

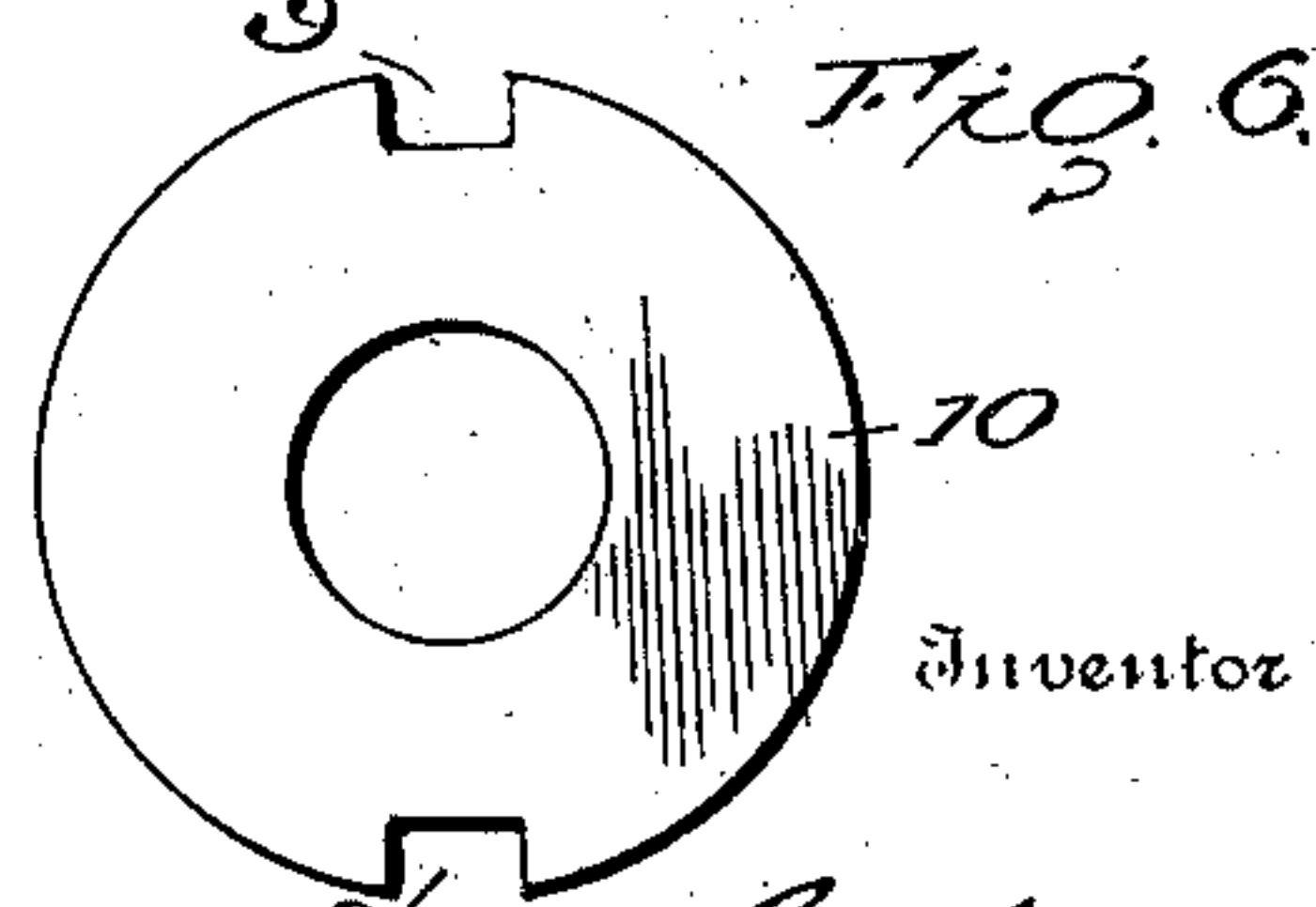
