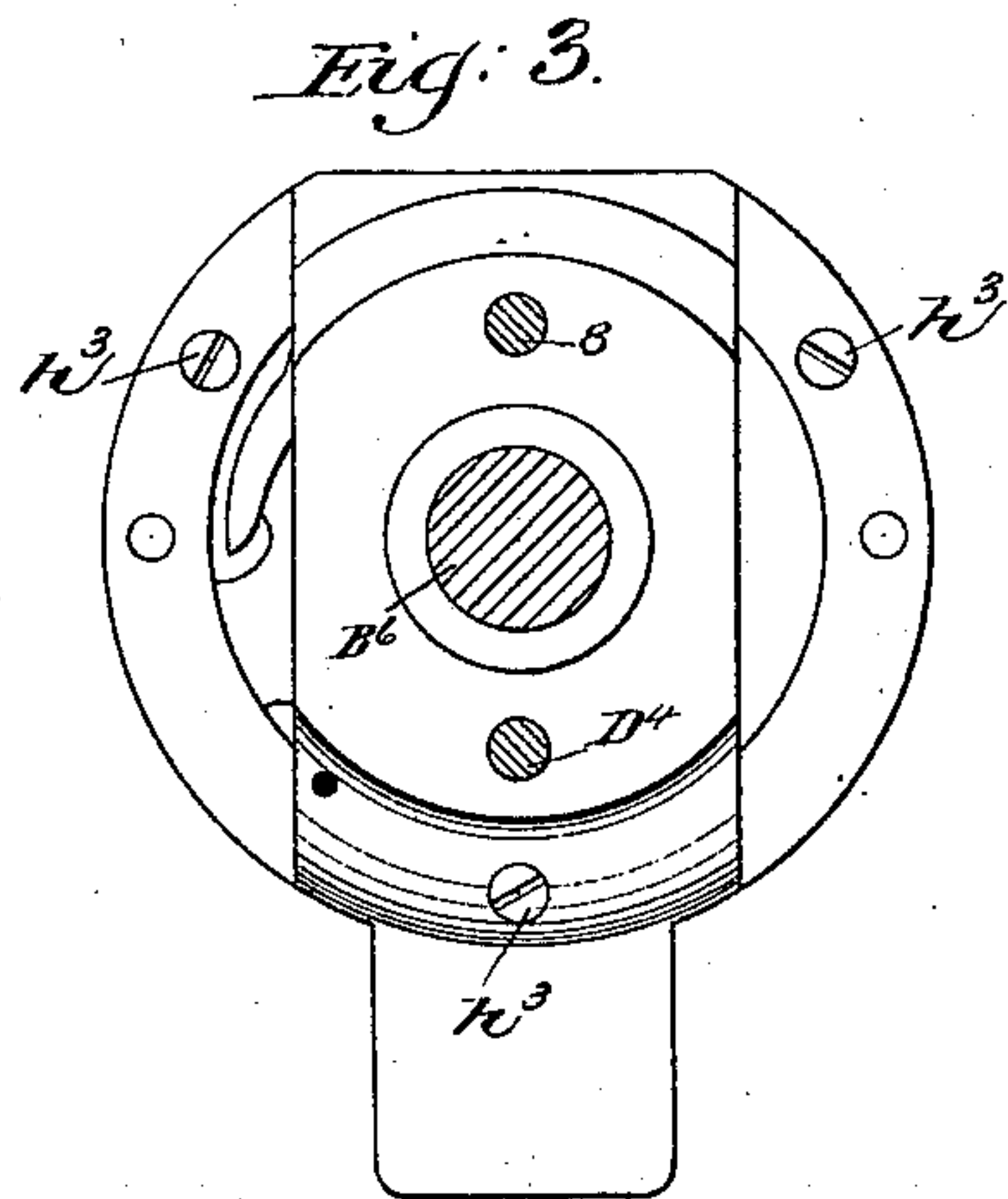
