

No. 755,329.

PATENTED MAR. 22, 1904.

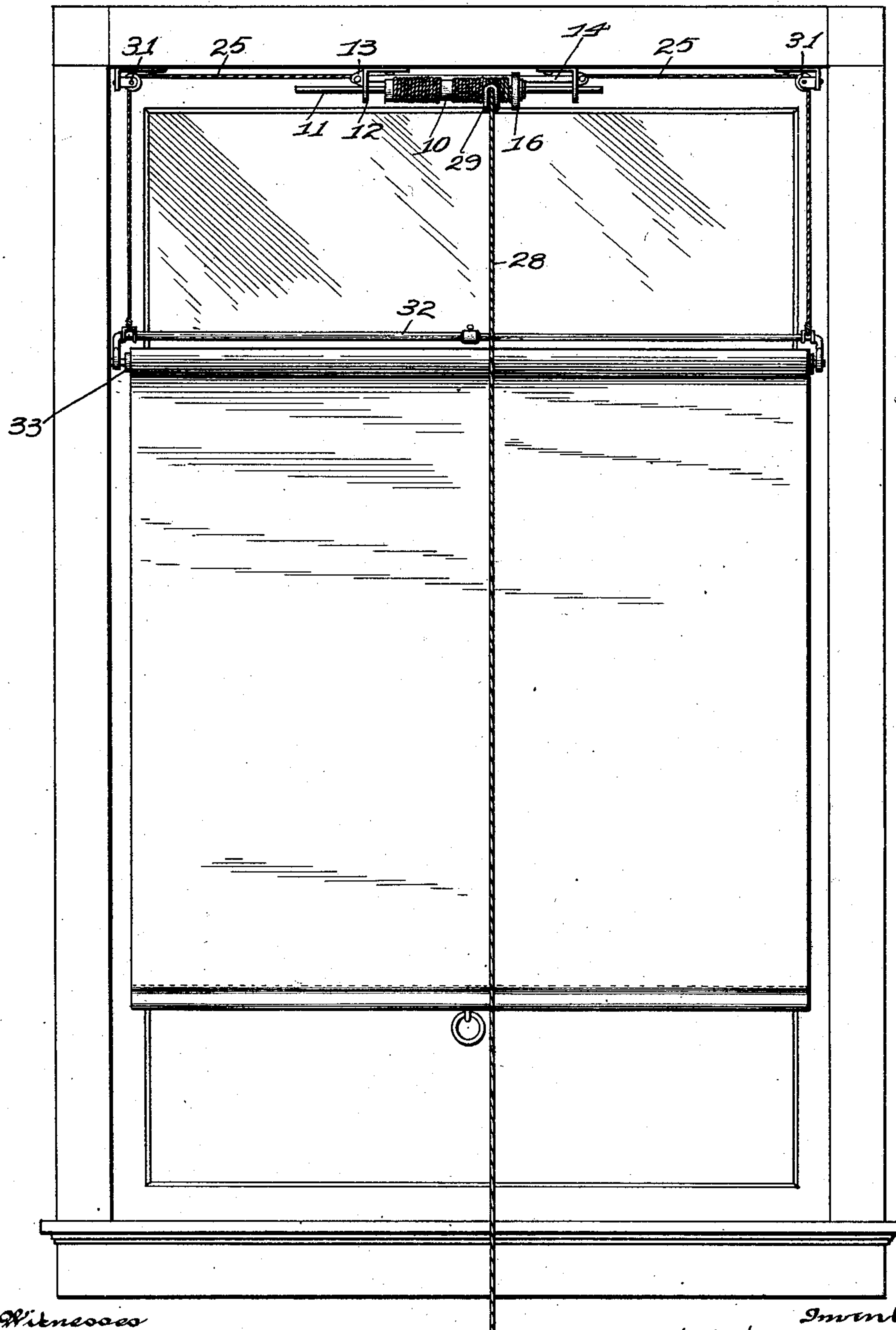
H. M. STURGIS.
AUTOMATIC DROP FIXTURE.

APPLICATION FILED AUG. 4, 1903.

NO MODEL.

3 SHEETS—SHEET 1.

Fig. 1.



Witnesses
Alfred A. Davis
m. d. Davis

Inventor
Herbert M. Sturgis
by: Higdon & Longan & Hopkinson

No. 755,329.

