

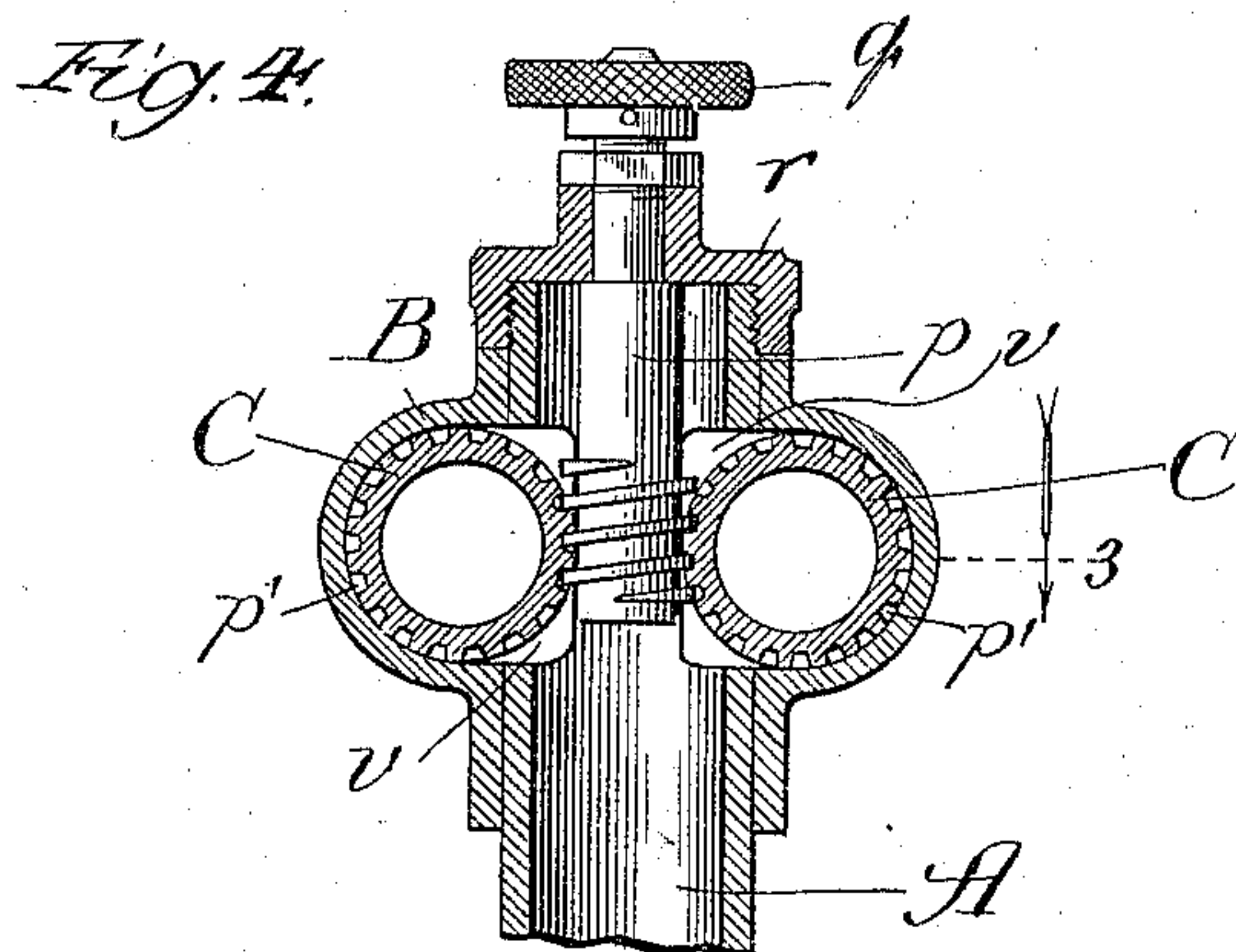
