

(No Model.)

T. H. CHUBB.

FISHING REEL.

No. 282,270.

Patented July 31, 1883.

Fig. 1.

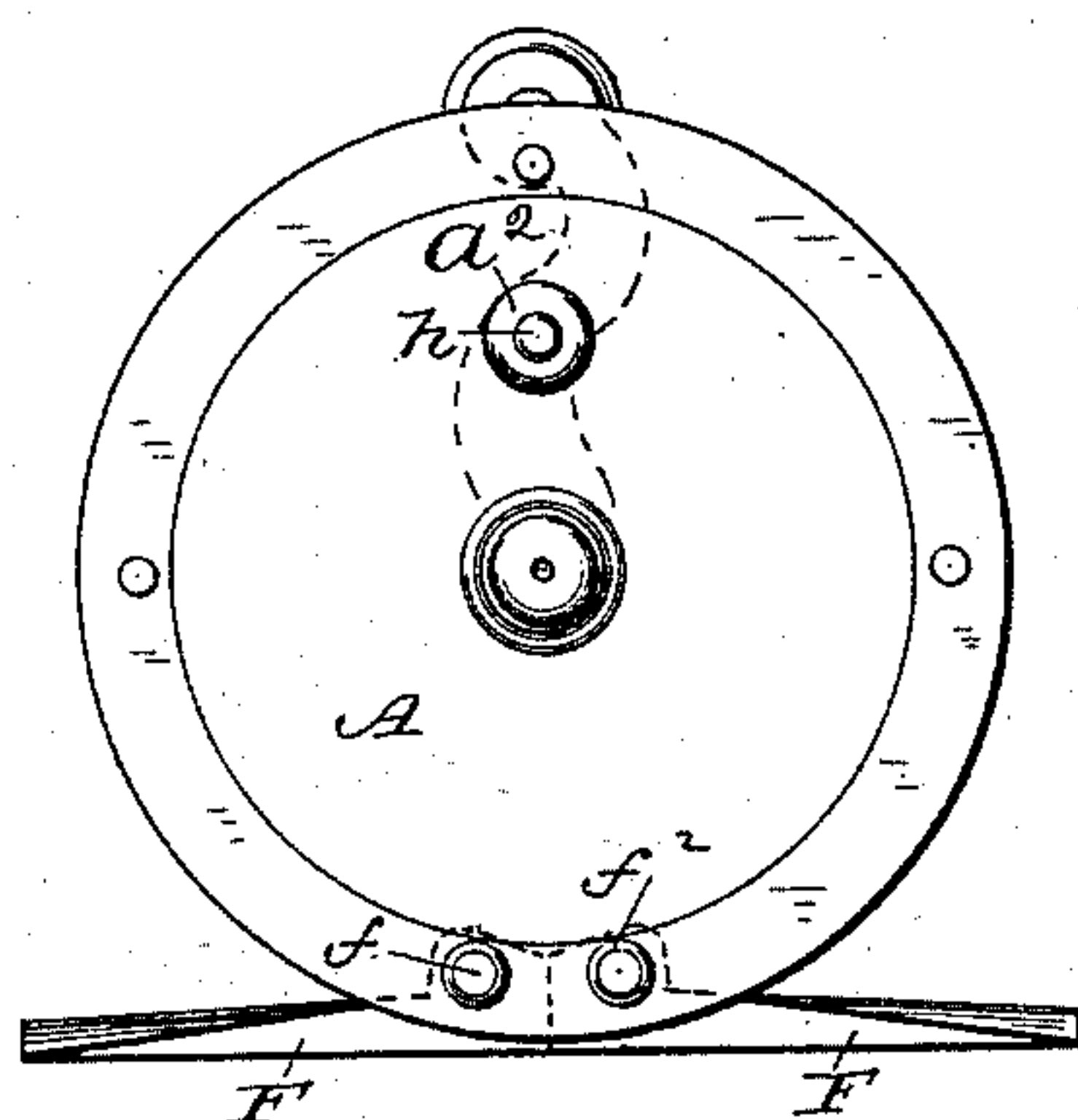


Fig. 2.