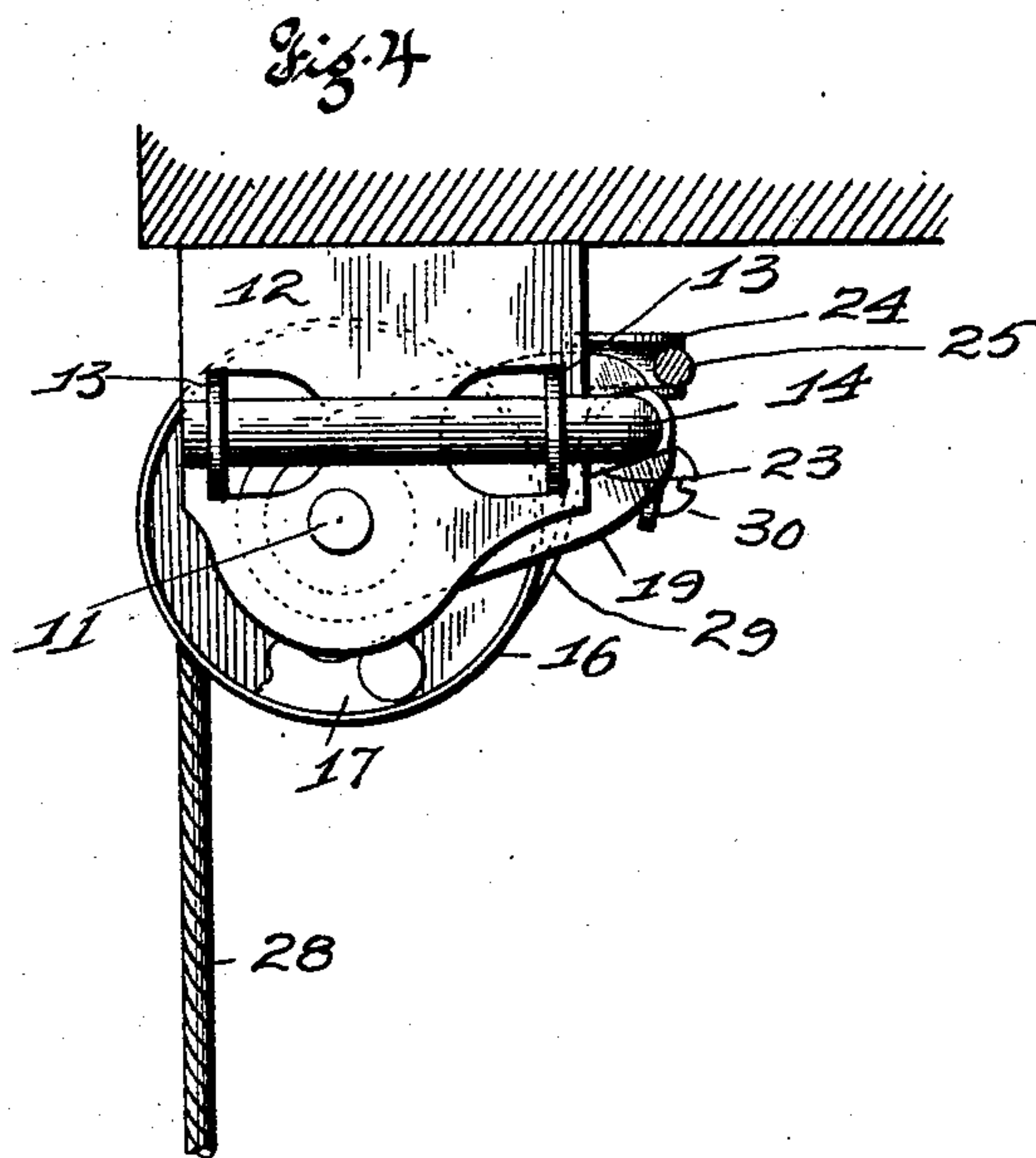
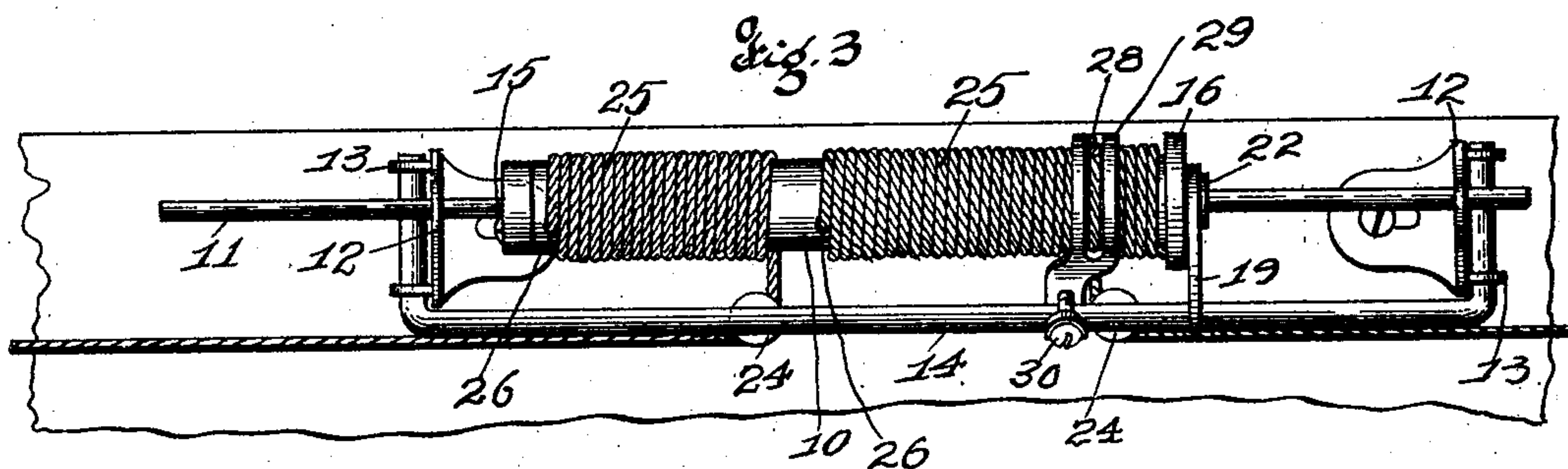
