(No Model.)

H. H. CORDES.

FISHING REEL.

No. 384,309. Patented June 12, 1888.

FIG. 3.

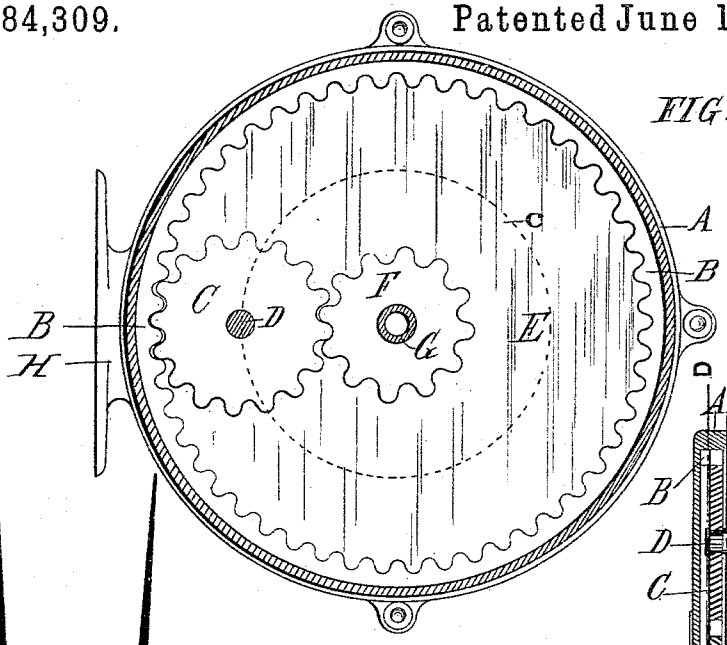


FIG. 2.

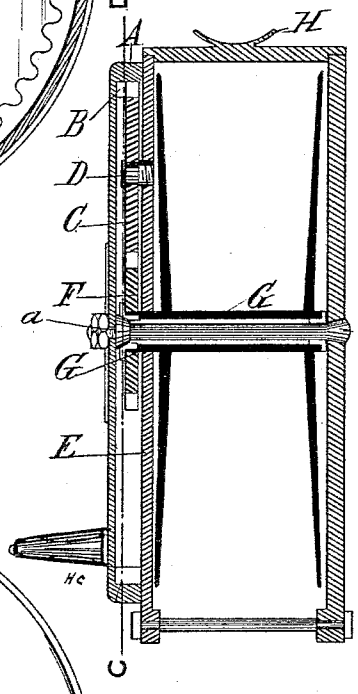


FIG. 4.

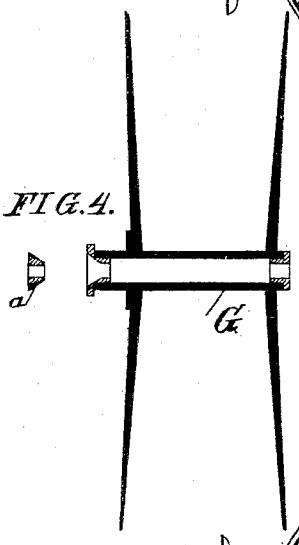
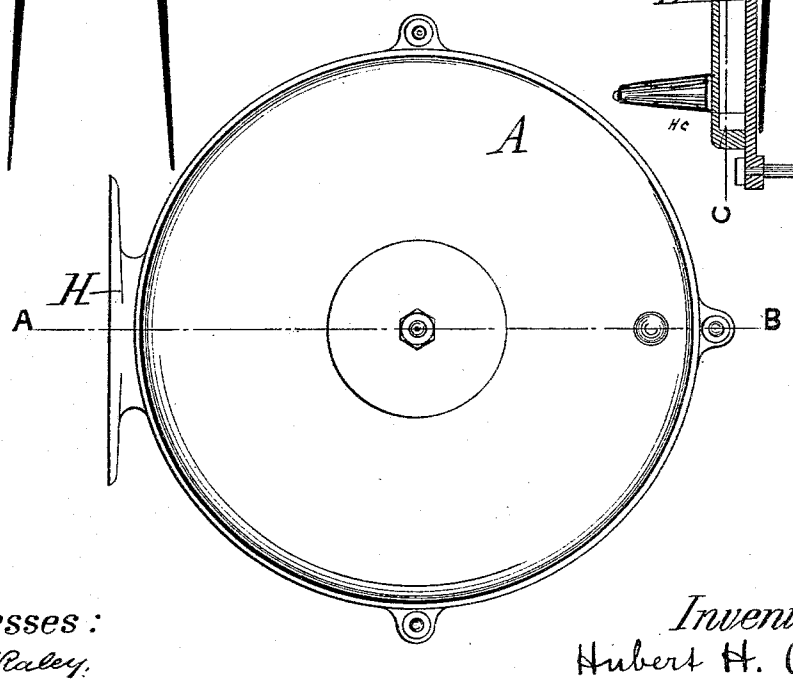


FIG. 1.



