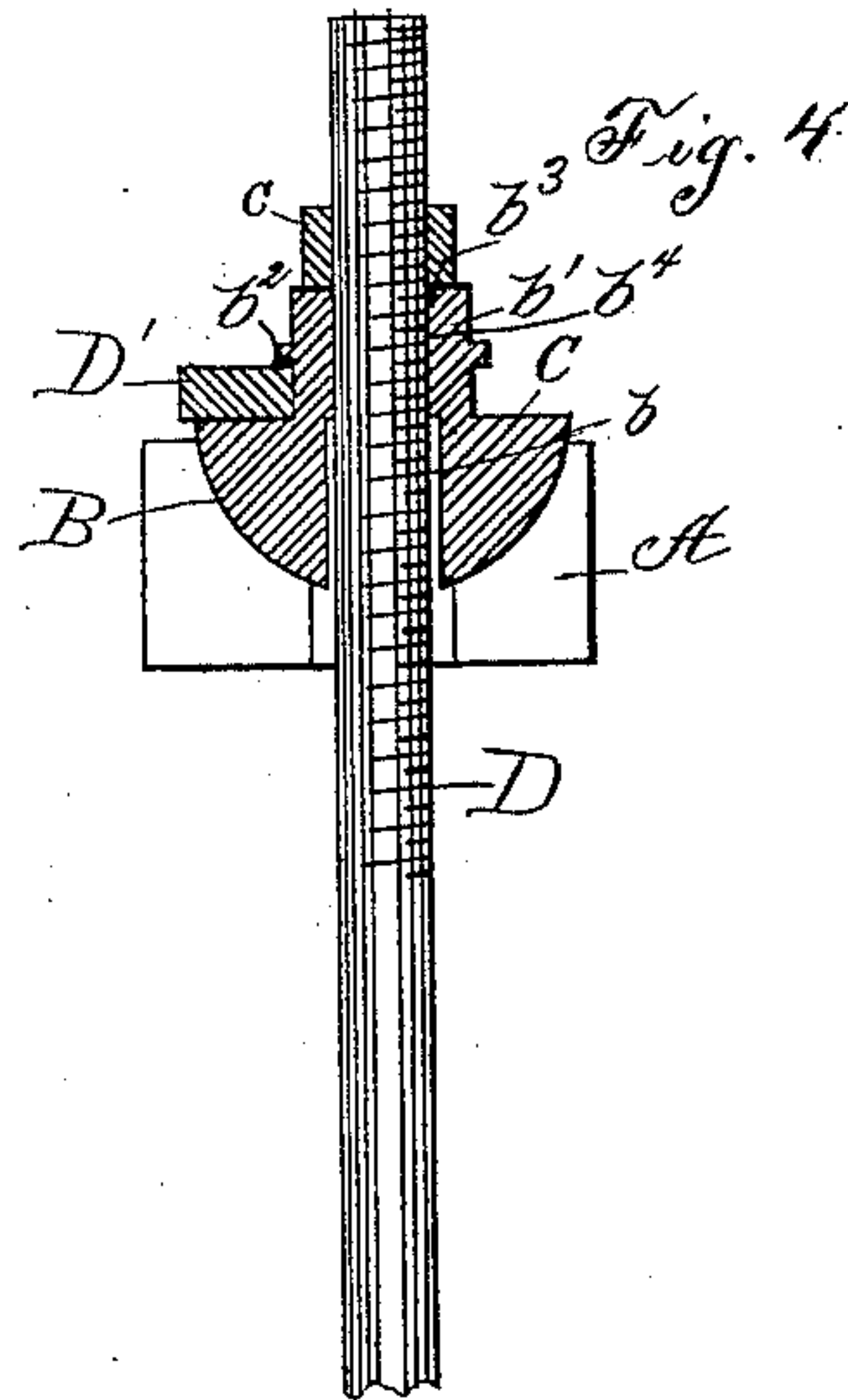