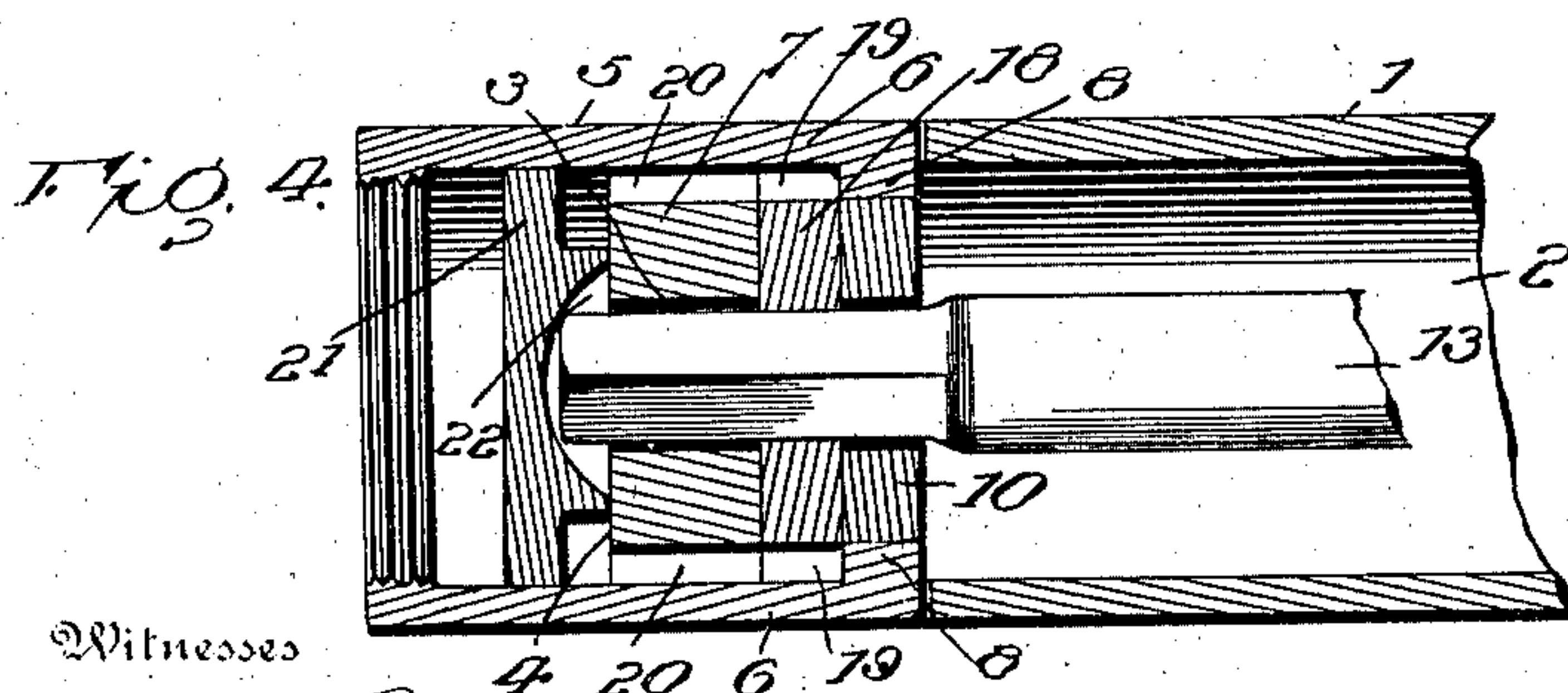
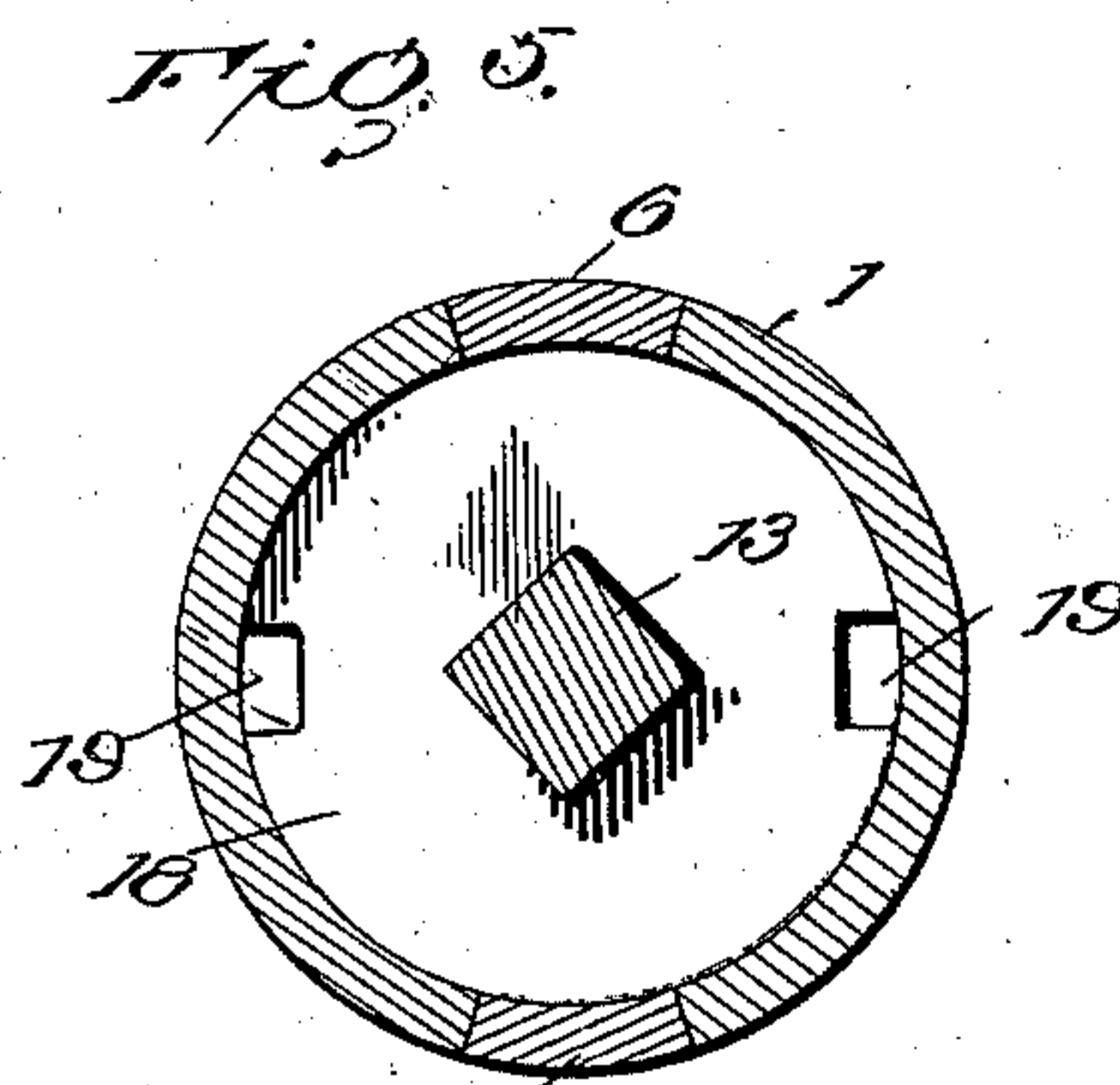
