

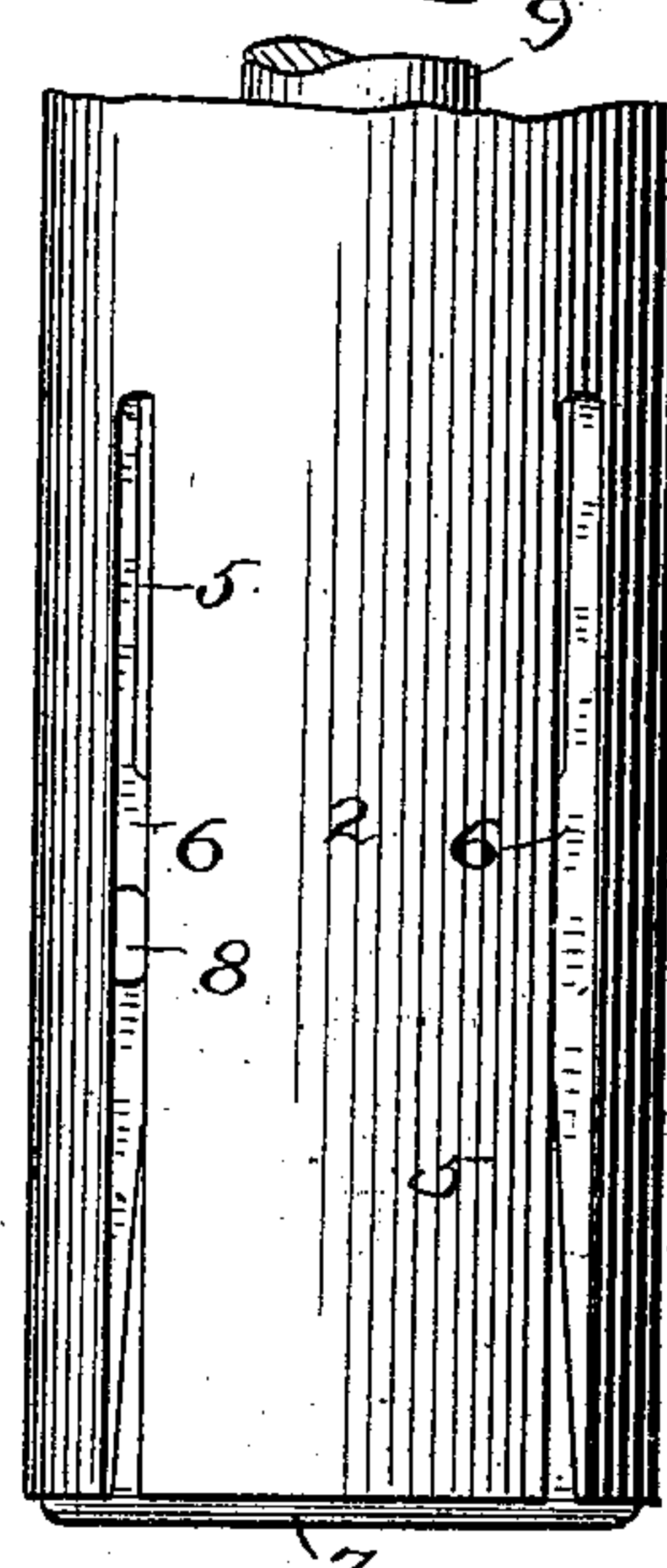