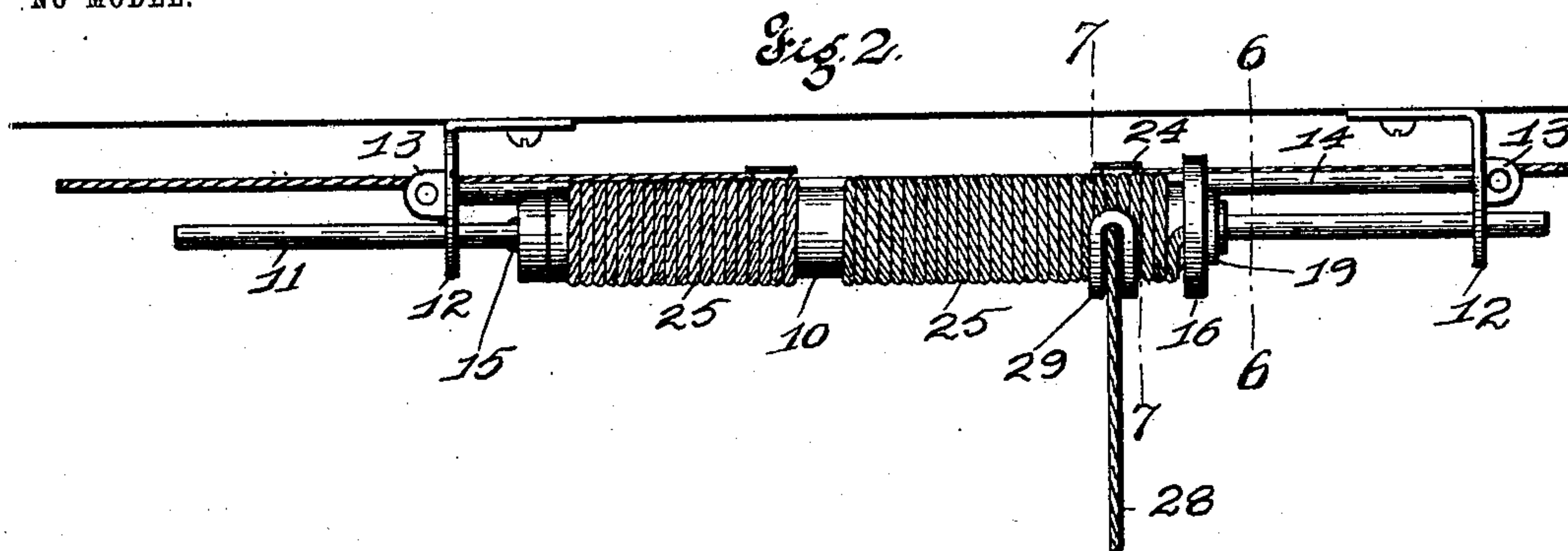
PATENTED MAR. 22, 1904.

