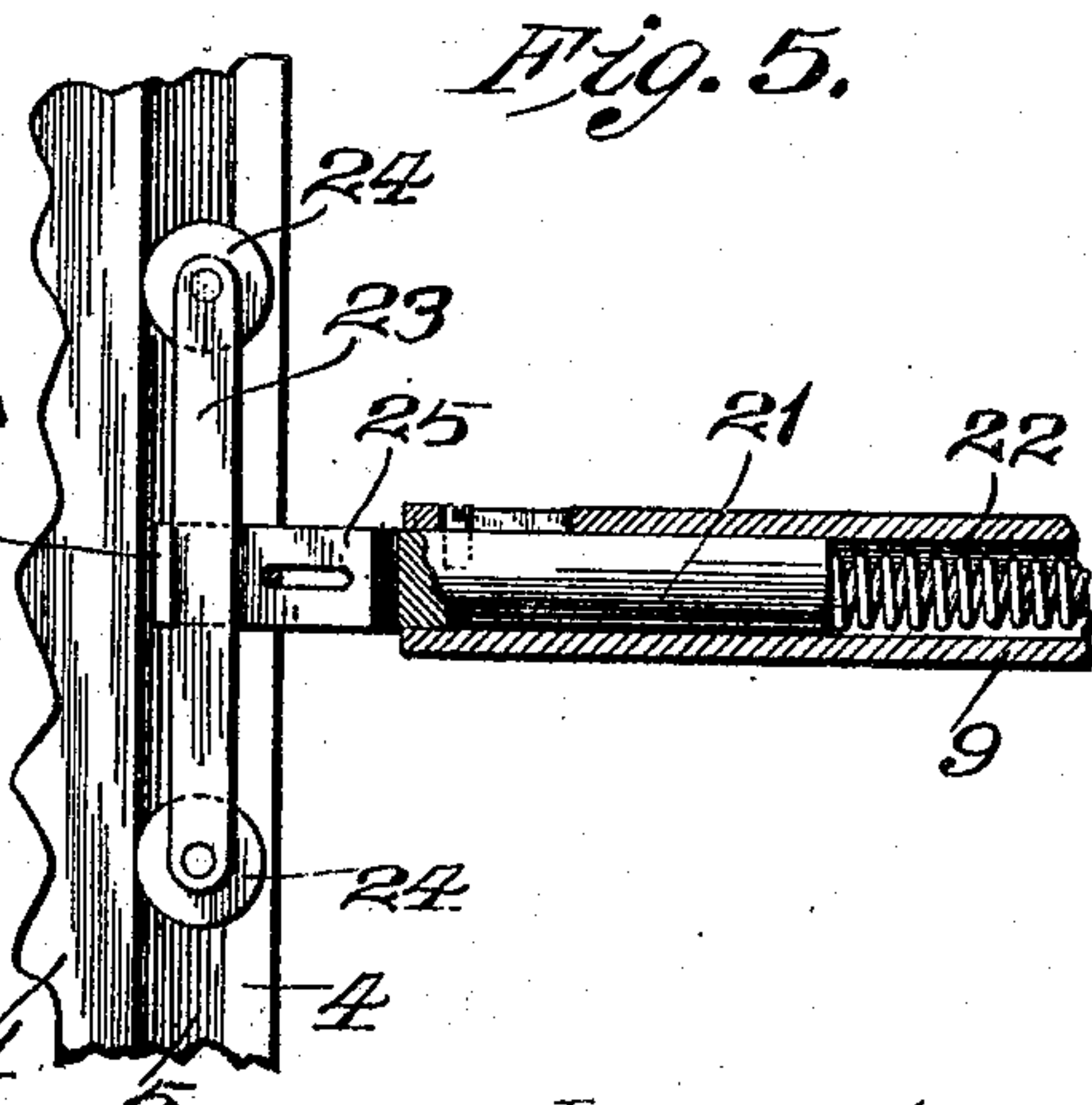