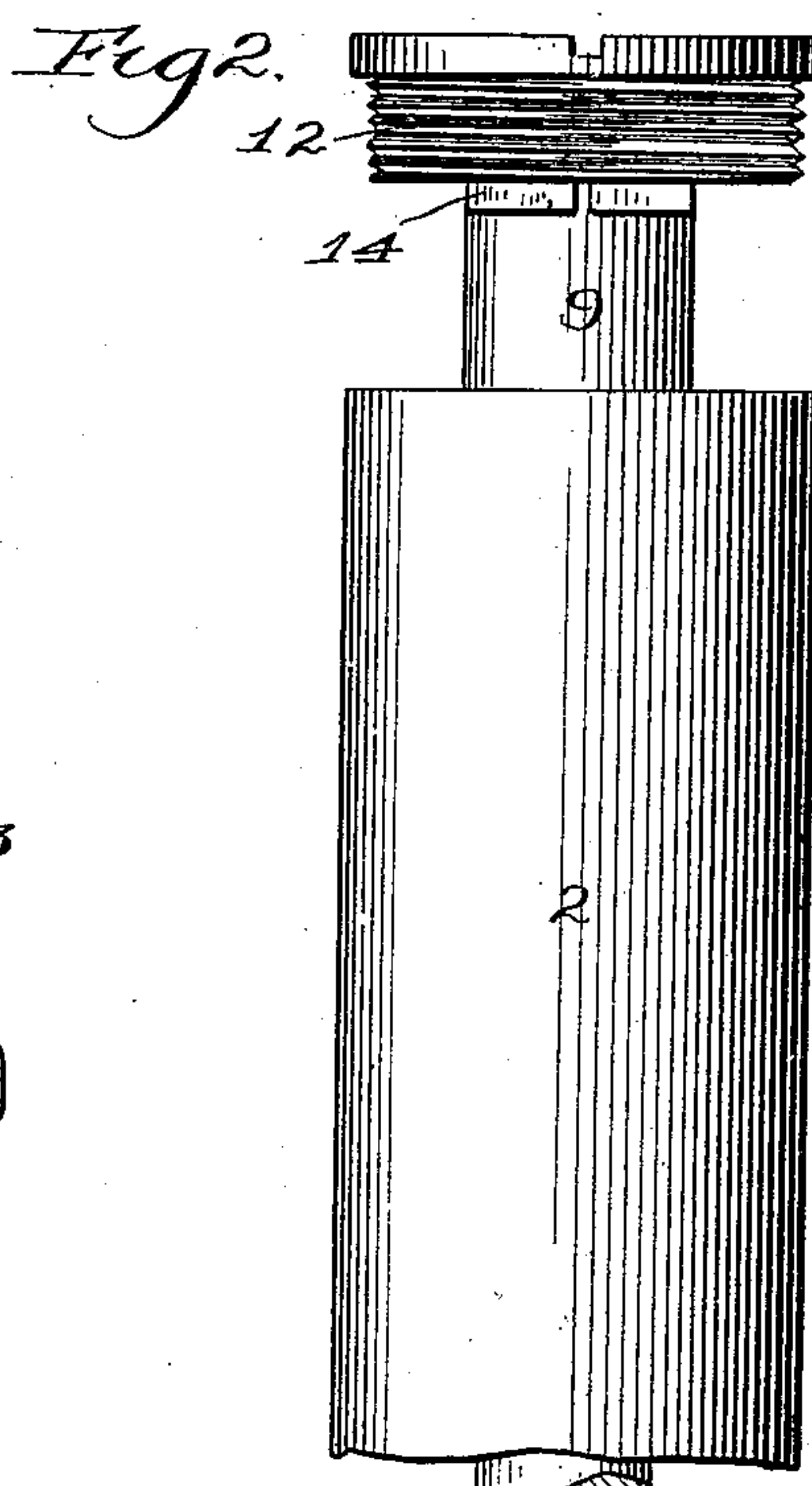