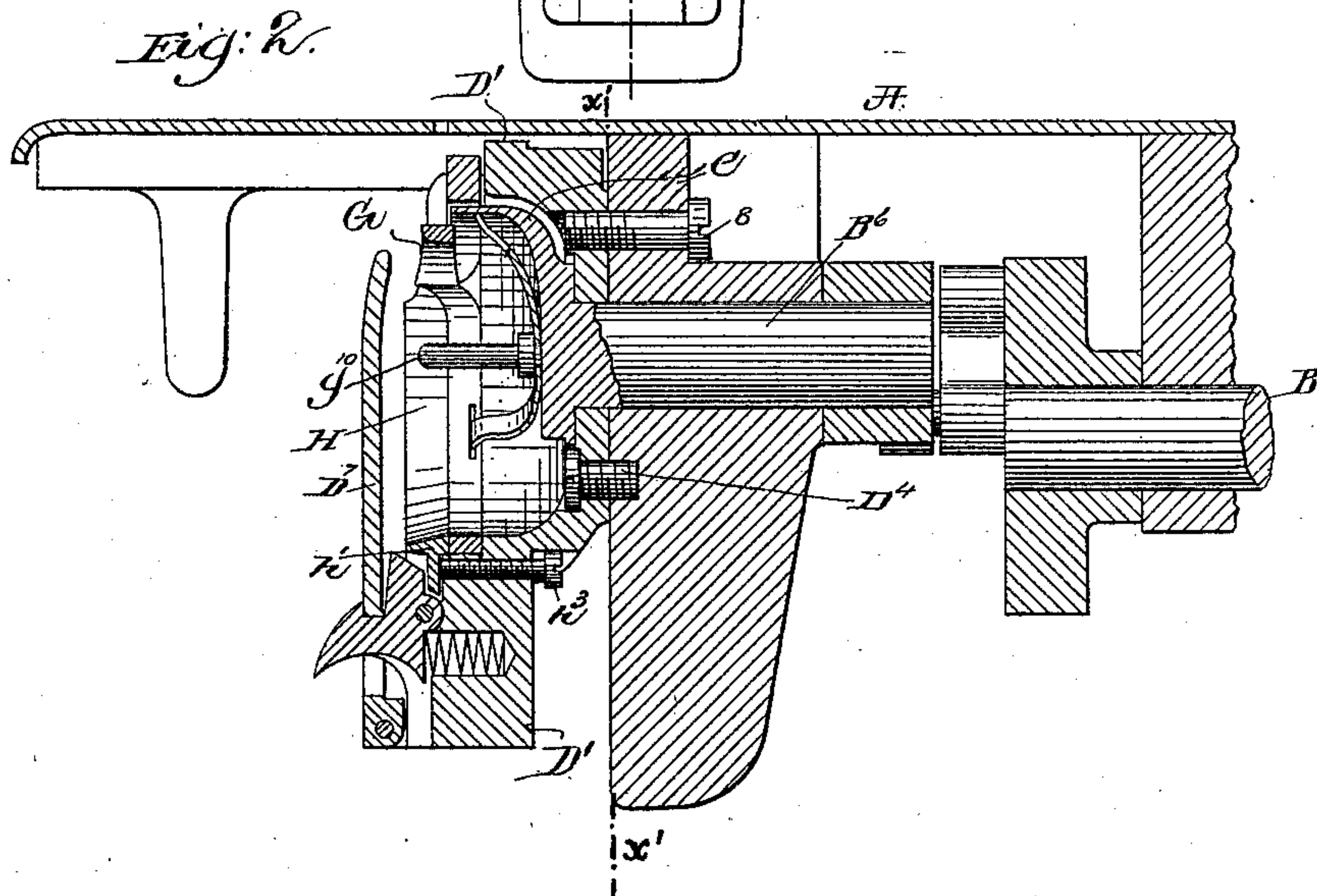