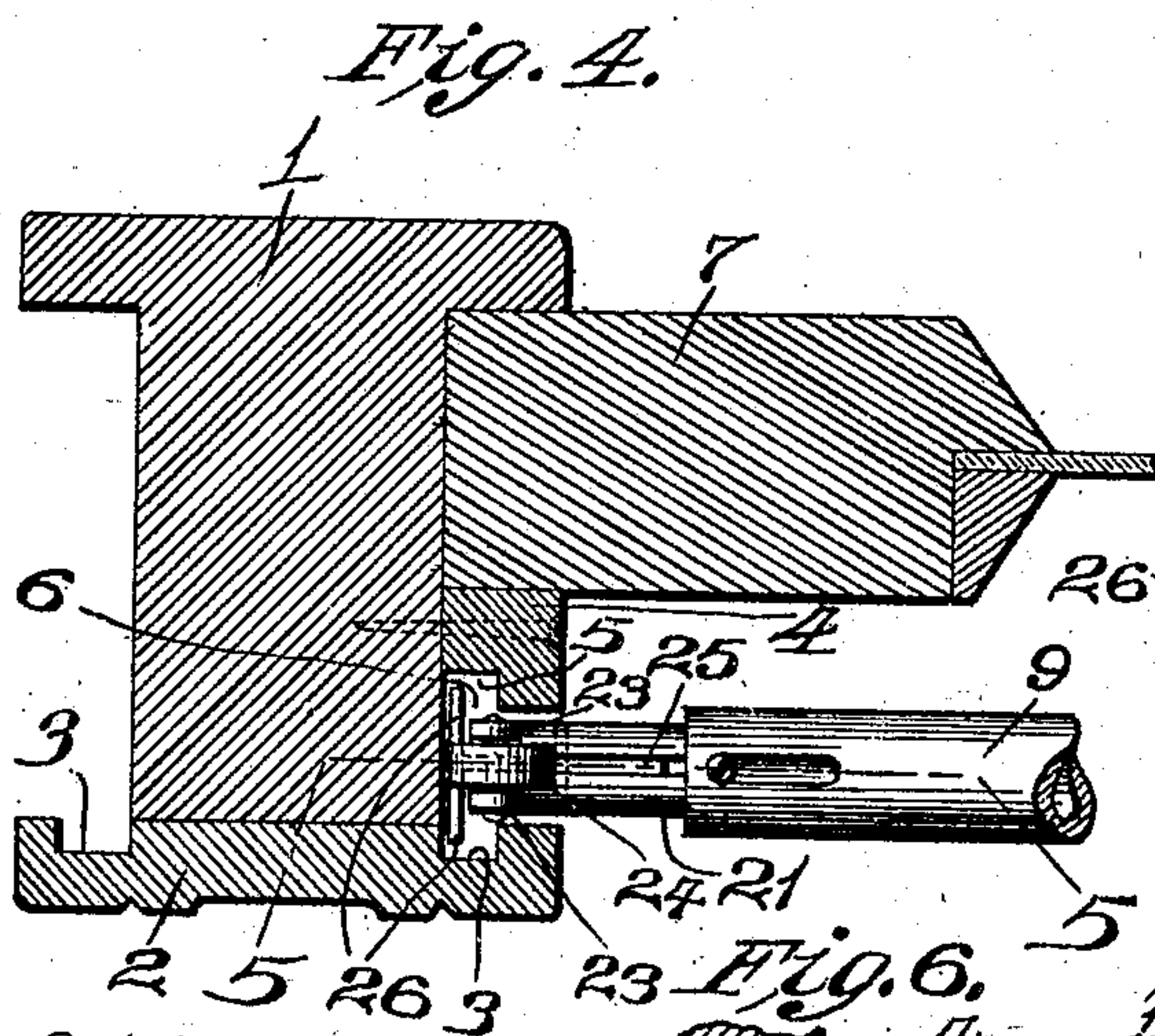