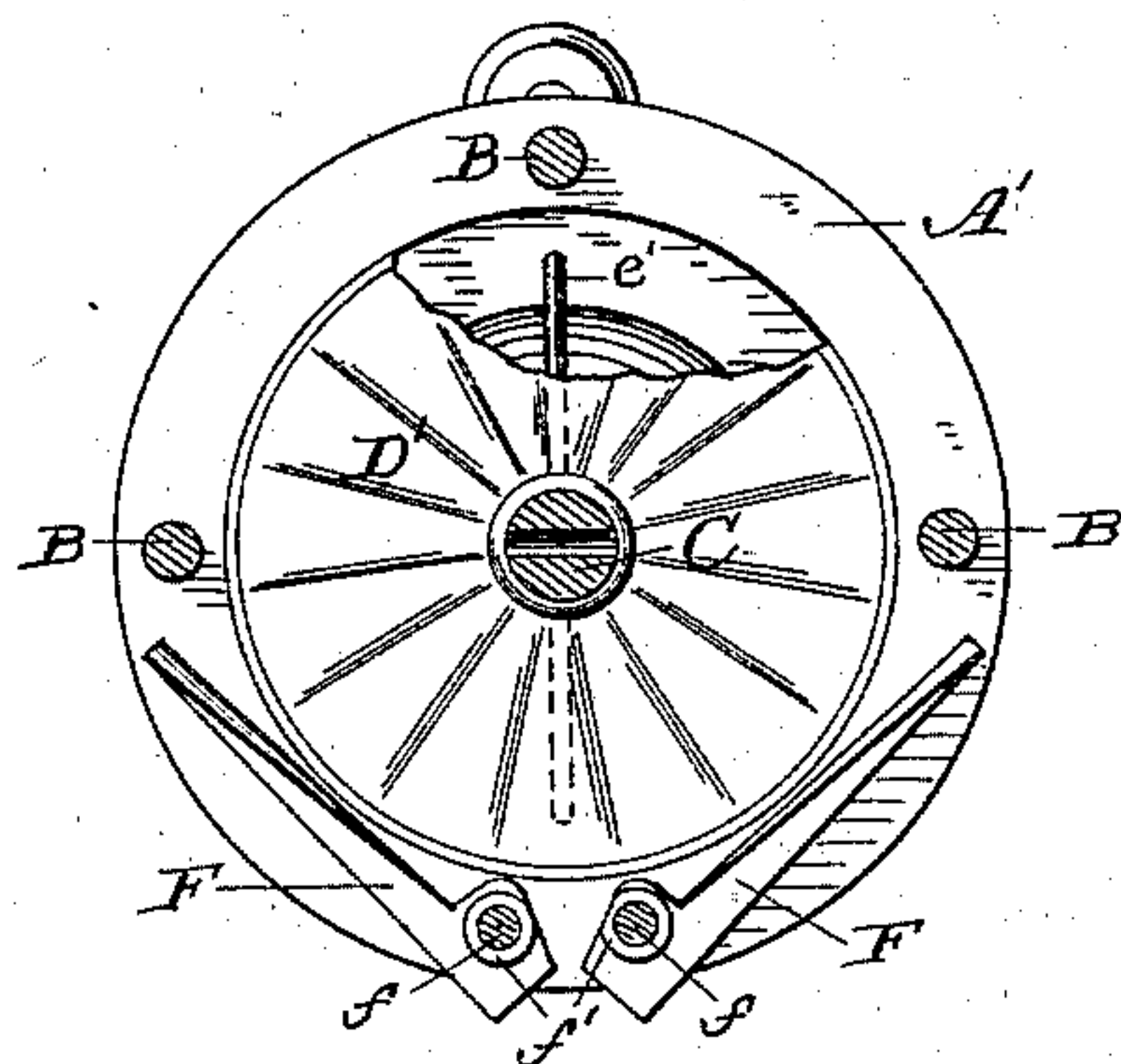


Fig. 3.