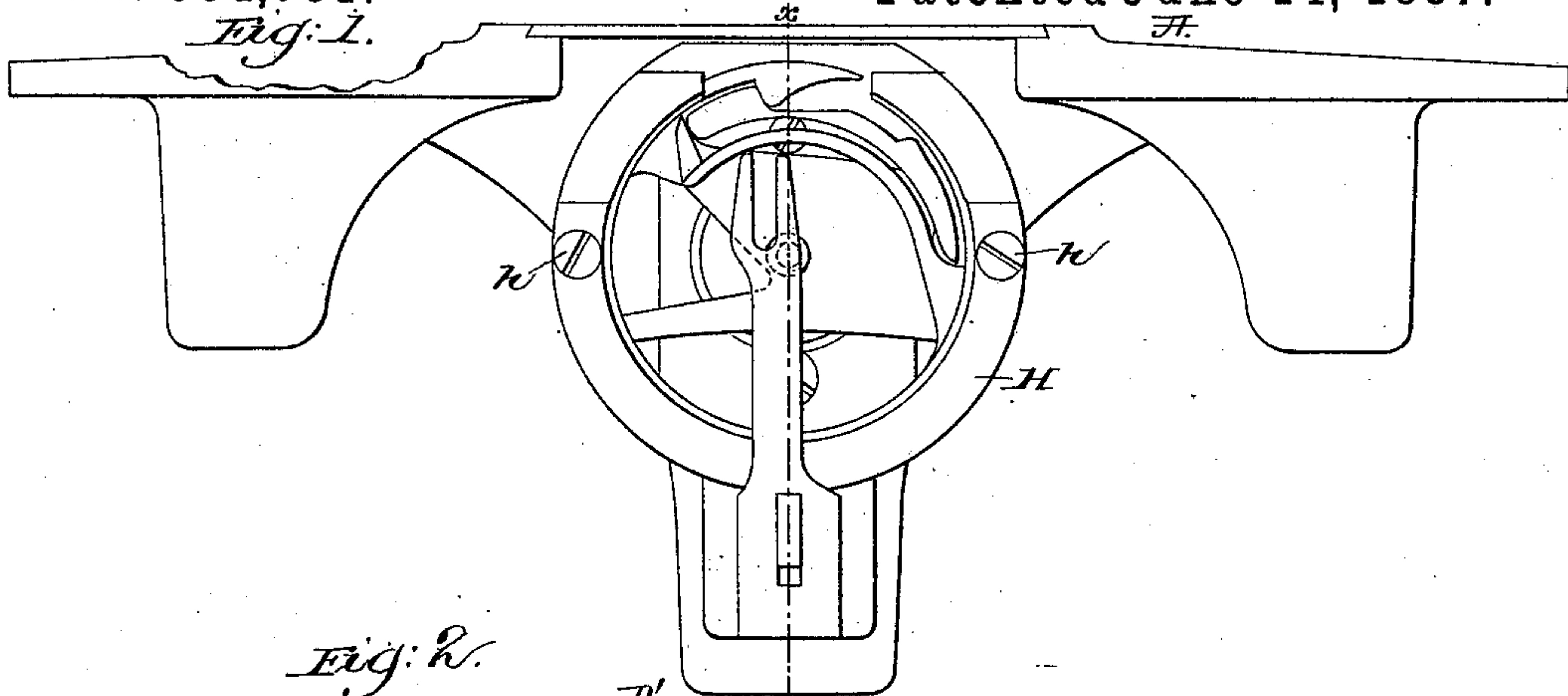


