

L. T. DICKSON.
Fishing-Reel.

No. 214,495.

Patented April 22, 1879.

Fig. 1.

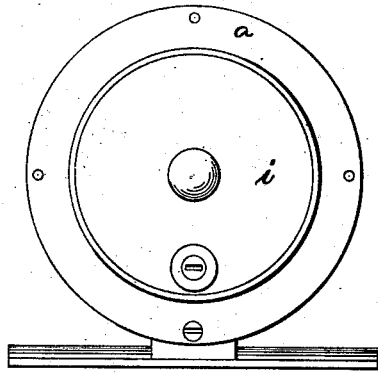


Fig. 2.

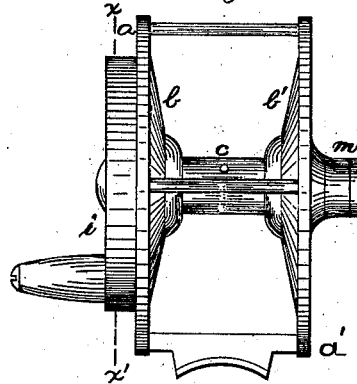


Fig. 3.

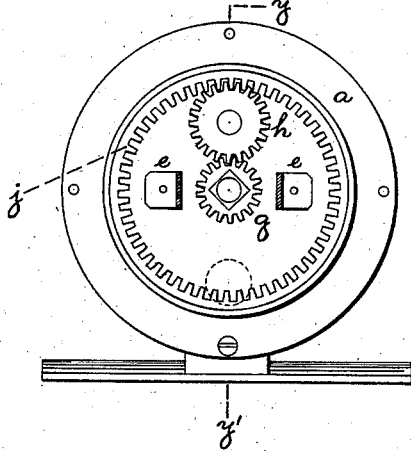


Fig. 4.

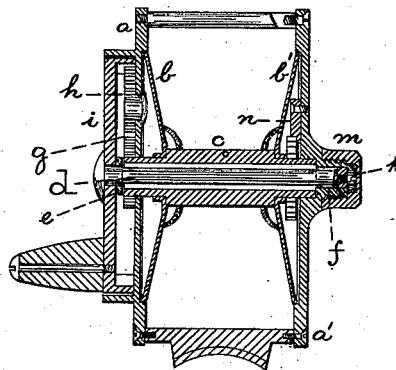
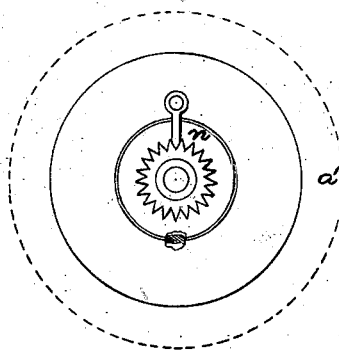


Fig. 5.



Witnesses:

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L. TAYLOR DICKSON, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN FISHING-REELS.

Specification forming part of Letters Patent No. **214,495**, dated April 22, 1879; application filed March 13, 1878.

To all whom it may concern:

Be it known that I, L. TAYLOR DICKSON, of Philadelphia, Pennsylvania, have invented an Improvement in Fishing-Reels, of which invention the following is a specification.

The objects of the said invention are, first, to be enabled to give the spool-drum a rapid rotary motion by a comparatively small movement of the crank; second, to avoid friction between the drum and the driving-shaft; third, to have the exterior of the reel free from all projections, which might entangle the fishing-line.

The first of these objects is effected by multiplying-gearing; the second, by making the driving-shaft of less diameter than the diameter of the drum, and giving said shaft bearings that form no part of the spool; and the third by constructing the crank in the form of a cap, which forms a part of the driving-gears, and at the same time covers in the other driving mechanism, all as hereinafter set forth.

In the drawings, Figure 1 is a side elevation of the reel; Fig. 2, a front elevation; Fig. 3, a section on the line *x x'* of Fig. 2; Fig. 4, a diametrical section on the line *y y'* of Fig. 3; Fig. 5, a sectional elevation of the click end of the reel.

a and *a'* represent the frame-plates; *b* and *b'*, the spool-heads; *c*, the spool-drum; *d*, the driv-

ing-shaft, which passes through the spool-drum and is free from contact with it, having bearings at one end in a bracket, *e*, Figs. 3 and 4, and at its other end in the frame-plate *a'* at *f*, Fig. 4. *g*, Figs. 3 and 4, is a gear-wheel rigidly attached to the end of the spool-drum *c*. *h* is an intermediate gear-wheel, having a bearing in the frame-plate *a*. *i* is a plate rigidly attached to the shaft *d*. It is constructed so as to form at its periphery, inside, the internal gear, *j*, which engages the gear *h*. The plate *i* covers in the described gearing and forms the crank.

The shaft *d* is secured in its place with a screw, *k*, which is inclosed by the screw-cap *m*, as shown.

By the described construction the exterior of the reel is freed from all projections which might entangle the line.

n, Fig. 5, is the ordinary click-movement.

I claim—

The combination, with the frame *a a'*, of spool *b c b'*, shaft *d*, cap *i*, and the multiplying-gearing, all constructed, arranged, and operating substantially as set forth.

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Witnesses:

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