H. M. STURGIS.
AUTOMATIC DROP FIXTURE.

APPLICATION FILED AUG. 4, 1903.

NO MODEL.

3 SHEETS—SHEET 2.



Witnesses
Alfred A. Eick
M. D. Dyer

Inventor
Herbert M. Sturgis
by Higdon & Dorgan & Hopkins Attys

No. 755,329.

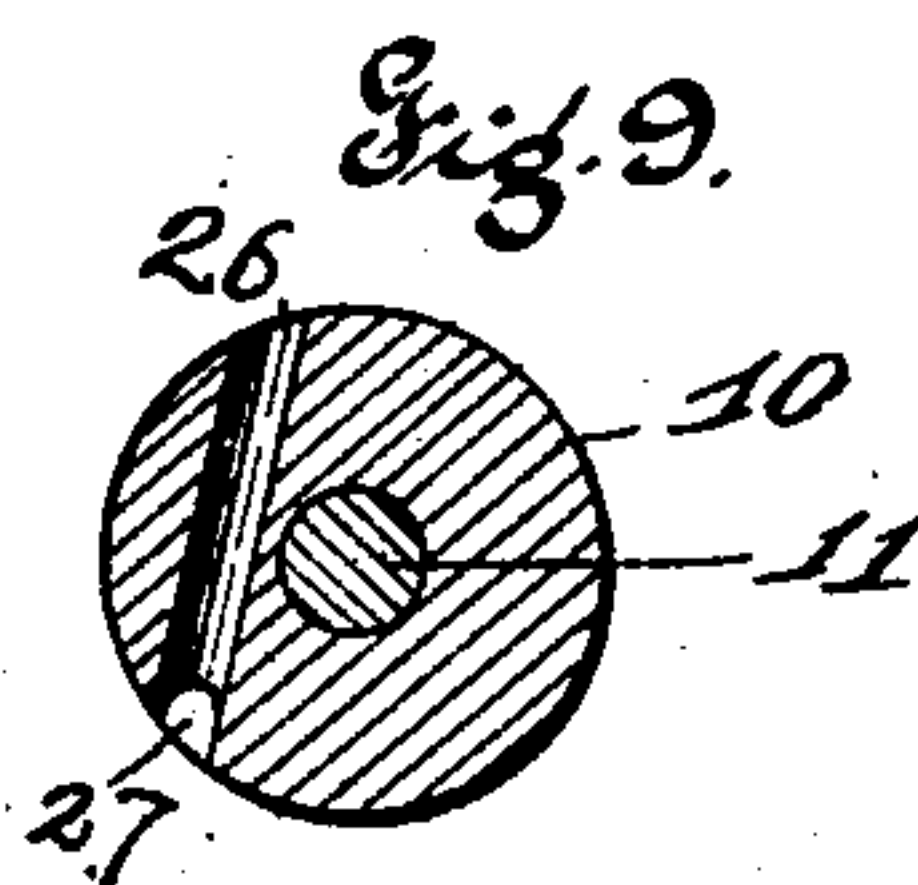
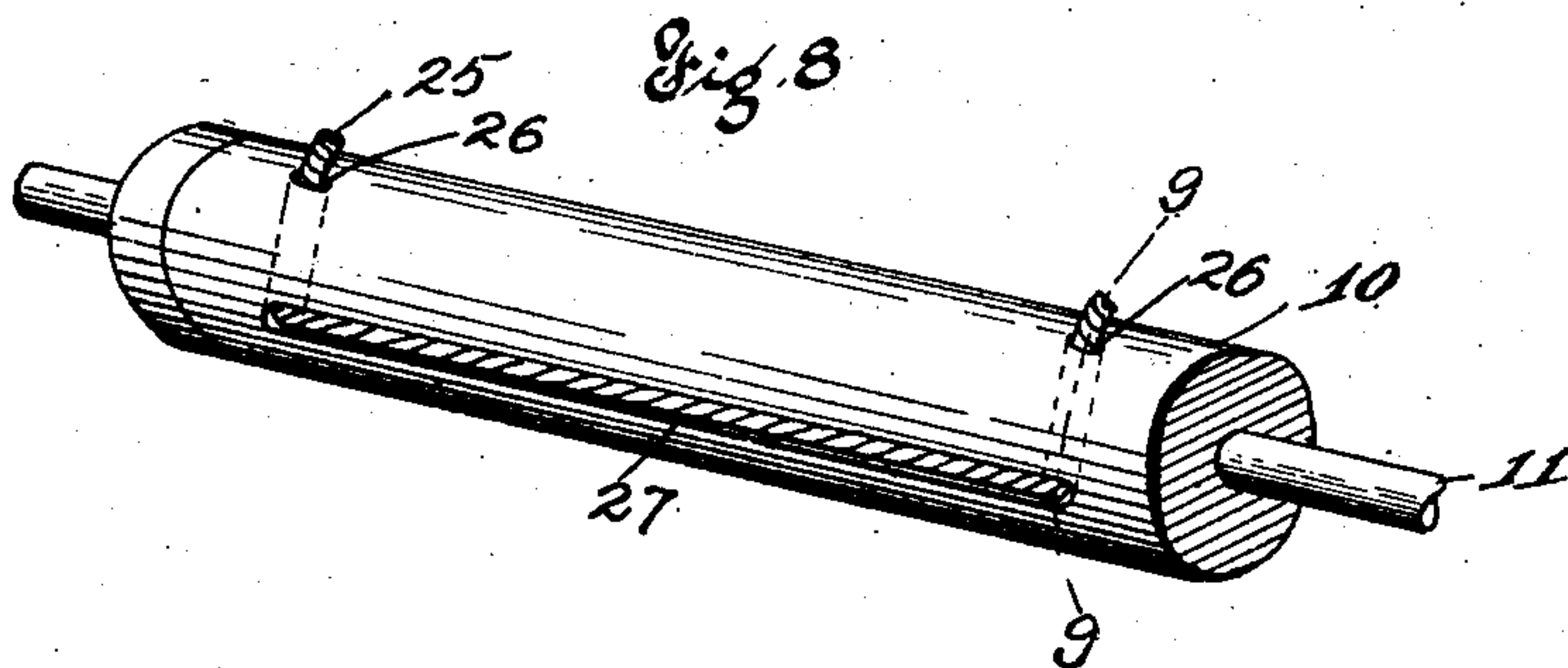