(No Model.)

C. H. BAYLEY.  
SEWING MACHINE.

No. 364,791.

Patented June 14, 1887.



Witnesses  
Fred L. Emery,  
John F. C. Pinkert

Inventor.  
Charles H. Bayley,  
by Crosby & Gregory, attys.



# UNITED STATES PATENT OFFICE.

CHARLES H. BAYLEY, OF BOSTON, MASSACHUSETTS.

## SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 364,791, dated June 14, 1887.

Application filed November 29, 1886. Serial No. 220,146. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES H. BAYLEY, of Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in Sewing-Machines, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to provide means whereby a circularly-moving loop-taker or equivalent carrying a second or under thread may be adjusted in its race to compensate for wear.

My invention consists, essentially, in a recessed circular raceway and a circularly-moving loop-taker or equivalent placed in the said recess, combined with an adjustable holding-ring to retain the loop-taker in operative position, and with means, substantially as will be described, to adjust the said holder to compensate for the wear of the loop-taker.

The spool or bobbin carried by the loop-taker is free to be removed from the loop-taker through and without moving the said holder.

Figure 1 in end elevation represents a sufficient portion of a sewing-machine to enable my invention to be understood; Fig. 2, a vertical section of Fig. 1 in the dotted line  $x$ ; and Fig. 3 is a section of Fig. 2 in the line  $x'$ , looking toward the left.

For the purpose of illustrating my invention, I have selected the form of machine represented in United States Patent No. 328,165.

Referring to the drawings, the bed-plate A, the main shaft B, the hook-shaft B<sup>c</sup>, connecting mechanism between the said shaft for giving the hook-shaft a variable movement, the carrier C, the loop-taker G, having a central stud or pin,  $g^{10}$ , to receive upon it a spool or bobbin containing the under thread, the raceway D', in which the loop-taker has a circular movement, the screws D<sup>4</sup> and 8 to adjust the raceway D', and the finger D', to retain the under spool or bobbin (not shown) on the stud  $g^{10}$ , are and may be as in the said patent, wherein like devices are designated by like letters.

Difficulty has been experienced in the wear of

the loop-taker in the raceway, the loop-taker having very rapid movements therein. To obviate this, I have provided a holder, H, which is of annular shape, the said holder having flanges for the reception of suitable screws, as  $h$ , (see Fig. 1,) by which to retain the holder in place. I have provided this holder, however, with a backwardly-extending rib,  $h'$ , which is extended within a recess formed in the raceway D' for the reception of the loop-taker, (see Fig. 2,) the said annular rib bearing directly against the loop-taker at one side near its periphery, the depth of the said rib in a horizontal plane when the holder is in position being such that the flanges outside the rib, and through which the holding-screws  $h$  are inserted, do not normally touch the raceway D'. Into the raceway I have inserted suitable stops or adjusting-screws,  $h^3$ , preferably three such screws, (see Fig. 3,) which are turned into and through the raceway far enough to enable the ends of the screws to form rests for the flanged part of the holder, and by adjusting these screws  $h^3$  and the rib, and then further turning in the screws  $h$ , any wear between the loop taker and holder may be readily compensated for.

I do not, broadly, claim a cap to bear against one side of the loop-taker or shuttle to hold it in its race; but prior to my invention I am not aware that such a cap has ever been made adjustable in the manner herein described, or has been acted upon at both faces by a screw or other movable device, whereby the holder may be adjusted bodily horizontally for any required distance.

It will be noticed that the holder does not in any sense act as a retainer to keep the usual spool or bobbin upon the stud  $g^{10}$ , that being done by the finger D'.

I claim—

1. A raceway containing a loop-taker, combined with an adjustable annular holder, H, attached to the raceway and provided with a rib and flange, said rib entering the raceway and bearing against the loop-taker, to operate substantially as described.

2. A raceway, a circularly-moving loop-taker placed therein, and an annular holder, H,

provided with a rib and flange, combined with screws to retain the holder in place, and with an adjusting or stop screw to determine the inward position of the holder with relation to the loop-taker to compensate for wear of the loop-taker in its race, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES H. BAYLEY.

Witnesses:

BERNICE J. NOYES,

F. CUTTER.