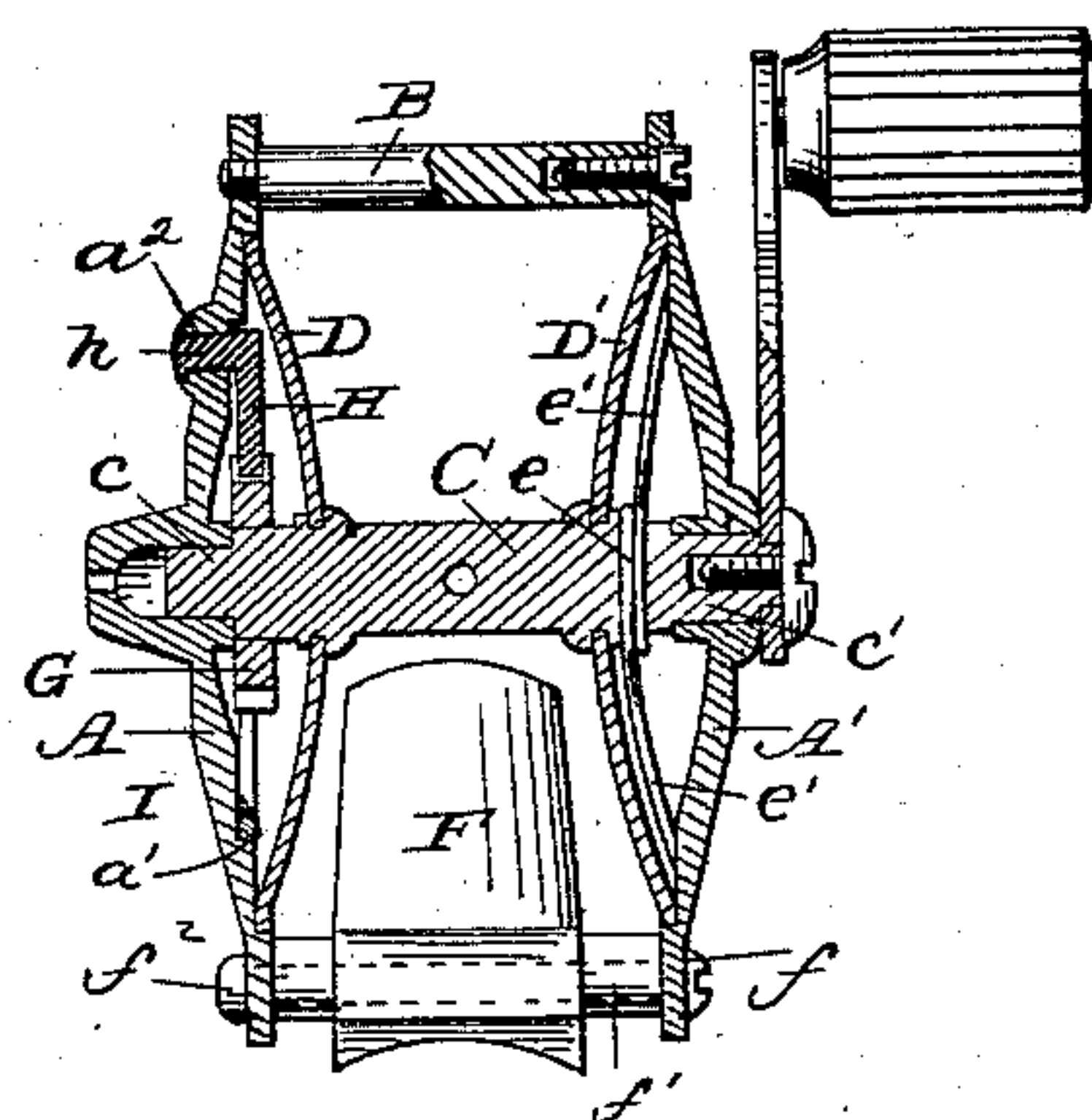


Fig. 4.