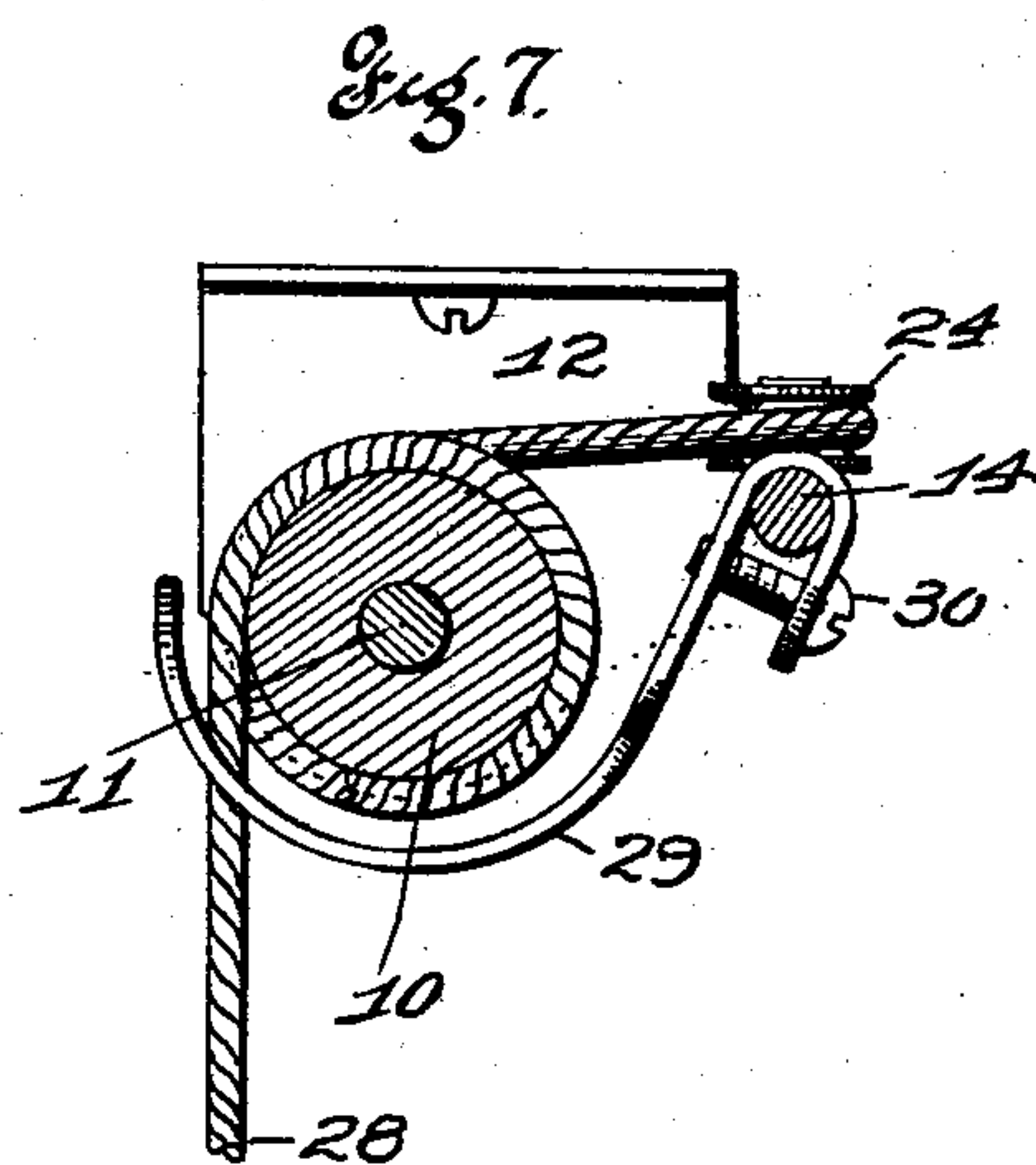
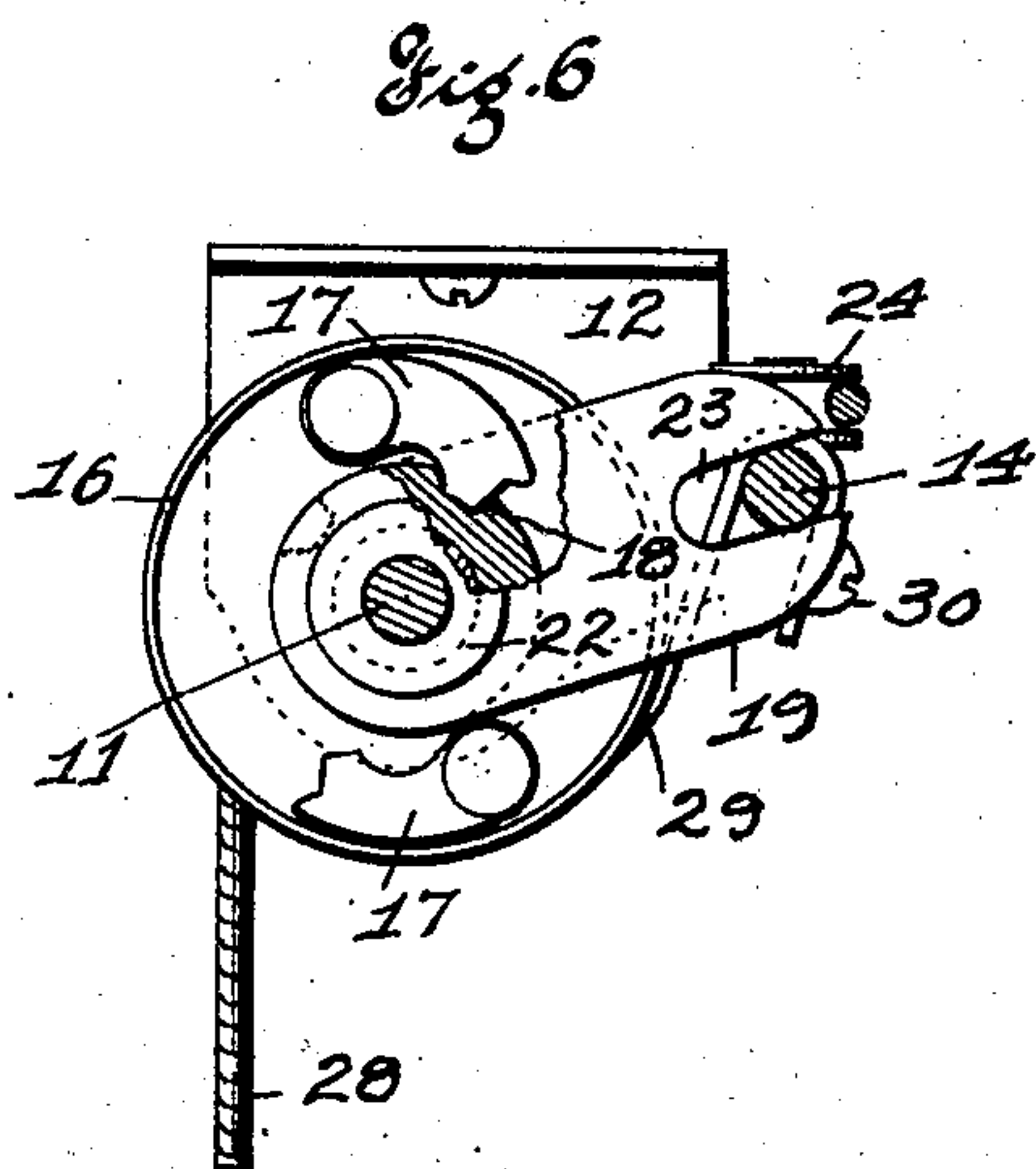
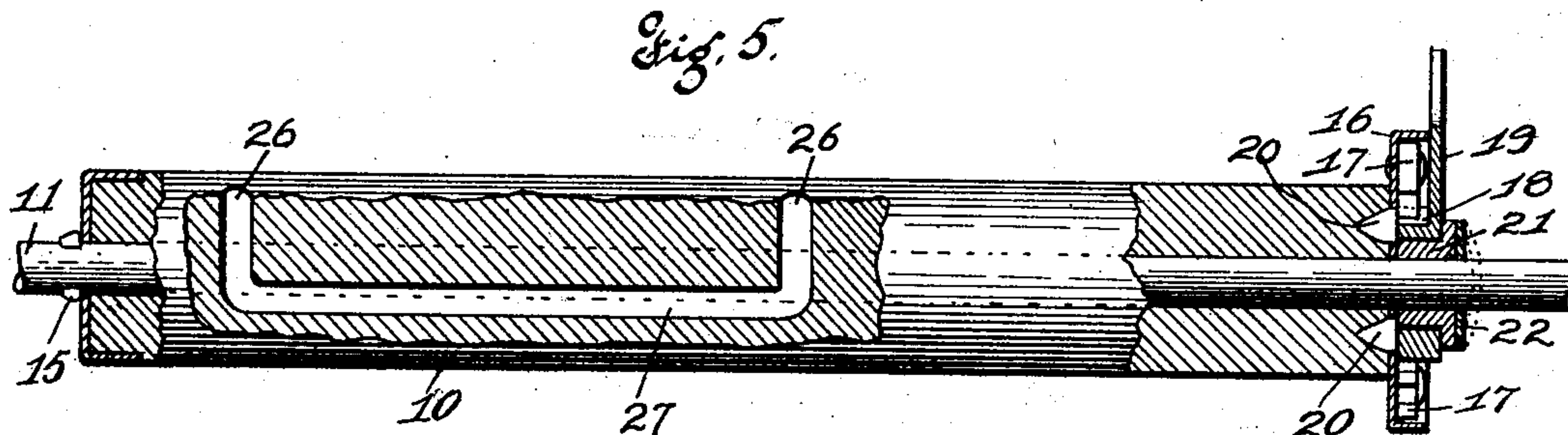
PATENTED MAR. 22, 1904.