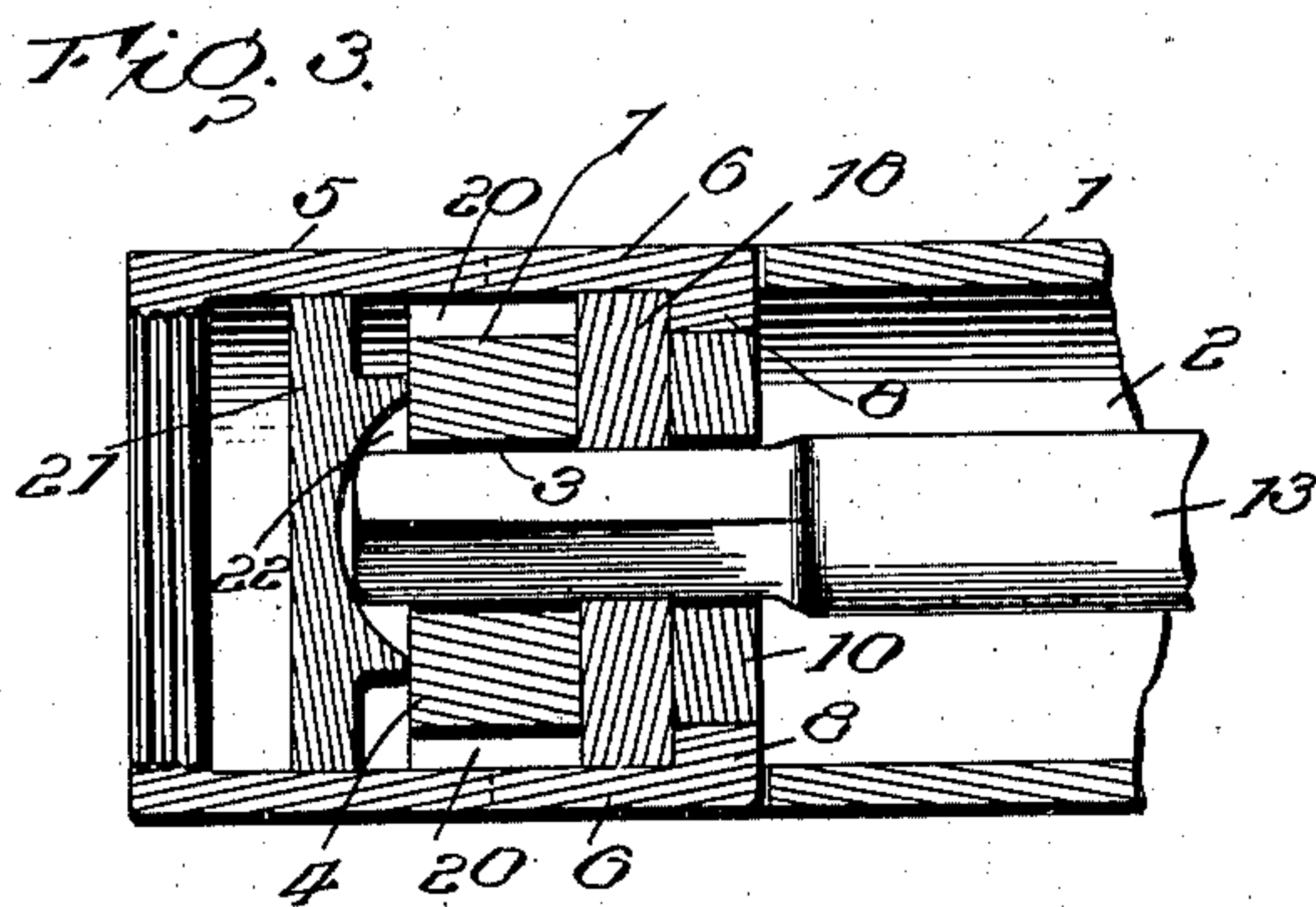