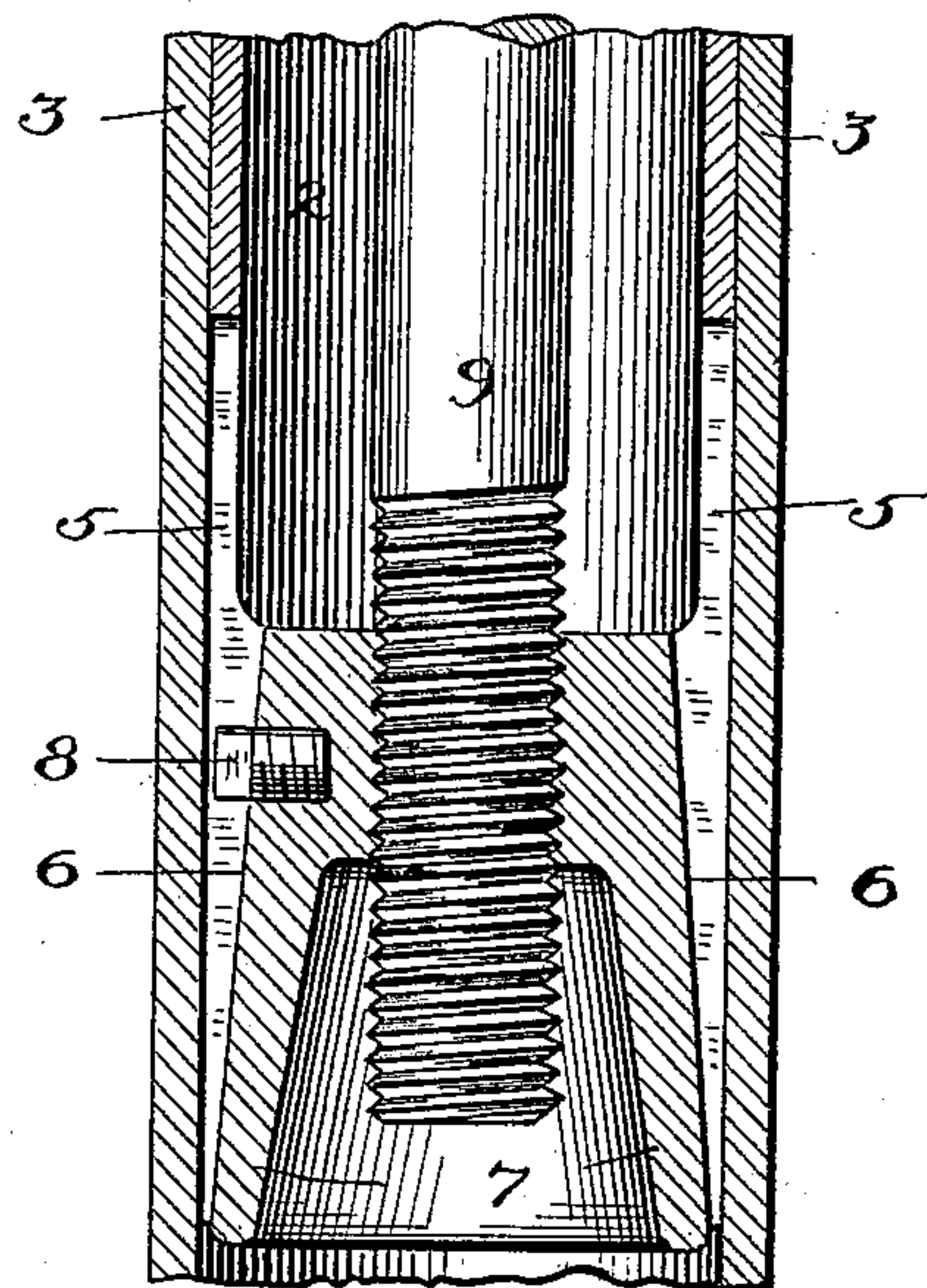