H. M. STURGIS.
AUTOMATIC DROP FIXTURE.

APPLICATION FILED AUG. 4, 1903.

NO MODEL.

3 SHEETS—SHEET 3.



Witnesses
Alfred E. Eick
W. L. Union

Inventor
Herbert M. Sturgis

by Heddon & Longan & Hopkins Attys

UNITED STATES PATENT OFFICE.

HERBERT M. STURGIS, OF KANSAS CITY, MISSOURI, ASSIGNOR OF TWO-THIRDS TO IVAN H. SHOEMAKER AND F. E. WEAR, OF KANSAS CITY, MISSOURI.

AUTOMATIC DROP-FIXTURE.

SPECIFICATION forming part of Letters Patent No. 755,329, dated March 22, 1904.

Application filed August 4, 1903. Serial No. 168,237. (No model.)

To all whom it may concern:

Be it known that I, HERBERT M. STURGIS, a citizen of the United States, residing at Kansas City, Jackson county, State of Missouri, have invented certain new and useful Improvements in Automatic Drop-Fixtures, 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.

This invention relates to improvements in automatic drop-fixtures which are especially adapted to window-shade adjusters; and it consists in the novel arrangement, construction, and combination of parts, as will be fully hereinafter described and claimed.

Although I have shown my invention to be used as a window shade or curtain adjuster, it may be advantageously employed for other purposes—as, for instance, for adjusting maps, advertising matter, charts, display devices in stores, &c.

Figure 1 is a front view of my complete invention, showing the same applied underneath the top of the window-casing, the shade being swung by my device and lowered, exposing a portion of the top window-pane. Fig. 2 is a detail front view of the operating mechanism of my invention. Fig. 3 is a bottom plan view of the same. Fig. 4 is an enlarged end view of the operating mechanism. Fig. 5 is a detail view of the roller with parts in section, showing its construction and the manner in which it is applied upon the sliding rod. Fig. 6 is a vertical sectional view taken on the line 6 6 of Fig. 2. Fig. 7 is a vertical sectional view taken on the line 7 7 of Fig. 2. Fig. 8 is a detail perspective view of a portion of the roller, showing the construction and manner in which the cord is attached thereto. Fig. 9 is a vertical sectional view of the roller, taken on the line 9 9 of Fig. 8.

In the construction of my invention I provide a roller 10, rigidly mounted upon a rod 11, supported and slidably mounted in brackets 12, by which the mechanism is supported to the window-casing. The brackets 12 are

provided with projecting perforated ears 13, stamped and bent from the same material, and acts as supports for the rod 14. The rod 11 is provided with lugs 15, against which one end of the roller 10 comes in contact and prevents it from sliding upon said rod 11. The opposite end of the roller 10 is provided with a cap 16, in which are pivotally carried the locking-pawls 17, which are adapted to come in contact with the recesses 18, formed in the shoulder of the bracket 19. Said cap 16 is rigidly held against the end of the roller 10 by means of the integral tongues 20, stamped and bent from the same material. The bracket 19 is held in position against the cap 16 by means of the shouldered washer 21, and said washer 21 is rigidly retained in position upon the rod 11 by means of the washer 22, being originally dished, as indicated in dotted lines in Fig. 5, before its application upon the rod.