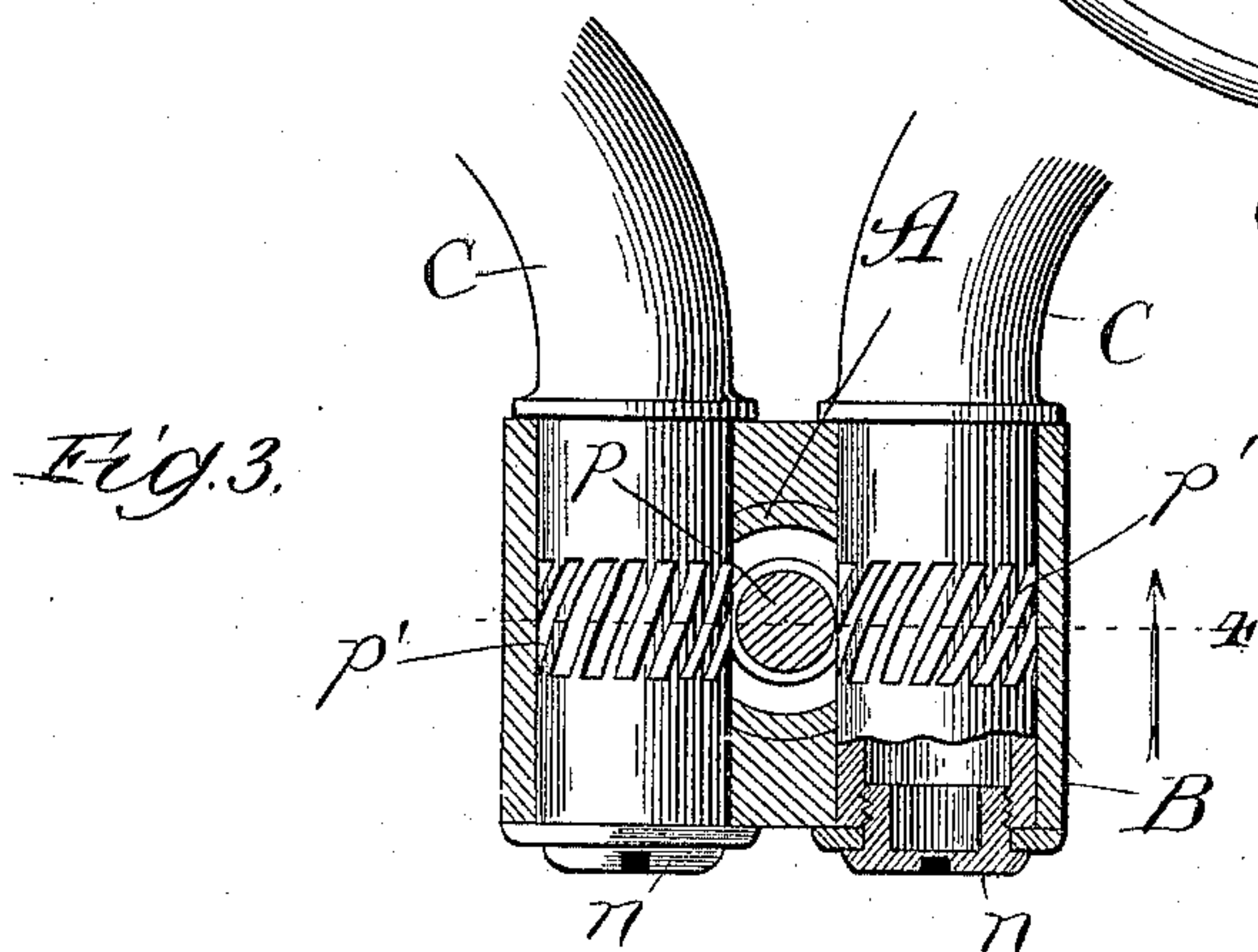