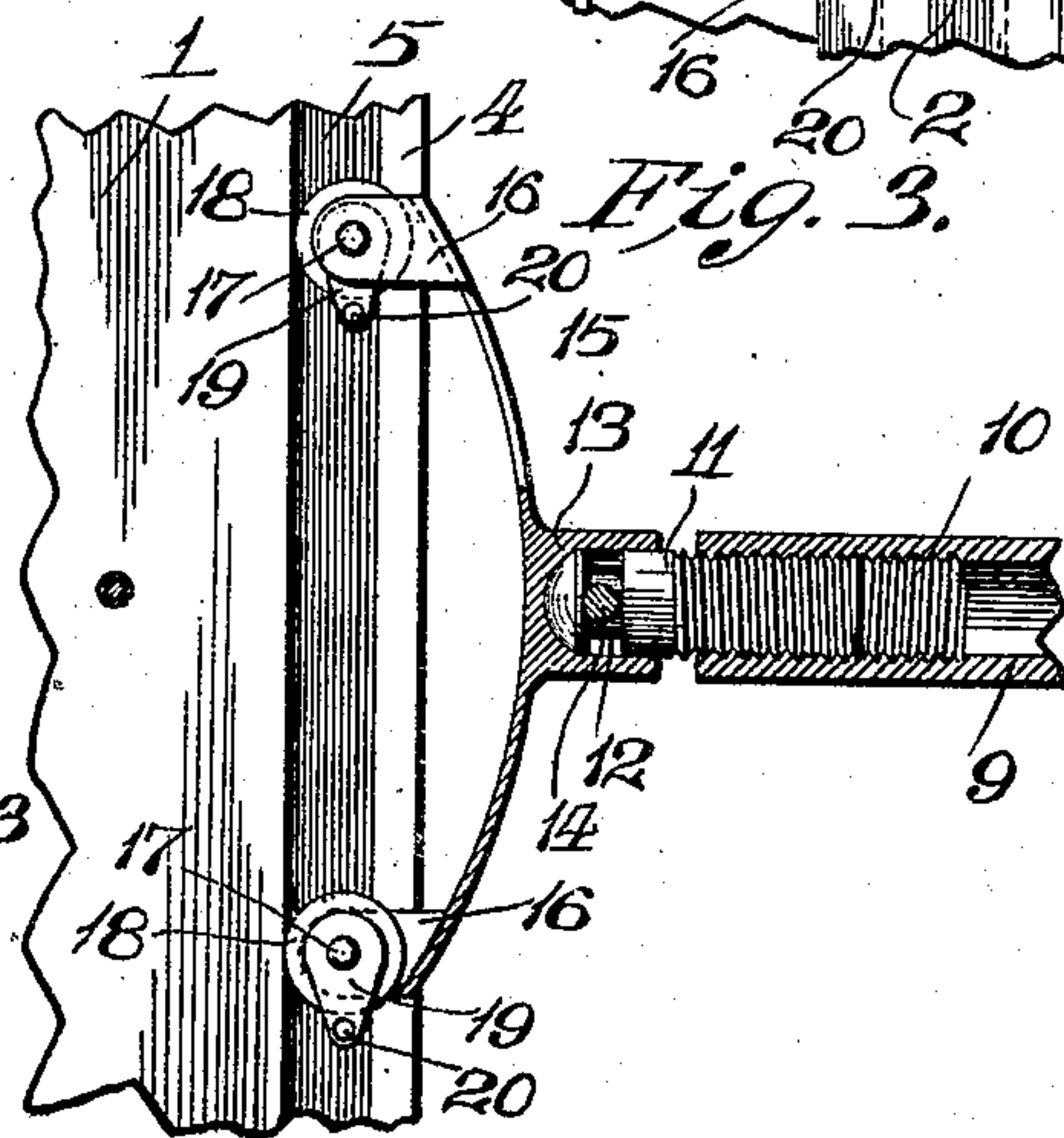