The bracket 19 is prevented from turning by means of the slot 23, formed in its free end, through which is passed the rod 14. Upon the rod 14 is mounted a pair of pulleys 24, over which is guided the cord 25. The said cord 25 is retained upon the roller by being passed through the holes 26 and lodged in the elongated groove 27, connecting said holes and permitting said portion of the cord contained within said groove 27 to be flush with the outer circumference of said roller. (See Fig. 8.)

The holes 26 are bored through the roller slightly to one side of the rod 11, so as not to interfere with said rod and the free passing of the cord. A cord 28 is wound around said roller and its one end secured in any desirable manner to the cap 16. The coiling of said cord around the roller is guided by the slotted curved arm 29, bent over and supported upon the rod 14 by means of the set-screw 30.

The cord 25 is passed over the pulleys 31, located in the corners of the window-casing, and the free ends of said cord are attached to and support the adjustable curtain-supporting rod 32.

The curtain-roller 33 is supported in the

downwardly-bent portions of the adjustable curtain-supporting rod 32 in the manner well known.

The operation of my invention is as follows: The operating mechanism, consisting of the roller, sliding rod, and brackets, are attached to the upper portion of the window-casing, either at the bottom or side thereof. The pulleys 31 are arranged in each corner of the upper portion of the casing. The cord 25 is passed through the holes 26, drawing the same therethrough until the ends are equal distances from the roller, a portion of the cord extending from hole to hole in the roller resting in the groove, the ends of the cord being passed around the pulleys 24, located upon the rod 14, and through the pulleys 31, attached to the adjustable curtain-supporting rod 32. The cord 28 is wound around the roller and secured to the cap 16 to raise the curtain carried by the adjustable curtain-supporting rod. The operator pulls upon the cord 28, which will wind up the cord 25, and by the gradual releasing of said cord 28 the pawls 17 will lodge within the recesses 18, holding the same in locked position. To lower the curtain, the cord 28 is again pulled upon and released quickly, allowing the cord 25 to unwind from the roller.

Having fully described my invention, what I claim is—

1. An automatic drop-fixture, comprising a pair of brackets, integral projecting perforated ears formed on said brackets, a rod, said rod supported by said ears, a sliding rod supported by the brackets, a cord-roller mounted upon said sliding rod, a cord carried by said roller, holes bored through said roller through which the cord is passed, substantially as specified.

2. An automatic drop-fixture, comprising a pair of brackets, integral projecting perforated ears formed on each of said brackets, a rod bent twice at right angles passed through the perforations in said ears, a sliding rod supported by the said brackets, a cord-roller mounted upon said sliding rod, an operating-cord carried by the roller, a cap secured to one end of said roller, a shouldered bracket located upon said sliding rod, a slot formed in the projecting end of the said bracket, the slotted end of said bracket engaging the rod bent twice at right angles preventing said bracket from turning, notches formed in the

shoulder of said bracket, pawls carried by the cap and adapted to engage with the notches in said bracket, washers mounted upon the sliding rod to retain the shouldered bracket in position, a semicircular-shaped slotted arm mounted upon the rod bent twice at right angles to guide the coiling of an operating-cord, substantially as specified.

3. A device of the class described, comprising a wood roller, an operating-cord carried by said roller, a sliding rod upon which said wood roller is mounted, a pair of brackets supporting said sliding rod and roller, a rod bent twice at right angles held by said brackets, holes bored through the said wood roller, a groove formed in said roller connecting the holes, a cord passed through the holes, the portion of said cord extending from hole to hole embedded in the groove, lugs formed on the sliding rod to retain the roller in position, a cap secured to one end of said roller, pawls pivotally carried in said cap, a shouldered bracket mounted upon the sliding rod and engaging with the rod bent twice at right angles, washers mounted upon said sliding rod retaining the shouldered bracket in position, pulleys mounted upon the rod bent twice at right angles over which the cord is guided, an arm held upon the rod bent twice at right angles, said arm bent around a portion of the roller, a slot formed in said arm for the guiding of the operating-cord, substantially as specified.

4. A device of the class described, comprising a pair of brackets mounted upon a rod 14, a sliding rod, a wood roller rigidly mounted upon said sliding rod, an arm 29 carried by the rod 14, pulleys mounted upon the rod 14, holes 26 bored through the wood roller, a groove 27 formed in the roller from hole to hole, a cord passed through said holes and groove, a cap secured to one end of the roller, an operating-cord 28 wound around said roller and secured to said cap, the said operating-cord 28 passing through a slot formed in the arm 29 whereby said cord is guided upon the roller, substantially as specified.

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

HERBERT M. STURGIS.

Witnesses:

IVAN H. SHOEMAKER,
FRANK P. STEVENS.