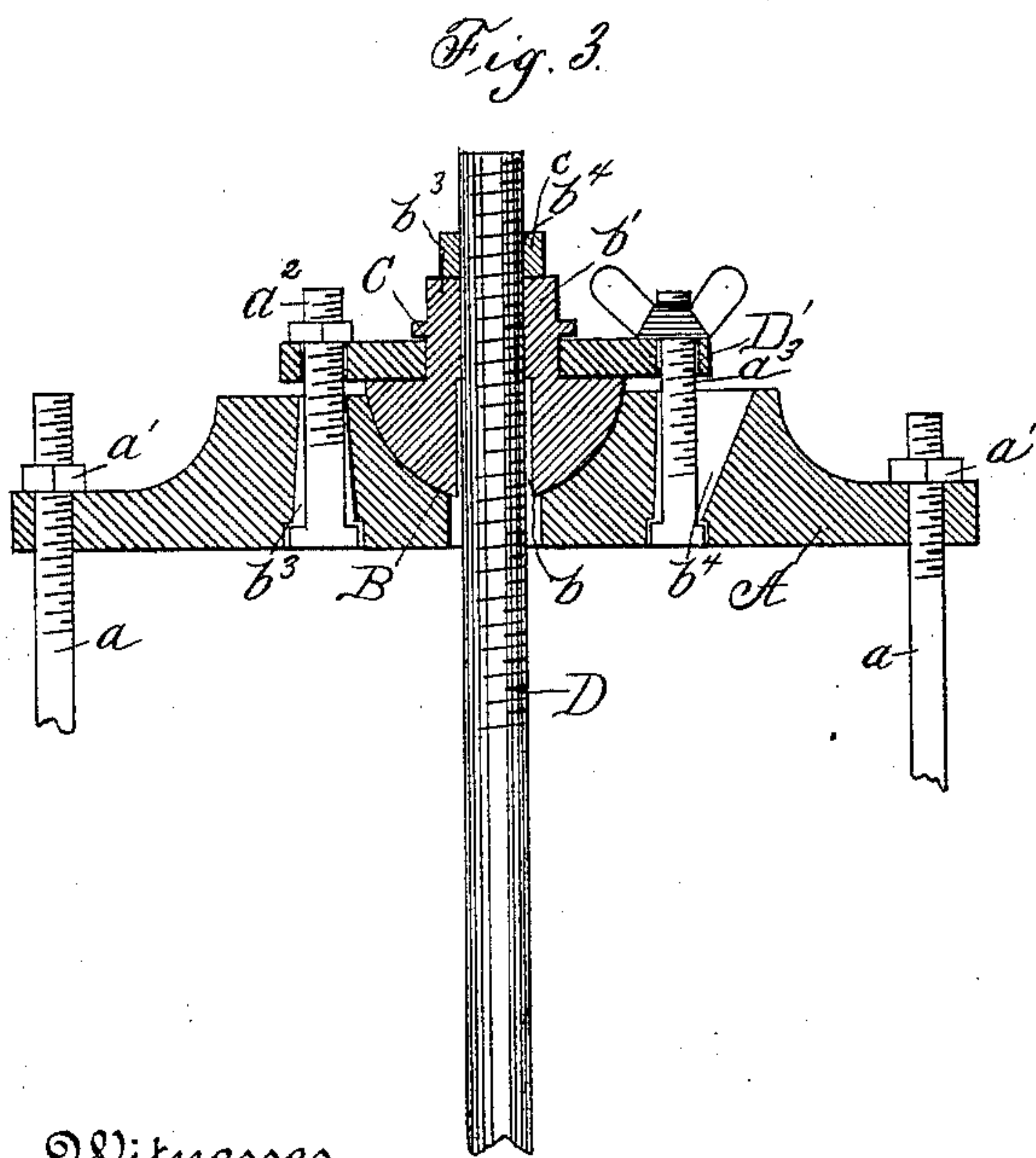
