

S. WHEELER.
PAPER ROLL BRACKET.
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935,078.

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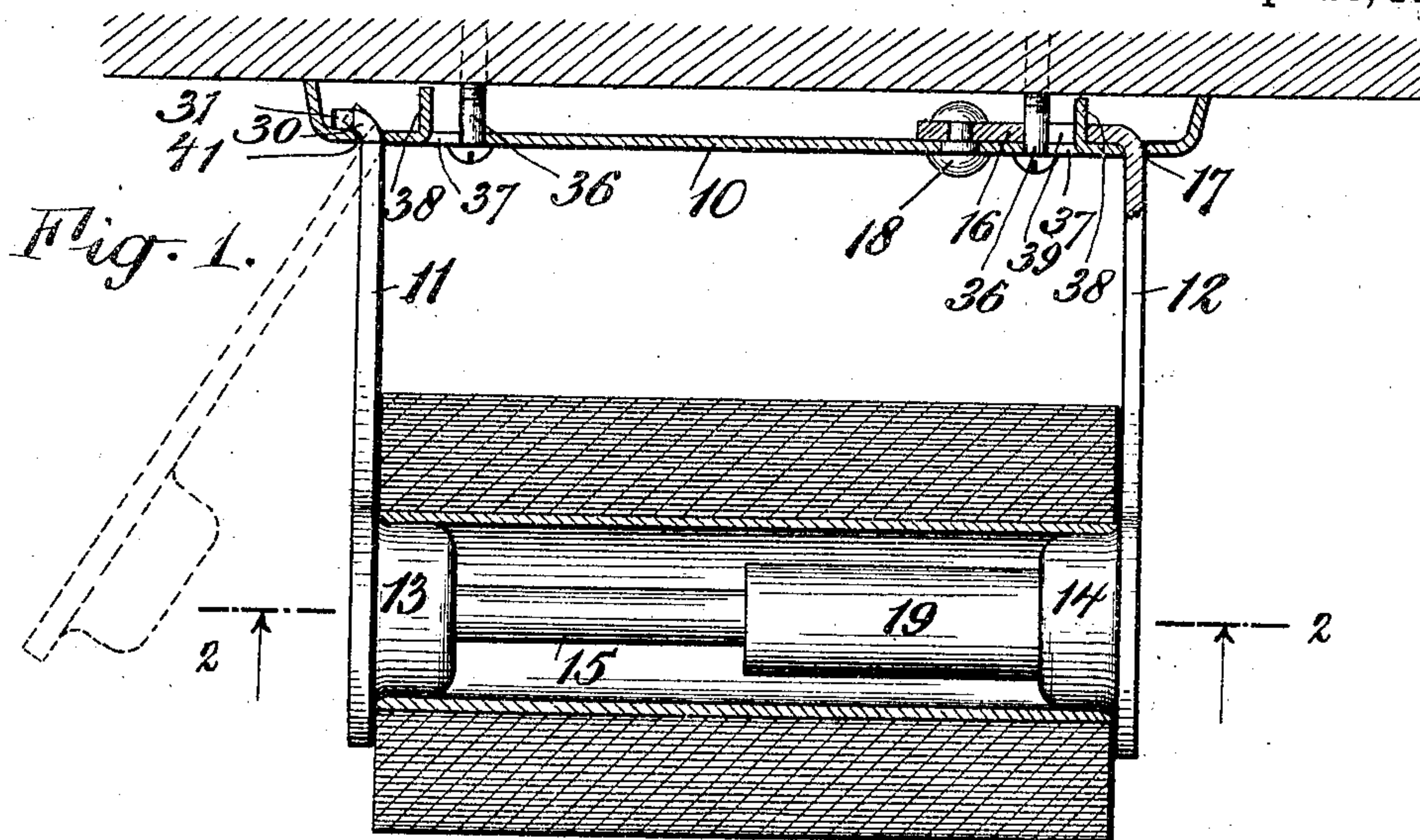


Fig. 2.