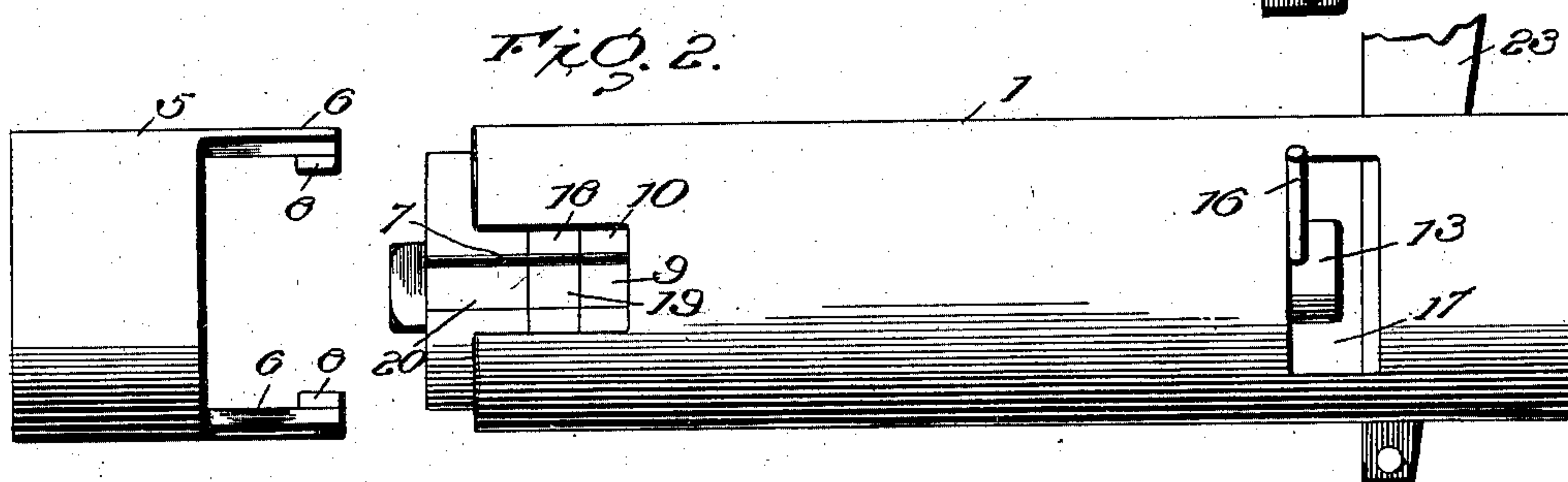