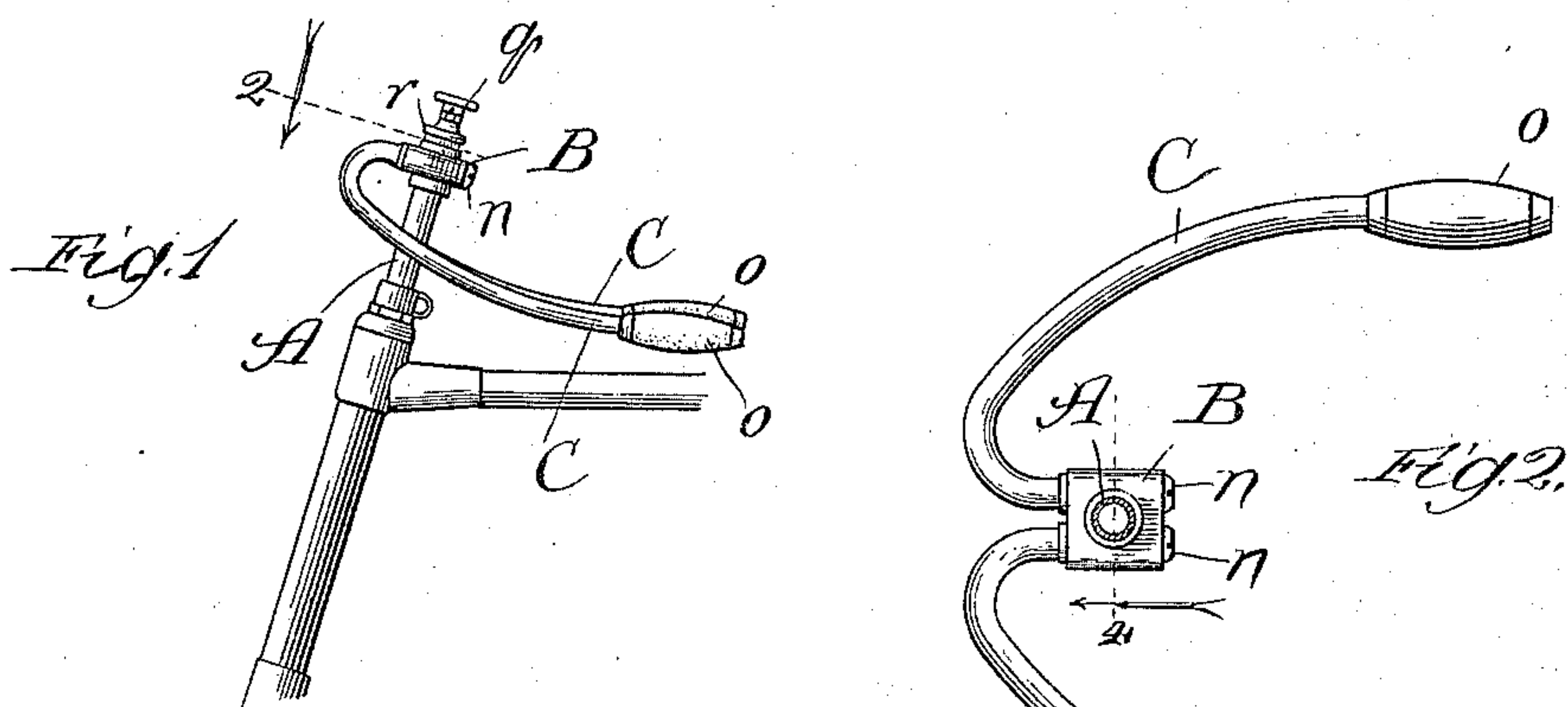
No. 638,427.