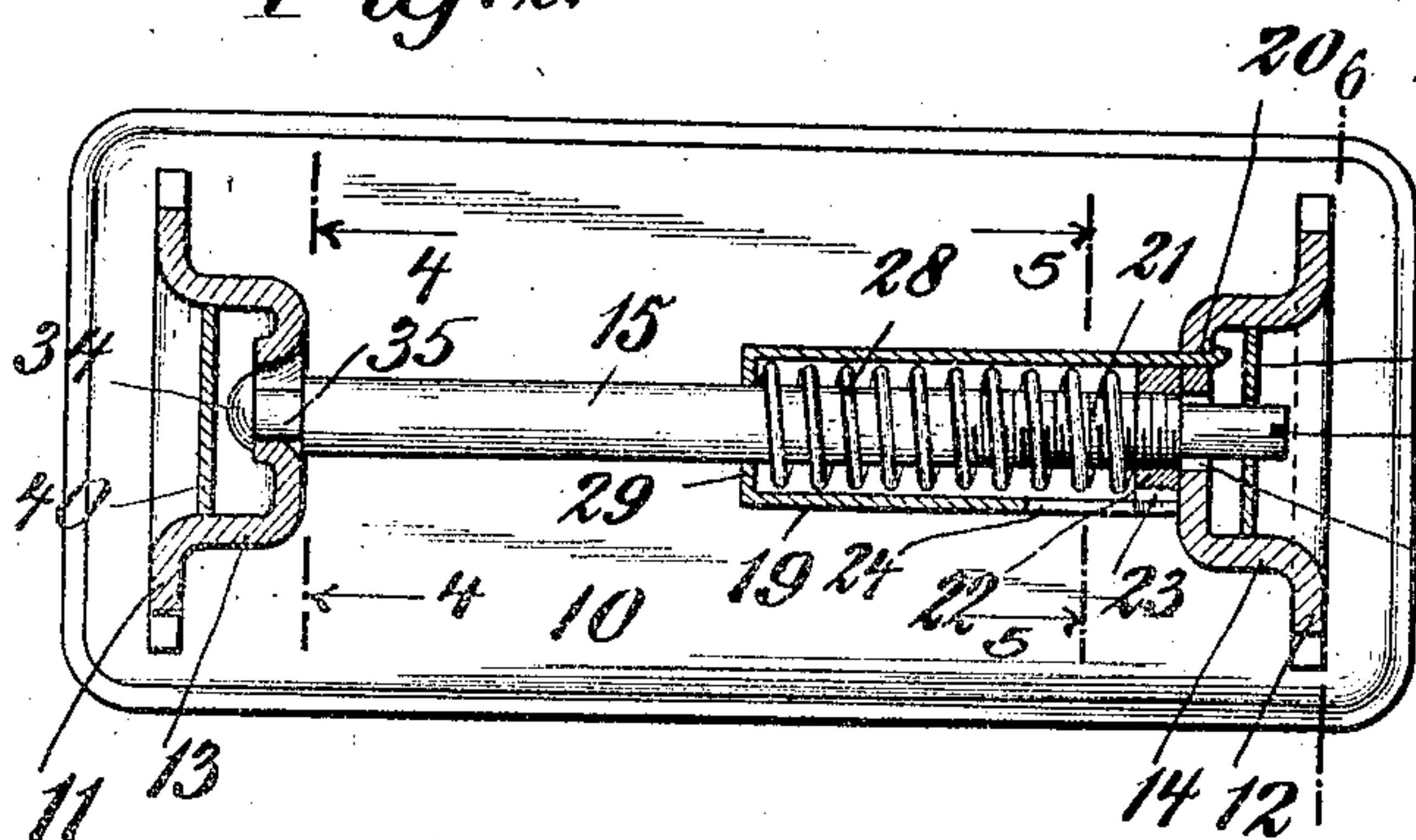