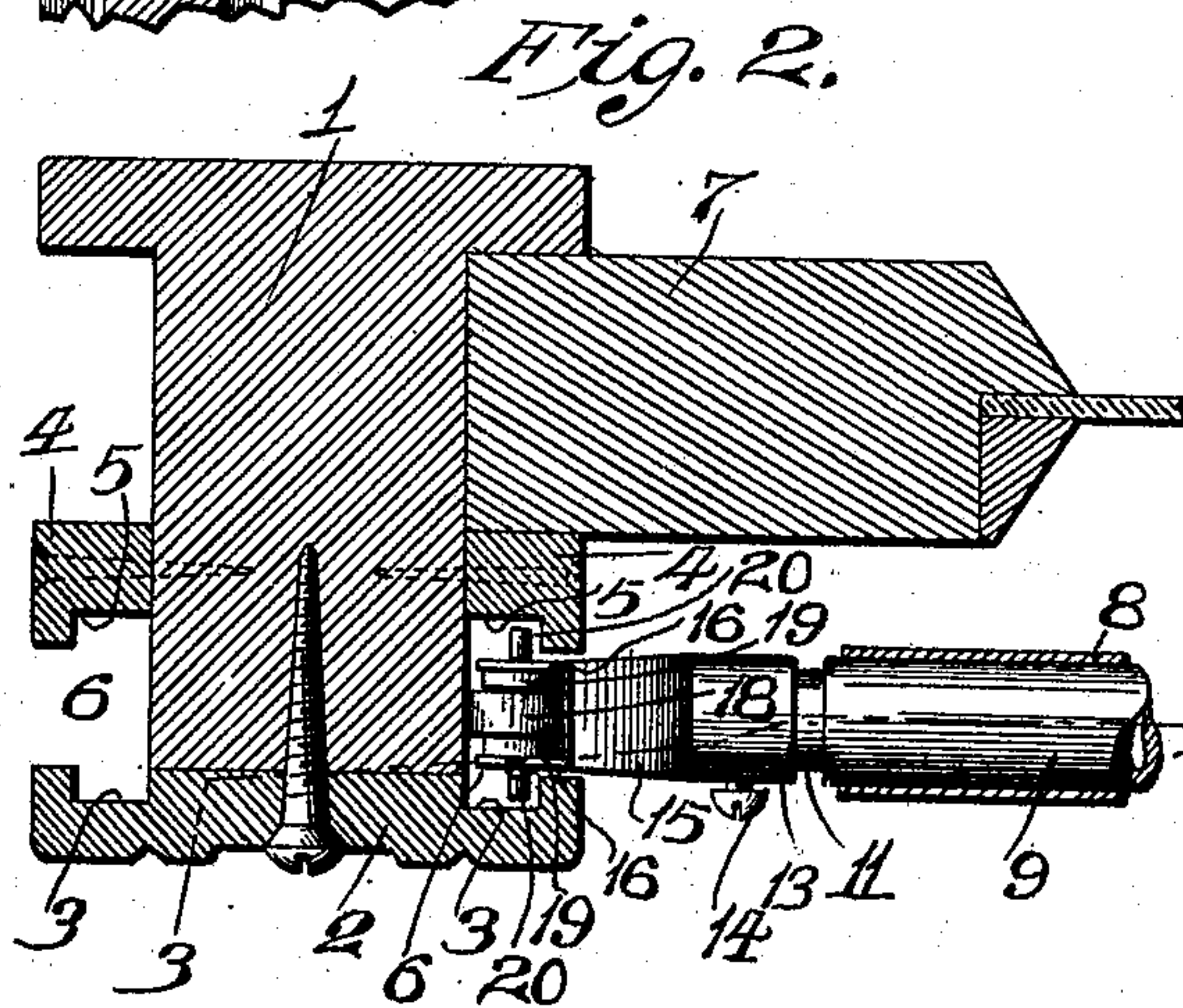