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UNITED STATES PATENT OFFICE.

HUBERT HOPE CORDES, OF TUCKENHAY HOUSE, TOTNES, SOUTH DEVON, ENGLAND.

FISHING-REEL.

SPECIFICATION forming part of Letters Patent No. 384,309, dated June 12, 1888.

Application filed June 9, 1887. Serial No. 240,742. (No model.) Patented in England May 28, 1887, No. 7,841.

To all whom it may concern:

Be it known that I, HUBERT HOPE CORDES, a subject of the Queen of Great Britain, residing at Tuckenhay House, Totnes, South Devon, England, have invented certain new and useful Improvements in Fishing-Reels, (for which I have obtained a patent in Great Britain, No. 7,841, dated May 28, 1887;) and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in the construction of the reels or winches used in connection with fishing-rods.

In consists, essentially, of a toothed ring or annulus, or what is generally known as an "annular toothed wheel," in connection with interchangeable speed or gear wheels, whereby I am enabled to obtain a maximum rate of rotation of the reel or line-bobbin within the smallest possible space. Said annular toothed wheel is in one modification, according to my invention, caused to rotate, and under another modification it is stationary, as hereinafter fully described.

In order that my invention may be more readily understood, I have appended the accompanying sheet of drawings, in which—

Figure 1 is a side elevation of the device which I employ. Fig. 2 is a vertical section taken on line A B, Fig. 1. Fig. 3 is a vertical section taken on line C D, Fig. 2, showing general arrangement of gearing. Fig. 4 is a detailed view of the reel or line-bobbin, like letters of reference denoting corresponding parts in the several views.

When the device aforesaid is constructed according to the first-referred-to modification, I adapt to the inside of the plate A, hereinafter termed the "winch-plate," the annular wheel B, gearing with and driving the spur-wheel C, rotating on a stud, D, fixed on or in the side plate, E. The spur-wheel C, on being rotated, transmits the motion to the wheel F, fixed to the reel or line-bobbin spindle G, which I have in the drawings shown as being tubular. It may, however, be formed solid, if preferred, according to the particular application.

In order to reduce the friction resulting from the rapid rotation of the line-bobbin, I may adapt cone-bearings, as shown at *a*, Figs. 2 and 4, or I may employ hardened collars, jeweled or ball bearings.

When it is desired to further increase or vary the relative speed of the reel or line-bobbin, I may introduce a suitable train of interchangeable change-wheels between the wheels C and F, before mentioned. Said wheels may be secured to their respective spindles or axles by spring-catches or other suitable device allowing of rapid and easy adjustment.

In the second modification of the device according to my invention I arrange the gearing as an epicyclic train. The annular wheel B, instead of being attached to and revolving with the winch-plate A, is attached to the side plate, E. The axis D of the intermediate wheel, C, being fixed in this case to the winch-plate A, and besides having a rotation around its own axis, would be carried round the path of travel (indicated by the dotted circular line *c*) by the winch-plate A, to which its axle is fixed, as before mentioned, the reel or line-bobbin and other accessory parts remaining the same as in the modification first described.

The base-plate H in the accompanying drawings is applicable to both modifications, and may be screwed or otherwise secured, either vertically or horizontally, to the side plate of the device, and, if found necessary or convenient, I may apply a check or drag to same.

The device hereinbefore described under either of the two modifications thereof is applicable to any ordinary plate-winch, and also to what is known as the "Nottingham" or any other type of winch, with such modifications as may be found necessary to meet the respective requirements of such winches.

I claim as my invention—

In a fishing-reel, the combination of the cas-

ing having a side plate, E, the reel G, provided with bearings and journaled upon a central pin carrying at its shouldered end a conical bearing, against which the winch-plate is secured by lock-nuts, the conical bearing *a*, the winch-plate A, the internal wheel-rim, B, the carrier-wheel C, and the wheel F, substantially as set forth.

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

HUBERT HOPE CORDES.

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