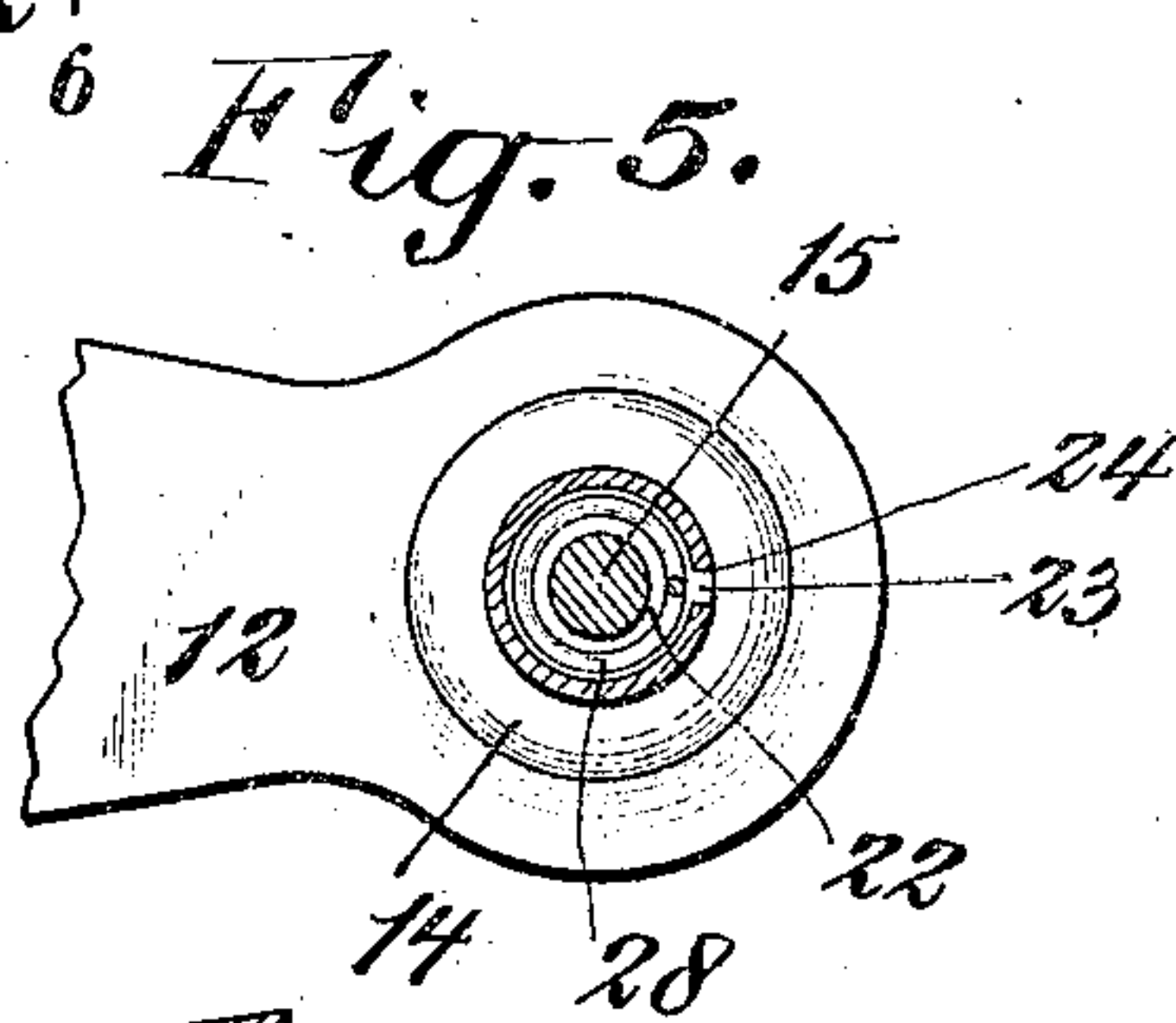