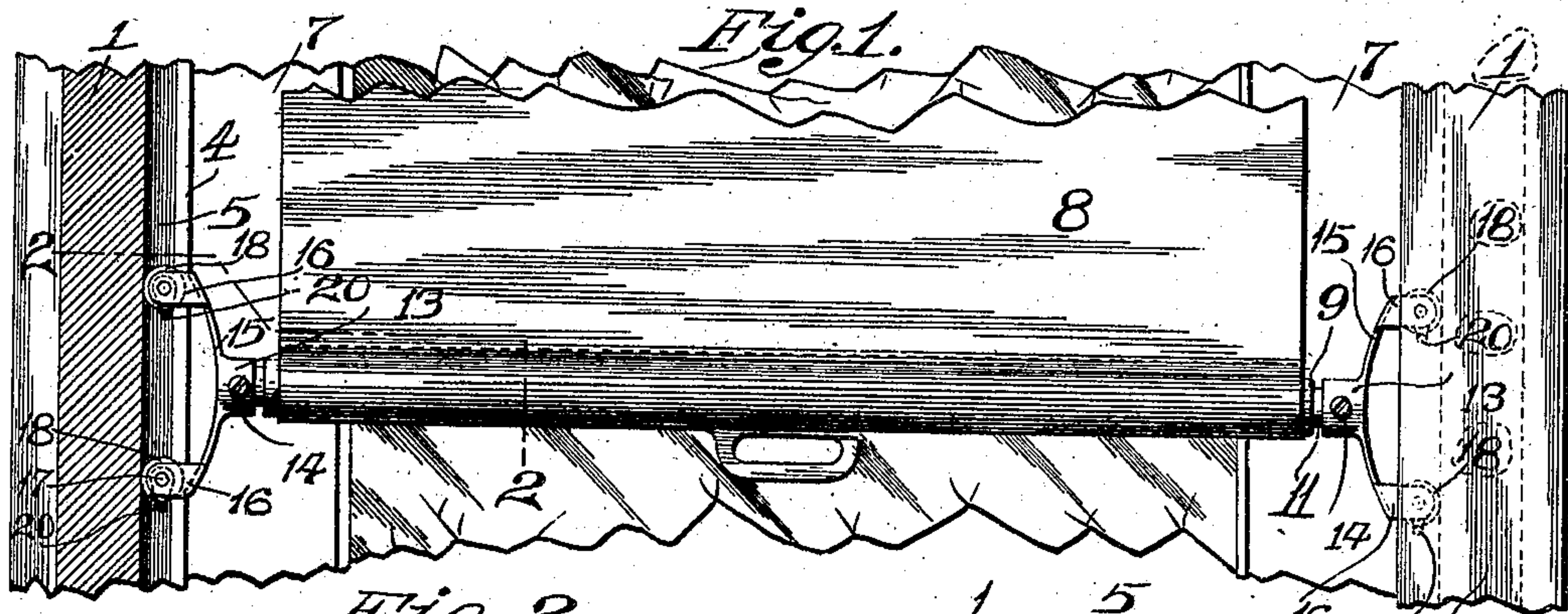