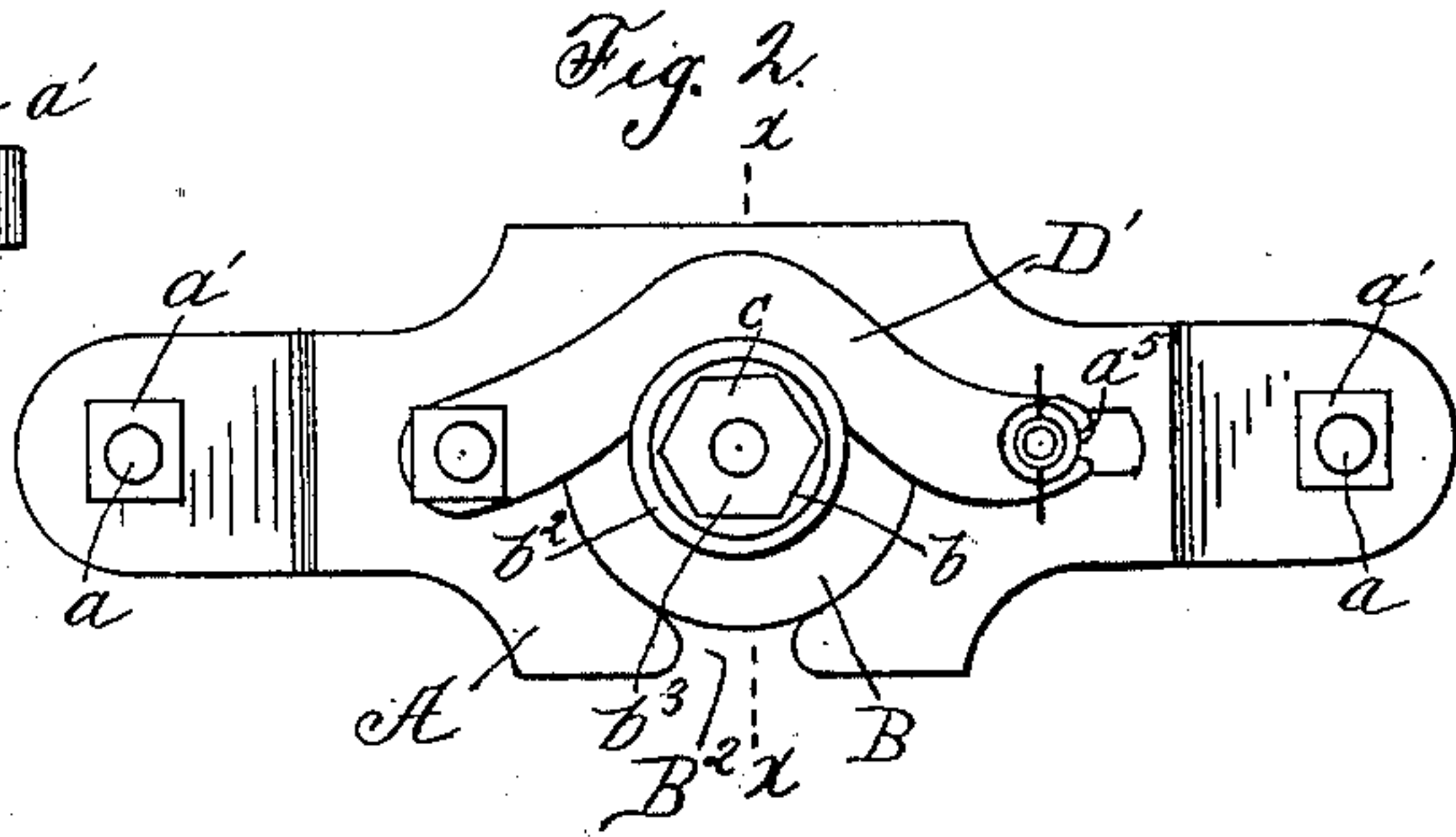