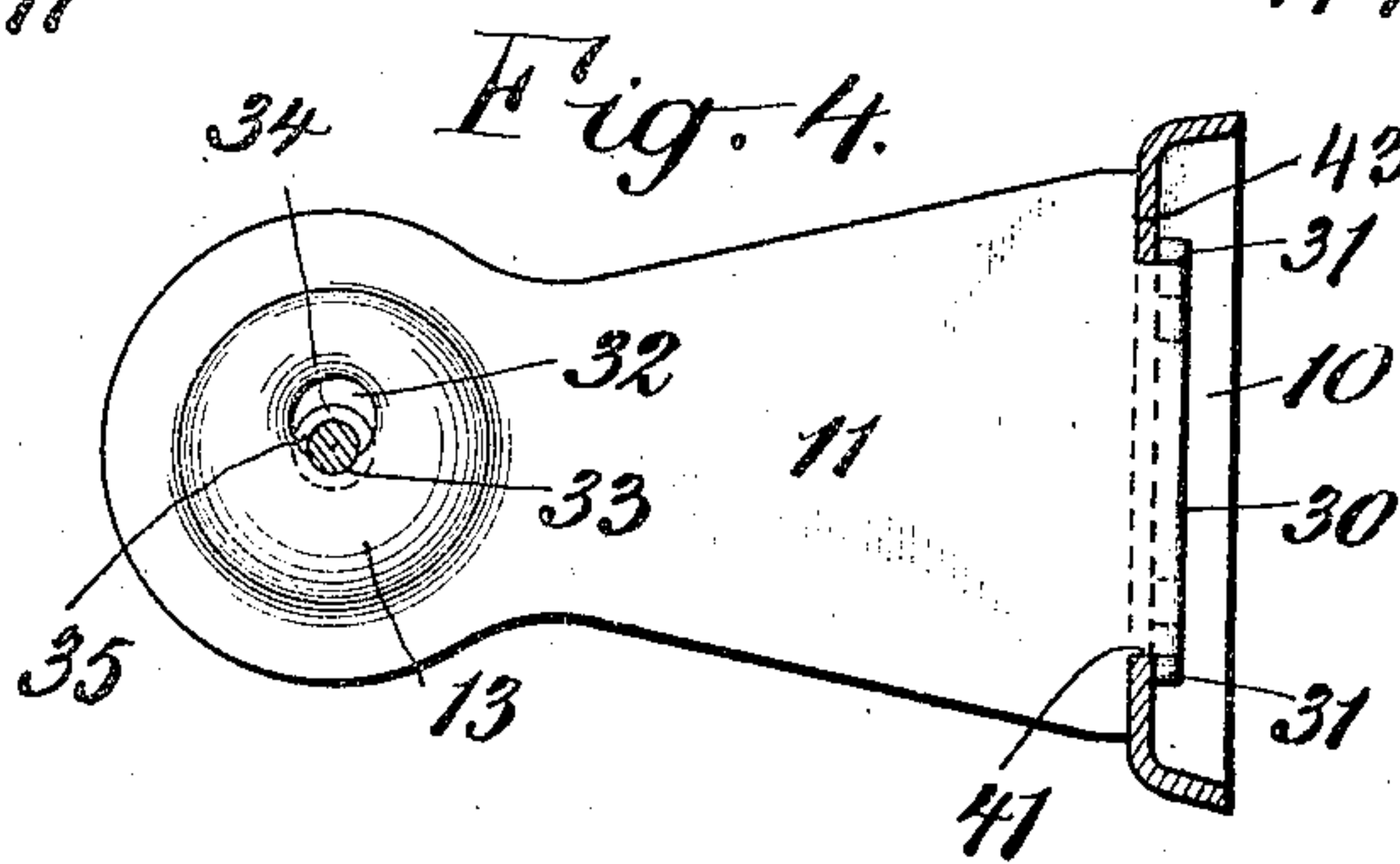