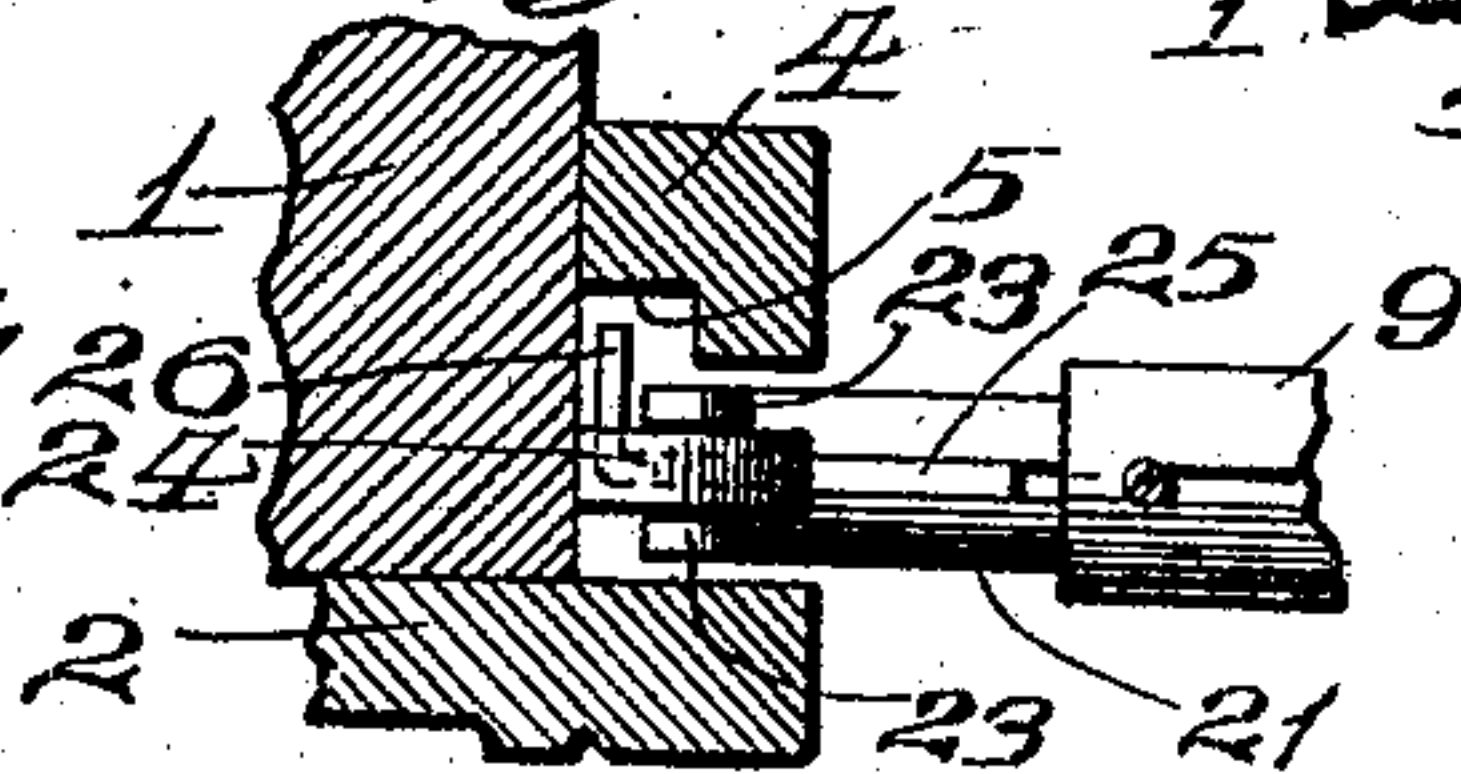
C. O. BIRNEY.
CAR WINDOW CURTAIN ROD.
APPLICATION FILED APR. 11, 1908.