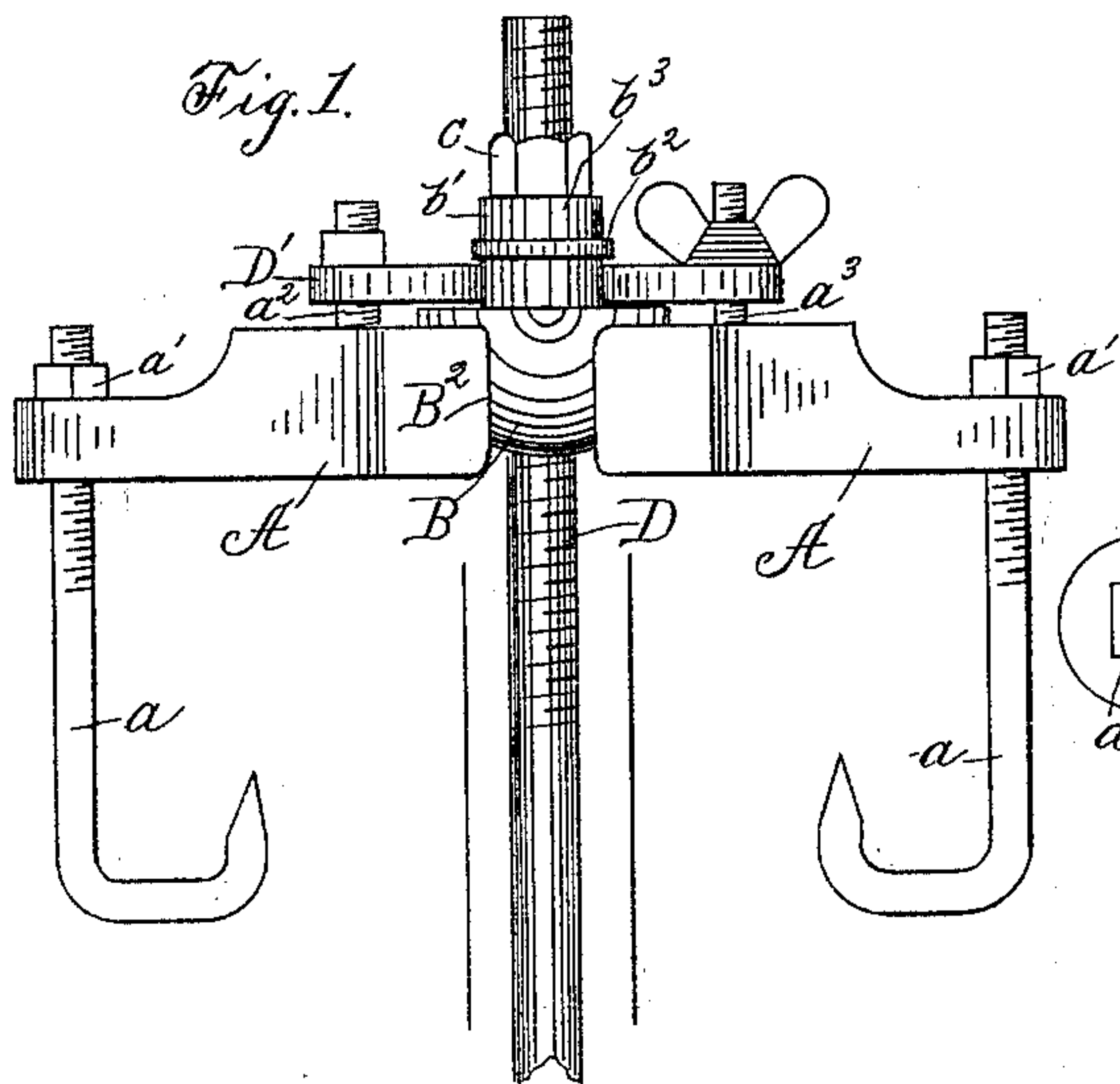