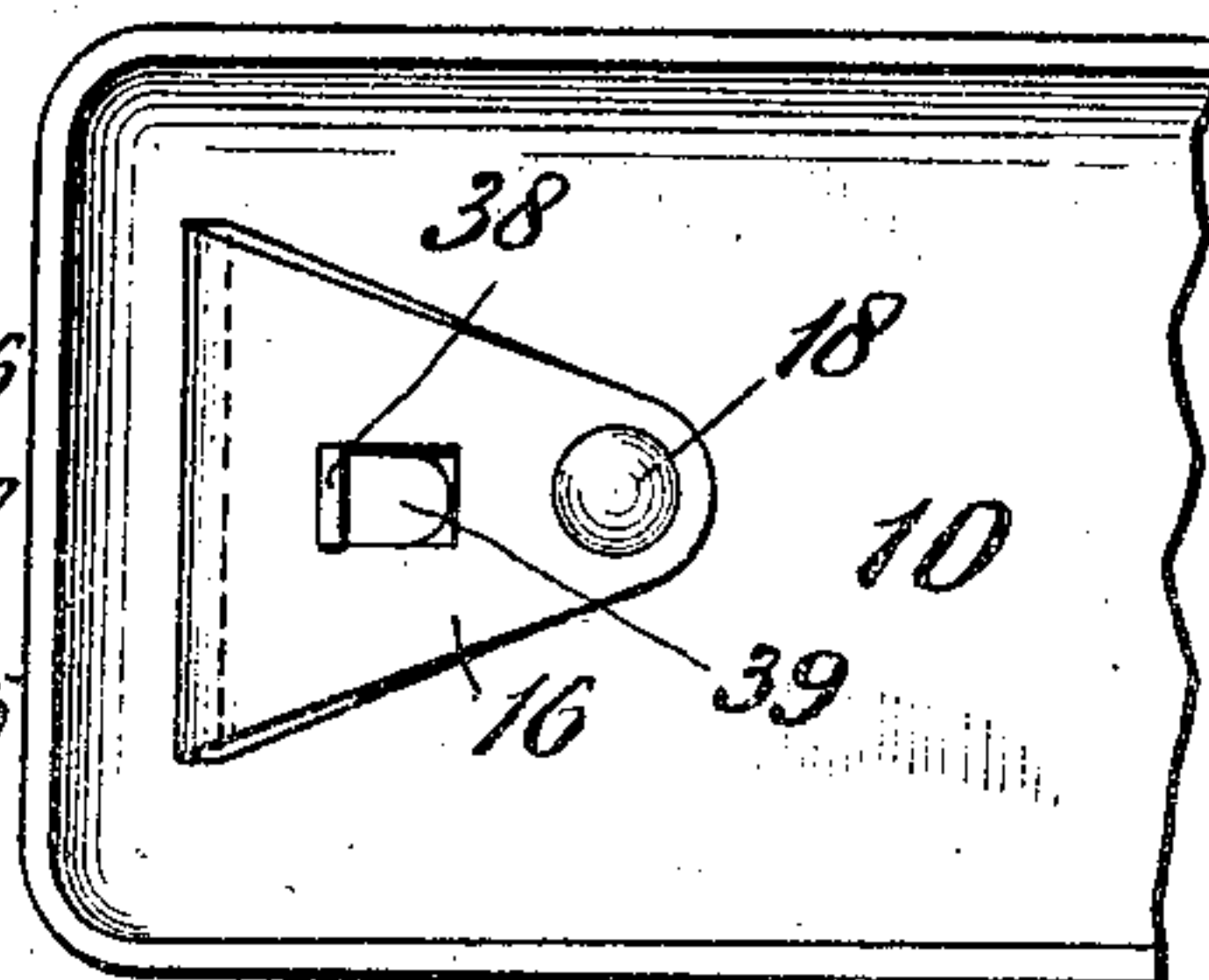