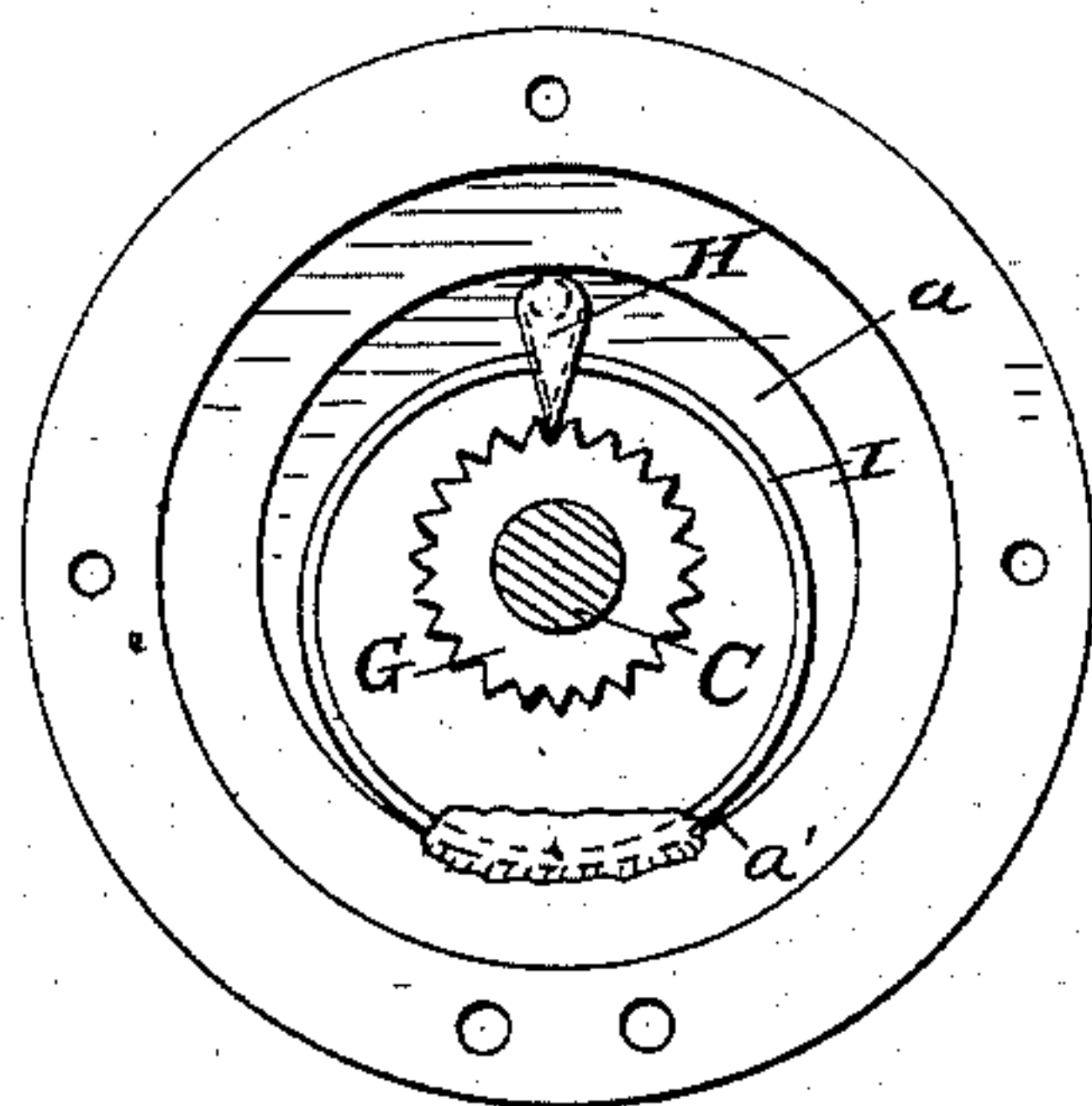


Fig. 5.