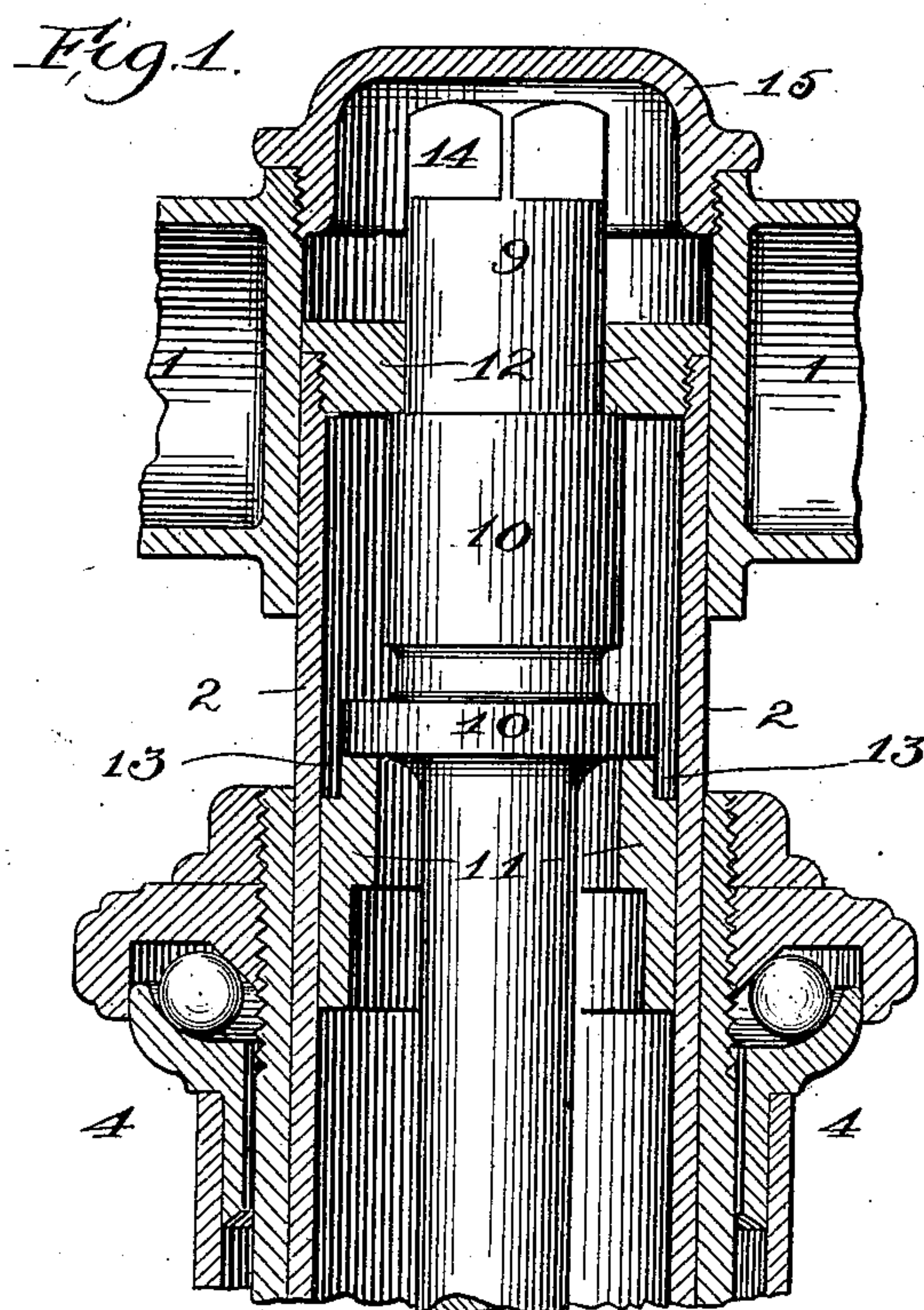
No. 618,681.