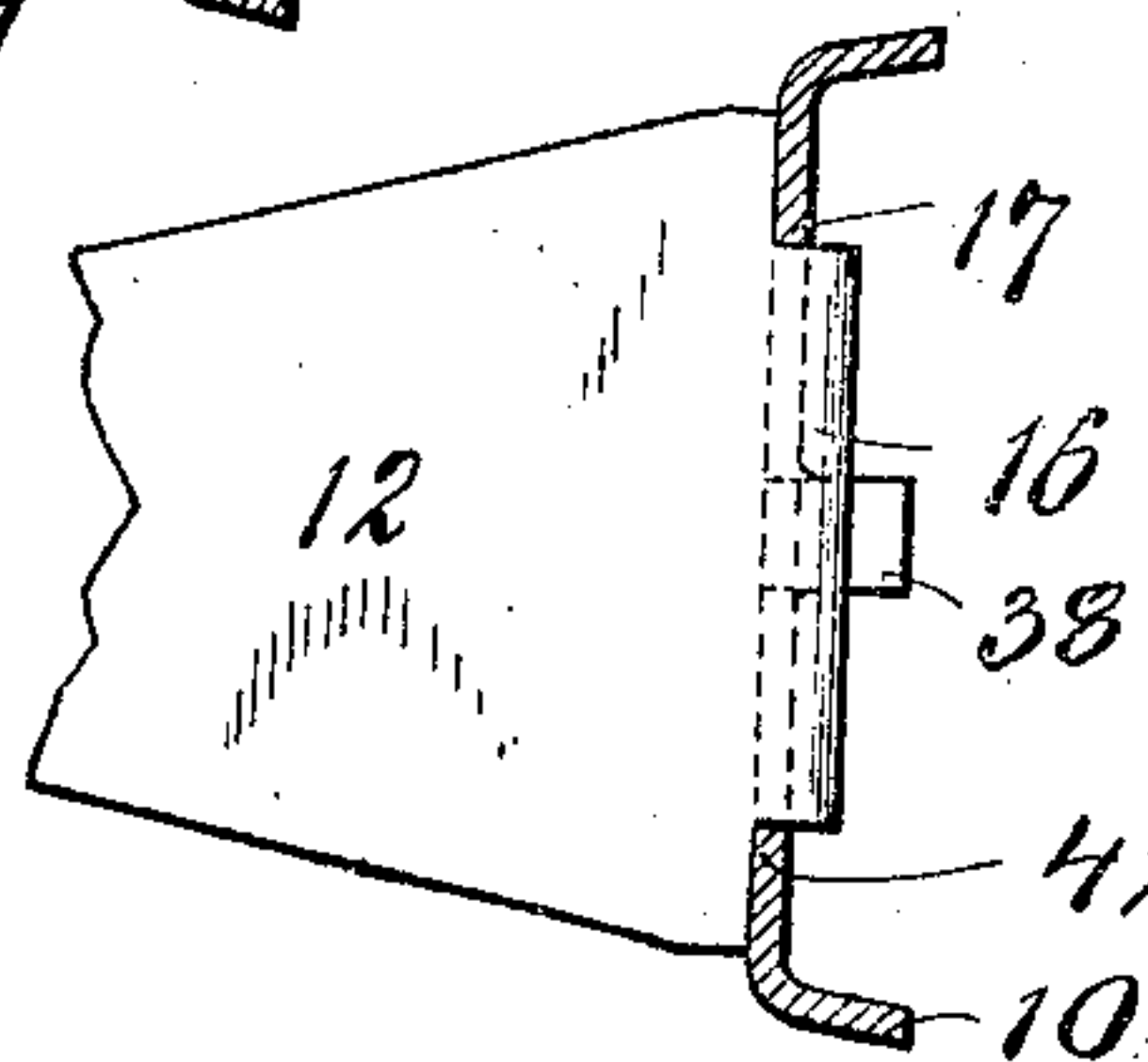