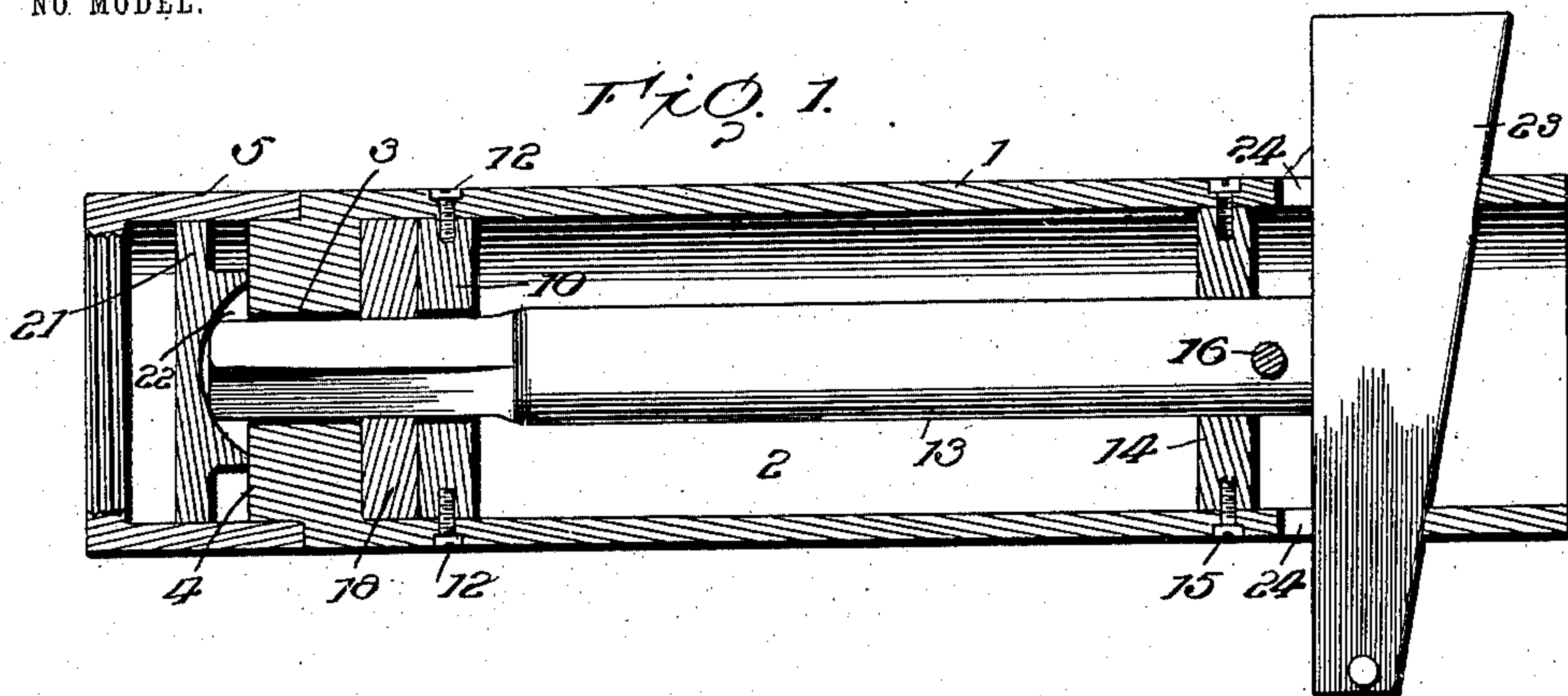
No. 741,954,