924,419.

Patented June 8, 1909.



Attest.
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UNITED STATES PATENT OFFICE.

CHARLES O. BIRNEY, OF ST. LOUIS, MISSOURI.

CAR-WINDOW CURTAIN-ROD.

No. 924,419.

Specification of Letters Patent.

Patented June 8, 1909.

Application filed April 11, 1908. Serial No. 426,616.

To all whom it may concern:

Be it known that I, CHARLES O. BIRNEY, a citizen of the United States, and resident of St. Louis, Missouri, have invented certain new and useful Improvements in Car-Window Curtain-Rods, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to a car window curtain rod, my object being to construct a simple, inexpensive curtain rod particularly adapted for the curtains of car windows, and the ends of the curtain rod being provided with yielding members carrying anti-friction rollers which operate in the curtain grooves formed in the side faces of the window posts, said yielding members being provided with retaining device, which prevents the parts carried by the ends of the rods from being withdrawn from the curtain grooves, and thus the lower end of the curtain is always maintained in proper position.

A further object of my invention is to equip the ends of the curtain rod with yielding members, there being adjustable connections between said yielding members and the ends of the rod whereby the members may be moved inward or outward to vary the friction between the rollers and the faces of the window posts.

To the above purposes, my invention consists in certain novel features of construction and arrangement of parts, which will be hereinafter more fully set forth, pointed out in the claims, and illustrated in the accompanying drawings, in which:—

Figure 1 is an elevation of the lower end of a car window curtain equipped with a rod of my improved construction; Fig. 2 is an enlarged horizontal section taken approximately on the line 2—2 of Fig. 1; Fig. 3 is a vertical section taken on the line 3—3 of Fig. 2; Fig. 4 is a horizontal section similar to Fig. 2, and showing a modified form of the curtain rod; Fig. 5 is a vertical section taken approximately on the line 5—5 of Fig. 4; and Fig. 6 is a detail view illustrating a modified form of construction of the curtain groove.

Referring by numerals to the accompanying drawings: 1 designates the window posts of the car, which are of the usual construction, and provided on their inner faces with

the post molding 2, and formed in the rear faces of the projecting portions of said molding are vertically disposed grooves 3.

Fixed on the side faces of the window posts are the vertically disposed parting strips 4, and formed in the faces thereof, immediately adjacent the projecting portions of the molding 2, are grooves 5, which are directly opposite the grooves 3, and thus a curtain groove 6 is formed, which groove is T-shaped in cross section.

The window sash 7, of ordinary construction, operates in the usual manner between the window posts 1 to the rear of the parting strips 4.

8 designates the curtain, of usual form, and arranged at the lower end thereof is the curtain rod 9, which is in the form of a tube, with its ends interiorly screw threaded, as designated by 10.

Screw seated in the threaded ends of the tubular curtain rod are pins 11, in the outer portions of which are formed the grooves 12. Arranged on the projecting portion of each pin is a socket 13, and passing therethrough is a set screw 14, the inner end of which enters the corresponding groove 12, thereby making a swivel connection between each pin 11 and socket 13.

Formed integral with each socket is a vertically disposed segmental spring 15, the ends of which are provided with pairs of ears 16, which normally occupy the main portion of the T-shaped curtain groove, and journaled on pins 17, passing through each pair of ears, are small rollers 18, which bear against the faces of the window posts 1 in the curtain grooves 6.

Loosely arranged on each of the pins 17 and between the ears 16 and rollers 18 are plates or washers 19, and projecting outward therefrom into the grooves 3 and 5 are pins 20. These washers 19 and pins 20 form hooks which are pivotally arranged on the ends of the springs 15, and which provide simple means for preventing the ends of said springs from becoming accidentally disengaged from the curtain grooves.

When a curtain equipped with my improved rod is raised or lowered in the proper manner, the rollers 18 carried by the ends of the springs 15 ride yieldingly and with a minimum amount of friction upon the side faces of the window posts 1, and thus the

curtain can be raised or lowered with very little effort, and will remain at any elevation desired.

Should either end of the curtain rod be elevated during the raising or lowering movement, the pins 20 carried by the plates or washers 19 will engage against the projecting portions of the molding 2 and the parting strip 4, and thus act as stops to prevent the ends of the springs 15 from being withdrawn from the curtain grooves.

The pins 11 can readily be screwed in and out of the ends of the tubular curtain rod 9, in order to increase or decrease the tension of the springs 15, and correspondingly increase or decrease the friction between the rollers 18 and the window posts 1.

In the modification shown in Figs. 4 and 5, pins 21 are arranged to slide in the ends of the tubular rod 9, the said pins being normally forced outward by expansive coil springs 22, and carried by the outer ends of said pins 21 are the vertically disposed arms 23, on the ends of which are journaled anti-friction rollers 24, which operate in the curtain grooves and bear against the window posts.