(No Model.)

E. W. BISETT.
ADJUSTER FOR POLISHER RODS.

No. 462,390.

Patented Nov. 3, 1891.



Witnesses.

Franklin Moore
Geo. R. Byington

E. W. Bisett, Inventor

By his Attorneys

Hallock & Halleck

UNITED STATES PATENT OFFICE.

EDWARD W. BISETT, OF DALLAS CITY, PENNSYLVANIA.

ADJUSTER FOR POLISH-RODS.

SPECIFICATION forming part of Letters Patent No. 462,390, dated November 3, 1891.

Application filed March 19, 1891. Serial No. 385,596. (No model.)

To all whom it may concern:

Be it known that I, EDWARD W. BISETT, a citizen of the United States, residing at Dallas City, in the county of McKean and State of Pennsylvania, have invented certain new and useful Improvements in Adjusters for Polish-Rods; and I do hereby 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.

My invention relates to adjusters for polish-rods for oil-well pipes.

It has for its objects to provide a polish-rod that can be readily and securely clamped to the end of a walking-beam and from which the polish-rod can be easily removed without danger of any of its parts falling off into the well, and to provide for the lengthening or shortening of the polish-rod without delay or loss of time.

The invention consists of combinations, constructions, and arrangements of parts, as hereinafter described in the specification, and pointed out in the claim.

Reference is had to the accompanying drawings, wherein—

Figure 1 is a front elevation of the device. Fig. 2 is a top plan view; Fig. 3, a longitudinal section; Fig. 4, a section on the line $x x$, Fig. 2.

A represents the holding-bracket, which is made of iron or any other suitable material.

$a a$ are two hooked irons or other suitable-shaped rods adapted to engage the bracket with a walking-beam in a fixed position. Said rods are raised or lowered by means of threaded ends and nuts $a' a'$ to fit the bracket to different sizes of walking-beams.

A semi-spherical socket B is formed in the bracket at or near its center to receive a correspondingly-shaped collar C, having a smooth or unthreaded bore b and a reduced upper end b' , with outside flange b^2 , terminating in a turning-nut or part b^3 , which upper end has a screw-threaded bore b^4 to engage with the polish-rod D. The socket B in bracket A and the collar C therein form a ball-and-socket joint for the polish-rod with said bracket. The collar C projects above the bracket A and is held down in position on the socket B by a curved yoke D' , which fits

loosely around the reduced upper end b' of said collar between its flat upper side and its flange b^2 . Suitably-arranged screw-bolts a^2 a^3 , having heads a^4 , pass through the ends of the yoke and through holes b^3 b^4 in the bracket. The hole b^3 from the head of the bolt to the top edge of the bracket gradually increases in width and length, and the hole b^4 is correspondingly formed, except that its lengthwise opening is greater than that for the opening b^3 . This described formation of the opening b^3 b^4 is provided for the purpose of admitting of the screw-bolts a^2 a^3 and yoke D' , partaking of the movements of the ball-joint and the corresponding movements of the polish-rod, as the latter ascends from and descends into the well. The opening b^4 for the screw-bolt a^3 is of greater length at its upper part, as above described, to admit of the screw-bolt being pushed into the slotted end a^5 of the yoke and withdrawn therefrom in securing the parts together or in removing them for repairs or other purposes.

The heads of the bolts a^2 and a^3 are countersunk into the bracket, so as to be flush with its lower side and leave it smooth to rest upon the walking-beam.

The bracket A, on one side in line with the socket B, is slotted, as shown at B^2 , so that when it is desired to remove the polish-rod from the bracket the yoke D is first disengaged and the polish-rod passed out of the slot B^2 in bracket A.

The polish-rod is provided with a jam-nut c to prevent it turning independent of its ball-and-socket joint. By loosening said nut and turning the collar the rod can be adjusted lengthwise.

In operation the device works as follows: The bracket is clamped to the end of a walking-beam and the latter set in motion. Now the end of said walking-beam as it ascends and descends describes the arc of a circle, but the polish-rod must remain parallel with the well-pipe. The curved yoke, fitting loosely around the collar and having the bolts a^2 a^3 working in the holes b^3 b^4 , gives free play to the ball within the socket B, so it may move sufficiently to keep the polish-rod parallel with the well-pipe. When it is desired to lengthen the polish-rod, the nut on bolt b^4 is unscrewed and said bolt drawn through slot

a^5 and the yoke swung round on the remaining bolt as a center until it disengages the ball. The jam-nut is then raised and the ball adjusted to the desired height. After this the
5 jam-nut is screwed down upon the collar and the curved yoke adjusted.

What I claim as new is—

The combination of the bracket having the socket-bearing, the semi-spherical-shaped collar C, fitting in said joint and having the re-
10 duced upper end b' , which is interiorly screw-

threaded, for engaging with the polish-rod and fastening devices, substantially as shown, while the lower part of the said collar C has a smooth bore of larger diameter than the
15 polish-rod.

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

EDWARD W. BISETT.

Witnesses:

D. L. ROSS,

WM. UTTER.