PATENTED OCT. 20, 1903.

B. BORDEN.
NIPPLE CHUCK.

APPLICATION FILED APR. 4, 1903.

NO. MODEL.



Witnesses

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NIPPLE-CHUCK.

SPECIFICATION forming part of Letters Patent No. 741,954, dated October 20, 1903.

Application filed April 4, 1903. Serial No. 151,159. (No model.)

To all whom it may concern:

Be it known that I, BRADFORD BORDEN, of Warren, in the county of Trumbull and State of Ohio, have invented certain new and useful Improvements in Nipple-Chucks; 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.

10 The object of this invention is to provide a chuck for pipe-nipples composed of but few parts and which shall be strong and durable, insuring the holding of the pipe-nipple tightly and squarely in place.

15 A further object is to effect the holding of the pipe-nipple within the chuck without the use of screw-threads, thereby rendering the operation of the device quick and certain and avoiding the danger consequent upon the wear of threads.

The invention will be hereinafter fully set forth, and particularly pointed out in the claims.

25 In the accompanying drawings, Figure 1 is a longitudinal sectional view. Fig. 2 is a side elevation with the nipple-bushing removed and shown slightly turned axially relatively to the rest of the chuck. Fig. 3 is a longitudinal section with parts broken away. Fig. 30 4 is similar to Fig. 3 with the nipple-bushing locked in place. Figs. 5 and 6 are details.

Referring to the drawings, 1 designates the tubular casing having a central bore 2 and a circular opening 3 in its closed end 4, such end being slightly reduced on its exterior to receive the inner end of the nipple-bushing 5, having arms 6, extended into keyways 7, formed in opposite sides of the casing. These arms on their inner faces have lugs 8, which are seated within slots 9, formed in opposite sides of a retaining-washer 10, such washer being held within the casing by a screw 12.

13 is a rod or bar extended longitudinally through the casing, being guided by a fixed disk 14, held by a screw 15. A pin 16, extending laterally from this rod through a slot 17 in the casing, forms a handle by which the rod may be turned axially to effect the locking and unlocking of the nipple-bushing.

50 The other end of rod 13 is square in cross-section, and hence passes loosely through the

opening in washer 10 and also through the opening 3. Between this washer and a shoulder formed by the closed end 4 is a locking-washer 18, having a central square opening 55 conforming to the square portion of the rod, so as to turn with the latter and yet allow the rod to move longitudinally. In the periphery of this washer 18 are opposite slots 19, which when coincident with the slots 9 and similar slots 20 in opposite sides of the casing form subkeyways or continuous grooves which allow the bushing to be inserted into or removed from position. When this bushing is positioned with its lugs seated in slots 9, the 65 axial turning of the rod 13 will cause washer 18 to lock such lugs within said slots, and thereby securely hold the bushing in place, all lateral movement being prevented by the arms within the keyways. 70

21 is a nipple-engaging stop-disk, located within the nipple-bushing and flat on its outer face, while from its inner face projects a concaved boss 22, designed to receive and accommodate the end of the actuating-rod 13. 75

23 is an adjusting-wedge, passed transversely through the casing through opposite openings 24, such wedge being designed when forced inwardly to engage the handled end of rod 13 and thereby move such rod longitudinally and force it and the disk 21 forward 80 hard against the end of the nipple screwed into the bushing, thereby tightly and securely holding the same in place. The chuck-casing, with its attached nipple, may then be 85 placed in a pipe-machine and held like an ordinary pipe during the threading of the nipple.

