them to grasp with firmness anything which may be interposed between them.

It will be readily observed that the combi-

nation of reel, crank-plate, crank-pin, and pinions herein shown can be advantageously employed in connection with light derricks, log-lines, and sounding-lines, or in connection with any lines or halliards which are to be rapidly drawn in or paid out.

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

1. The combination of a reel mounted in a suitable frame, and provided with a pinion secured to its axis, a crank-pin provided with a pinion rigidly attached thereto, and a rotating crank-plate revolving on an axial line common to the reel, and carrying the crank-pin and its pinion, substantially as described, whereby the reel may be operatively revolved at a speed greater than that at which the crank-plate is revolved, and also whereby the motion of the reel may be reversed without consequent movement of the crank-plate, as and for the purposes specified.

2. The combination of the reel, rotary crank-plate, crank-pin, connecting-pinions, and the stop *k*, whereby the reel and crank-pin may be united and rotated at the same rate of speed, and possess no capability of movement in either which shall be independent of the other, as and for the purposes specified.

3. The combination, with the reel, of the semicircular jaws and the rotating cam-plate, substantially as described, whereby the jaws are made to securely compress a rod when interposed between them, as and for the purposes specified.

GEORGE MOONEY.

Witnesses:

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