Patented Jan. 31, 1899.

A. JEROME.
HANDLE BAR FASTENING.

(Application filed Nov. 19, 1898.)

(No Model.)



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UNITED STATES PATENT OFFICE.

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HANDLE-BAR FASTENING.

SPECIFICATION forming part of Letters Patent No. 618,681, dated January 31, 1899.

Application filed November 19, 1898. Serial No. 696,904. (No model.)

To all whom it may concern:

Be it known that I, ANTHONY JEROME, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Handle-Bar Fastenings; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

The present invention relates to that type of fastening means for bicycle handle-bars and other like parts in which the lower end of the tubular handle-bar stem is made laterally expansible and formed with a tapering counterbore to receive a correspondingly-formed plug or expander which is moved vertically by means of an axially-arranged operating screw bolt or shaft to effect a fastening or unfastening of the handle-bar stem within the tubular fork-stem of the bicycle.

The object of the present improvement is to provide a simple, durable, and effective construction and arrangement of parts in which the operating screw-shaft is secured within the tubular handle-bar stem in such a manner as to permit of the free rotation of such shaft in the operation of the same to effect a fastening or unfastening of the parts and at the same time prevent any endwise movement of such shaft with relation to the handle-bar stem. In consequence of such construction movement in both directions is imparted in a positive manner to the plug or expander to effect a fastening of the handle-bar stem in place and a subsequent unfastening of the same when required in a certain and ready manner, all as will hereinafter more fully appear, and be more particularly pointed out in the claims. I attain such object by the formation and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1 is an enlarged detail central sectional elevation of a handle-bar fastening embodying the present invention; Fig. 2, a side elevation of the handle-bar stem in a detached condition with the removable abutment-collar thereof in a separated condition.

Similar numerals of reference indicate like parts in both views.

Referring to the drawings, 1 represents the usual handle-bar, formed with a pendent stem 2, that is adapted to fit within the bore of the usual tubular fork-stem 3, that in turn is journaled in the steering-head 4 of the bicycle-frame. The lower end of the tubular handle-bar stem 2 is formed with vertical slits 5 to render the same capable of lateral expansion and with a tapering counterbore 6, the diameter of which is largest at its lower end, as shown.

7 is a tapering plug or expander fitting the tapering bore 6 of the handle-bar stem and provided with a laterally-projecting stud 8, that engages in one of the vertical slits 5 to prevent independent rotation, and with a central screw-threaded orifice for the reception of the screw-threaded lower end of the operating-shaft 9.

In the present improvement the upper portion of the screw-threaded operating-shaft 9 is formed with an enlargement 10, that has a fixed relation between a lower stationary collar 11, fixedly secured within the bore of the handle-bar stem, and an upper removable cap-nut or collar 12, that screws into or is otherwise removably attached to the upper end of the handle-bar stem. By the removal of such cap or collar ready detachment of the parts is had for cleaning, repairs, &c. In my preferred construction as illustrated in the drawings the screw-threads upon the upper cap-nut or collar will be left-handed in order that the turning of the screw-threaded operating-shaft 9 to cause an unfastening will, through the friction of the parts, have a tendency to tighten such collar in place.

13 is a marginal annular cavity at the upper end of the lower fixed bearing-collar 11 for holding a supply of lubricant for the adjacent bearing-surface of the shaft and such collar.

14 is a non-circular operating-head at the upper end of the screw-threaded operating-shaft.

15 is a cap or cover attached by means of a screw-thread or other usual means upon its

lower skirt in a correspondingly-formed bore in the handle-bar 1 and adapted to cover over and conceal the head 14 of the operating-shaft 9 after a fastening operation has been effected.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A fastening for bicycle-stems and the like, comprising an outer tubular stem, an inner tubular stem slitted at its lower end and formed at such end with a tapering counter-bore, a lower fixed collar in the bore of said inner stem, a removable collar at the upper end of said inner stem, a tapering plug fitting the tapering counterbore of the inner stem, and an operating screw-shaft having engagement at its lower end with said plug and formed with an enlargement that has engagement between the upper and lower collars of the inner stem, to prevent vertical movement of said shaft, substantially as set forth.

2. A fastening for bicycle-stems and the like, comprising an outer tubular stem, an inner tubular stem slitted at its lower end, and formed at each end with a tapering counter-bore, a lower fixed collar in the bore of said inner stem and formed at its upper end with a marginal annular cavity for containing a lubricant, a removable collar at the upper end of said inner stem, a tapering plug fitting the tapering counterbore of the inner stem, and an operating screw-shaft having engagement at its lower end with said plug and formed with an enlargement that has engagement between the upper and lower collars of the inner stem to prevent vertical movement of said shaft, substantially as set forth.

In testimony whereof witness my hand this 15th day of November, 1898.

ANTHONY JEROME.

In presence of—

ROBERT BURNS,
JAMES LAVALLIN.