As is well known in the art, nipple-bushings of various sizes are required in conjunction 90 with nipple-chucks. By means of my invention the nipple-bushing may be readily removed and another substituted, the release and securing of the bushings being easily effected by an axial turning of the holding-rod. 95 The firm tightening and holding of the nipple is readily and easily accomplished by driving the wedge transversely through the casing, such wedge forcing the rod and nipple-engaging stop-disk tight against the nipple. 100

A chuck thus constructed embodies many advantages in point of simplicity, durabil-

ity, inexpensiveness, and certainty of operation.

I claim as my invention--

1. A nipple-chuck having a longitudinally
5 and axially movable rod, a nipple-bushing,
means actuated by the axial turning of the
rod for locking said nipple-bushing, and a
disk for engaging the nipple when the rod is
moved longitudinally, as set forth.
- 10 2. A nipple-chuck comprising a casing, a
detachable nipple-bushing, a nipple-engag-
ing stop-disk, a rod movable longitudinally
within the casing engaging said stop-disk,
and means actuated by the axial turning of
15 the rod for locking such bushing to the cas-
ing, as set forth.
3. A nipple-chuck comprising a casing, a
detachable nipple-bushing, a rod extended
longitudinally through the casing, means ac-
20 tuated by such rod for engaging and locking
such bushing, a nipple-engaging stop-disk,
and means for forcing said rod longitudinally
and holding said stop-disk against the nipple,
as set forth.
- 25 4. A nipple-chuck comprising a casing hav-
ing keyways, a detachable nipple-bushing
having arms fitted in said keyways and lugs
extending from said arms, a nipple-engaging
stop-disk, an axially-movable rod engaging
30 said stop-disk, a locking-washer movable axi-
ally with said rod for engaging said lugs, and
means for forcing the rod longitudinally
against the stop-disk, as set forth.
5. In a nipple-chuck, a longitudinally and
35 axially movable rod having a squared portion,
a locking-washer having slots and a square
opening to accommodate said rod, a nipple-
bushing having lugs designed to extend
through said slots and be engaged by said
40 locking-washer when said rod is turned axi-
ally, a nipple-engaging disk, and a wedge act-
ing on said rod for forcing said disk against
the end of a nipple, as set forth.

6. The combination with the tubular cas-
ing having keyways at one end and opposite 45
openings at or near the other, of the nipple-
bushing having arms fitted in said keyways,
lugs on said arms, seats therefor, a rod ex-
tended longitudinally of the casing having a
squared portion, a locking-washer fitted on 50
said squared portion and having slots de-
signed to coincide with said seats, a nipple-
engaging disk, and a wedge passed through
said openings for forcing said rod against said
disk, as set forth.

7. The combination with the tubular cas-
ing having a slot and opposite openings, of a
detachable nipple-bushing having opposite
lugs, a nipple-engaging disk within such bush-
ing, a rod movable axially and longitudinally 60
within the casing and having a squared por-
tion, a locking-washer for engaging said lugs
having a squared opening to accommodate
said rod, a pin extending from the latter
through said slot, and a wedge passed through 65
said openings of the casing for engaging said
rod, substantially as set forth.

8. The combination with the casing having
at one end keyways formed with central
grooves, of a nipple-bushing having arms fit- 70
ted in said keyways, lugs projecting from said
arms fitting in said grooves, a locking-washer
having opposite slots for coinciding with said
grooves, a rod for turning said washer to lock
said lugs in said grooves, a nipple-engaging 75
stop-disk, and means for moving the rod lon-
gitudinally independently of said locking-
washer, as set forth.

In testimony whereof I have signed this
specification in the presence of two subscrib- 80
ing witnesses.

BRADFORD BORDEN.

Witnesses:

F. S. CHRYST,
W. A. UERACHER.