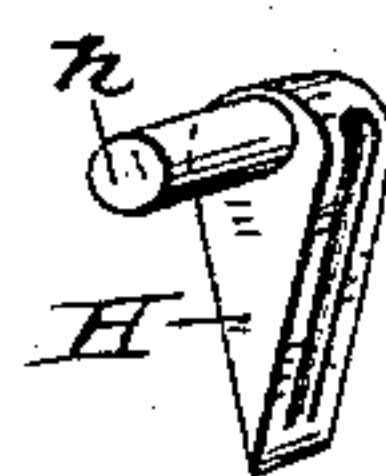
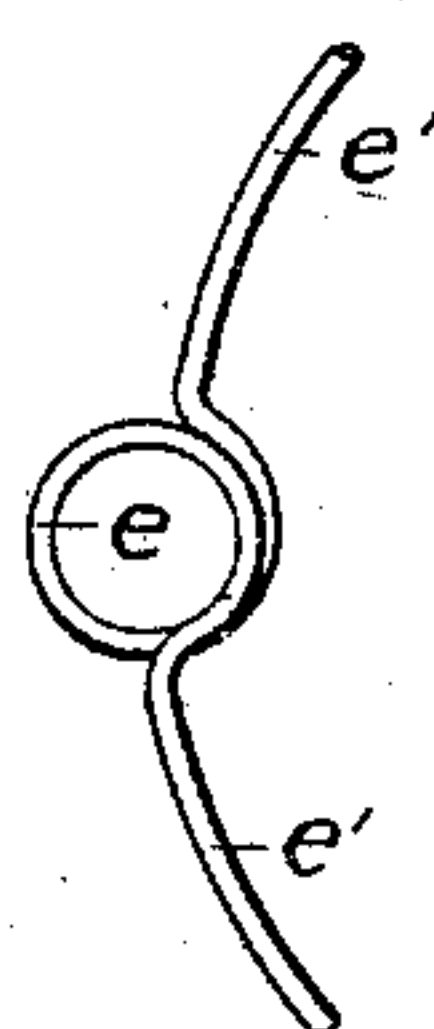


Fig. 6.



Witnesses:

A. L. Low  
J. S. Barker.

Inventor;

Thomas H. Chubb  
by H. N. Low atty



# UNITED STATES PATENT OFFICE.

THOMAS H. CHUBB, OF POST MILLS, VERMONT.

## FISHING-REEL.

SPECIFICATION forming part of Letters Patent No. 282,270, dated July 31, 1883.

Application filed April 20, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, THOS. H. CHUBB, a citizen of the United States, residing at Post Mills, in the county of Orange and State of Vermont, have invented certain new and useful Improvements in Fishing-Reels, of which the following is a specification, reference being had therein to the accompanying drawings.

Figure 1 is a side elevation of my improved fishing-reel, the reel-seat being in position for attachment. Fig. 2 is a longitudinal section with the reel-seat folded for transportation. Fig. 3 is a cross-section. Fig. 4 is a view of one of the side plates and click mechanism. Fig. 5 is a view of the click or pawl detached. Fig. 6 is a view of the tension or steadying spring.

A A' are the sides or frame-plates of the fishing-reel, which are connected and supported at a suitable distance apart by braces or standards B B B, screwed or otherwise secured to the side plates.

C is the axis of the spool, having journals *c* *c'* in the side plates, and provided with heads or flanges D D', preferably of sheet metal, struck up so as to be concave on the sides next the plates A A'.

The cross-plate or reel-seat for attaching the reel to the rod is made in two parts, F F, independently pivoted to the side plates and adapted to be folded within the circumference of the latter. I thus obviate the former awkward shape of the reel, and I am enabled to pack it within a round case of convenient shape and size for the pocket. Preferably these seats F are mounted upon pins *f*, extending from one frame-plate to the other, and screwed, riveted, or otherwise secured to said plates. Hollow sleeves or bearings *f'* on the seats F surround pins *f*, making a hinge. Other methods may, however, be employed for mounting the seats F pivotally—as, for instance, short screws passing through the side plates, A A', and entering the seats F far enough to give them a pivotal bearing, and I do not limit myself to the exact method shown. By this method, however, I more effectually connect the side plates, A A', the sleeves *f'* being long enough to properly space said plates, and the pins *f* holding them together by

the pin-head and a countersunk nut, *f*<sup>2</sup>. Preferably, for greater steadiness and strength, I so shape the seats F that they shall abut against one another at their rear ends when in position to be attached to the rod.