Patented Dec. 5, 1899.

R. E. SHERMAN.
HANDLE BAR FOR VELOCIPEDES.

(Application filed Nov. 18, 1895.)

(No Model.)



Witnesses:
E. J. Gaylord,
L. J. M. H. M.

Inventor:
Richard E. Sherman,
By Dyrnforth & Dyrnforth,
Attorneys

UNITED STATES PATENT OFFICE.

RICHARD E. SHERMAN, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE CHALLENGE MACHINERY COMPANY, OF SAME PLACE.

HANDLE-BAR FOR VELOCIPEDES.

SPECIFICATION forming part of Letters Patent No. 638,427, dated December 5, 1899.

Application filed November 18, 1895. Serial No. 569,329. (No model.)

To all whom it may concern:

Be it known that I, RICHARD E. SHERMAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Handle-Bars for Velocipedes, of which the following is a specification.

My invention relates to an improvement in the handle-bars of a velocipede or bicycle; and my primary object is to enable the rider of a velocipede or bicycle while riding, and thus without requiring him to dismount, to adjust the height of the handle-bars in accordance with his desire. To this end I so pivot the handle-bars at the opposite sides of the handle-bar rod, which is inserted into the tubular shank of the fork, that they may be swung laterally with relation to the bicycle or otherwise oscillated on their pivots to raise and lower them, and I provide means for securing the handles in any position to which they may thus be adjusted.

My invention consists in the general construction of my improvement; and it also consists in details of construction and combinations of parts, all as hereinafter set forth and claimed.

Referring to the accompanying drawings, Figure 1 is a broken view, in side elevation, of a portion of a bicycle provided with my improvement; Fig. 2, a plan section taken at the line 2 on Fig. 1 viewed in the direction of the arrow and enlarged; Fig. 3, a broken section taken at the line 3 on Fig. 4 viewed in the direction of the arrow and enlarged, and Fig. 4 a section taken at the line 4 on Fig. 2 or at the line 4 on Fig. 3 and viewed in the direction of the arrow.

A is the handle-rod bar, or bar which is commonly inserted into the tubular stem (not shown) of the fork. Surmounting the bar A, which is tubular, is a screw-cap *r*, affording a bearing for the worm-shaft *p*, extending into the tubular bar and terminating at its projecting end in any suitable form of lever, such as the hand-wheel, (represented at *q*.) Coincident with the worm portion of the shaft

p the tubular bar A is cut out at opposite sides, as shown at *v v*, where it is surrounded by a housing B, having openings at its opposite ends at both sides of the tubular bar.

C C are the handle-bars, which may be of the usual or any suitable general variety and which are shown to be considerably bowed, each formed with a return-bend. A shorter end of each handle-bar, or that opposite the end at which the cork portion *o* is usually provided, is provided with a series of worm-teeth *p'*. These ends are inserted into the openings of the housing B, each being fastened therein at one extremity, as by a screw *n*, and being provided at the opposite end of the housing adjacent thereto with a collar *m*, affording a bearing about the opening. Thus the handle-bars are pivotally supported on the handle-bar rod at its opposite sides and may be adjusted by turning each in a lateral direction to bring the portion to which the hand of the rider is applied to any desired higher or lower position within, say, something less than one-half a circle. This adjustment may be effected by properly turning the worm-stem *p*, since the worm on its inner end engages the worm-teeth on the adjacent portions of the handle-bars which flank it, so that when the rider desires to adjust the handle-bars he may do so while riding, thus without requiring him to dismount for the purpose, by properly manipulating the worm-stem at its handle *q*.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a head of the steering-post of a velocipede, of a worm mounted in that head and two handle-bars jointed to the head and each with a worm-gear meshing with said worm, substantially as set forth.

2. In combination with the handle-bar rod of a bicycle, the housing B secured thereon, the handle-bars C C having the worm-teeth *p'* on their journal ends at which they are fastened in said housing at opposite sides of said rod, and a worm-stem *p* journaled in the outer end of said rod, to extend therein and

engage the worm-teeth on the handle-bars, and provided at its outer end with a handle, substantially as described.

3. The combination of a pair of bicycle handle-bars, a head to which said bars are pivoted on axes extending transversely of the bars, grips arranged on the outer ends of said bars and being located substantially parallel

with said axes and a worm-gear for simultaneously raising or lowering said handle-bars, substantially as set forth. 10

RICHARD E. SHERMAN.

In presence of—

J. H. LEE,

M. J. FROST.