Arranged to slide longitudinally in the outer ends of the pins 21 are plates 25, the outer ends of which carry laterally projecting fingers 26, which occupy the branches 3 and 5 of the curtain grooves. These fingers 26 prevent the ends of the curtain rod from being accidentally disengaged from the curtain grooves.

In the modified form of the curtain groove shown in Fig. 6, the groove 6 formed in the rear side of the molding 2 is dispensed with, and where this form of curtain groove is made use of, but a single pair of plates or washers 19 are located on each spring 15.

I claim:—

1. The combination with car window posts, in the side faces of which are formed curtain grooves having restricted openings, of a curtain rod arranged on the curtain operating between the window posts, resilient members arranged on the ends of the curtain rod, anti-friction rollers carried by said resilient members and operated in the curtain grooves, and pivoted hooks carried by the ends of the resilient members and normally positioned in the wider portions of the curtain grooves for maintaining the curtain rod in proper position.

2. The combination with car window posts, in the side faces of which are formed curtain grooves having restricted openings, of a curtain rod arranged on the curtain operating between the window posts, resilient members adjustably located on the ends of the curtain rod, the ends of which resilient members are normally positioned in the wider portions of the curtain grooves, and pivoted hooks carried by the ends of

said resilient members and occupying the wider portions of the grooves for preventing the withdrawal of the ends of said members from the curtain grooves.

3. The combination with car window posts, in the side faces of which are formed curtain grooves having restricted openings, of a curtain rod arranged on the curtain operating between the window posts, pins adjustably arranged in each end of the curtain rod, sockets loosely mounted on the outer ends of the pins, springs integral with said sockets, the ends of which springs extend into the curtain grooves, rollers carried by the ends of the springs, and hooks pivotally arranged on the ends of the springs, and which hooks engage in the wider portions of the curtain grooves.

4. A curtain rod, comprising a body portion, resilient members arranged on the ends of said body portion, anti-friction rollers carried by said resilient members and which rollers operate in the curtain grooves, and pivoted hooks carried by the resilient members and occupying the curtain grooves for maintaining the curtain rod in operative position.

5. A car window curtain rod, comprising a body portion, resilient members adjustably located on the ends of the body portion, anti-friction rollers arranged on the ends of the resilient members and which rollers operate in the curtain grooves, and hooks pivotally arranged on the ends of the resilient members for maintaining the curtain rod in operative position.

6. The combination with car window posts, provided with the usual post molding and the usual parting strips, in the adjacent faces of which molding and strips are formed oppositely disposed grooves which communicate with the spaces between the parting strips and the projecting edges of the post molding, of a curtain rod arranged on the curtain operating between the window posts, and means carried by the ends of the curtain rod and engaging in the grooves in the post molding and parting strips for maintaining the curtain rod in operative position.

7. The combination with car window posts, provided with the usual post molding, on the inner face of which is formed a vertically disposed groove, of a curtain rod arranged on the lower end of the curtain operating between the window posts, and means carried by the ends of the curtain rod and engaging in the grooves in the post molding for maintaining the curtain rod in operative position.

8. The combination with car window posts provided with the usual post molding, the side edges of which project beyond the side faces of the window posts, of parting strips rigidly fixed on the side faces of the window posts, there being grooves formed

in the faces of the parting strips directly
opposite the projecting portions of the post
molding, a curtain operating between the
window posts, a curtain rod arranged on the
5 lower end of the curtain, and means carried
by the ends of the curtain rod and engaging
in the grooves in the parting strips for main-
taining the curtain rod in operative position.

In testimony whereof, I have signed my
name to this specification, in presence of two 10
subscribing witnesses.

CHARLES O. BIRNEY.

Witnesses:

M. P. SMITH,

E. L. WALLACE.