A tension or steadying spring formed of a single piece of wire is situated between plate A' and flange D' of the spool, the middle of the wire being coiled around the axis C to form a collar, *e*, which presses against flange D', and the ends *e' e'* being extended oppositely from said coil to bear against plate A'. This is a very convenient and effectual means of preventing any play and rattling of the spool within the supporting-frame, and is much simpler and cheaper than those heretofore used.

The click mechanism consists of a toothed wheel, G, mounted on the axis C, between plates A and D, and a pawl, H, which is held in a position radial to the axis C by a spring, I, and is adapted to "click" as the spool rotates in either direction. The spring I, substantially circular in shape, is soldered to plate A, that method being much better and cheaper if it can be done securely. To insure this I make a depression or circular rabbet, *a*, in said plate, of substantially the depth of the spring and of not much larger circumference. Against the wall or shoulder *a'* of the rabbet, at a point opposite the pawl H, the middle of the spring I is placed, coinciding with the wall *a'* for a distance, and may in this position be soldered in place so securely that there is no risk of detachment by wear or vibration, the strain and operation of the spring being in line with the wall or shoulder A'. The pawl or click H is mounted pivotally in the side plate A. The method heretofore generally used is to make the pivot stationary, it being integral with or screwed into said plate, and the friction and wear taking place between the pawl and the pivot. When so made, I have found by experience that the jolting and working of the pawl wears upon the pin to such an extent that it is liable to break off in a comparatively short time. To obviate this difficulty I have made the pawl H and pin *h* rigid with one another and given the latter a bearing in the side plate, which at the point of pivoting



may be made with a boss of any desired thickness to give the pin a longer bearing. On the outside the head of the pin *h* is riveted or expanded to keep the pawl in place. The sides  
5 of the pawl, when the ends of spring *I* bear upon it, are preferably grooved to keep the spring in engagement.

I am aware that pawls engaging radially with the toothed wheel controlled by a substantially circular spring engaging with its opposite sides, and adapted to click in either direction, are old, and I do not claim such as my invention.

What I claim is—

- 15 1. In a fishing-reel, a reel-seat constructed to be arranged longitudinally of the rod, and engaging with one side only thereof, said reel-seat being adapted to be folded for transportation, substantially as set forth.
- 20 2. In a fishing-reel, a reel-seat arranged longitudinally of the rod and engaging with one side only thereof, said seat being divided and adapted to be folded for transportation, substantially as set forth.
- 25 3. In a fishing-reel, the combination, with the side frame-plates, of the reel-seat hinged to the same on axes parallel to the axis of the reel, and folding within the frame of the reel, substantially as set forth.
- 30 4. The combination, with the side frame-plates, of the folding reel-seat having sleeves of a length equal to the distance between said

plates, and pins passing through said sleeves and connecting the frame-plates, substantially as set forth.

5. In a fishing-reel, the combination, with the reel-frame, of a reel-seat made in two parts, the parts being pivoted to the reel-frame and abutting against each other to prevent further oscillation when in position for attachment to  
40 the rod, substantially as set forth.

6. In a fishing-reel, the combination, with the frame-plate having a boss,  $\alpha^2$ , making an increased length of bearing for the pawl-pin, of the pawl *H*, situated between the frame-  
45 plate and the spool, and having the pin *h* rigid therewith, substantially as set forth.

7. The combination, with the frame-plate of the reel, having the rabbet *a* and pawl *H*, of the substantially circular spring *I*, partially  
50 coinciding with the wall of the rabbet and secured at its middle to the frame-plate, substantially as set forth.

8. The combination, with the side plates, *A* *A'*, and the spool of the reel, of the spring *e e'*  
55 *e'*, of one piece of wire, coiled about the axis of the reel and pressing against plates *A' D'*, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS HENRY CHUBB.

Witnesses:

W. B. CHUBB,  
E. G. SIMONS.