Fig. 3.



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PAPER-ROLL BRACKET.

935,078.

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To all whom it may concern:

Be it known that I, SETH WHEELER, a citizen of the United States of America, and a resident of Castleton, county of Rensselaer, State of New York, have invented certain new and useful Improvements in Paper-Roll Brackets, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to improvements in brackets for supporting paper rolls of the type comprising two bracket arms provided with trunnion heads for engaging the core of the paper roll, a catch or lock for connecting them together, and a spring for drawing the said heads toward each other to create frictional contact upon the ends of the roll of paper when the same is supported in position.

The bracket is so constructed that the heads may be moved away from each other when a roll has been completely used up so as to permit a new roll to be readily put in place. When the new roll is mounted in position the heads are again moved toward each other and locked against any outward relative movement except such as is permitted by the spring, for so long a time as the roll is in position.

The objects of my present invention are to simplify roll holders or brackets of this description; to render them strong, durable, and unlikely to get out of order; to provide a simple means whereby the tension of the spring, tending to draw the two heads together, may be adjusted; to provide that the various parts may be made from stampings instead of being cast as is common in this class of device, and to provide a simple, effective, durable, and easily manipulated form of locking means for locking the two heads together.

To these ends my invention consists in certain novel details of construction and combination of parts, as will be more fully hereinafter set forth.

In order that my invention may be fully understood, I will now proceed to describe an embodiment thereof, having reference to the accompanying drawings illustrating the same, and will then point out the novel features in claims.

In the drawings: Figure 1 is a view in

partial central longitudinal section and partial side elevation of a roll holder or bracket embodying my invention. Fig. 2 is a view in longitudinal section thereof, the plane of section being taken along the line 2—2 of Fig. 1. Fig. 3 is a detail rear view of one part of the bracket, showing the method of connecting one of the arms to the base plate. Fig. 4 is a transverse sectional view taken upon the line 4—4 of Fig. 2. Fig. 5 is a detail view in transverse section of certain parts, the plane of section being along the line 5—5 of Fig. 2, and Fig. 6 is a detail view in transverse section upon the plane of the line 6—6 of Fig. 2.

The roll holder or bracket consists generally of a base plate 10, arms 11, 12, having trunnion heads 13, 14, and a connecting stem 15. The base plate 10 comprises a stamping of substantially rectangular form, as will be readily seen by reference to Fig. 2, the edges thereof being turned down so as to form a hollow space at the rear thereof (see Fig. 1). The arm 12 is shouldered at 42 and is provided with a turned over portion 16, which passes through a slot or opening 17 in the base plate 10. The shouldered portion 42 rests upon the base plate, the said portion 16 lying close against the rear of the base plate, being contained within the hollow space inclosed within the said base plate at the rear thereof, and is secured to the base plate 10 by means of a rivet or bolt 18. The trunnion head 14 is formed by cupping the outer end of the arm 12 (see particularly Fig. 2), and a tube 19 is secured thereto in any suitable manner, as by means of lugs 20 upon the tube 19, which pass through suitable orifices in the face of the head 14, the said tube being arranged to project in a direction toward the opposite head 13. The connecting stem 14 is in part housed within the tube 19, a portion of that part of the stem which is contained within the same tube being screw-threaded as at 21 and provided with a nut 22, as is shown in Figs. 2 and 5. The said nut 22 has a lateral lug or projection 23 which is received within a slot 24 in the side of the tube 19, whereby the said nut 22 will be permitted to slide longitudinally within certain limits in the tube, but will be prevented from rotating therein. The end of the rod 15 beyond the screw-

threaded portion 21 is reduced in diameter and projects through a concentric opening 25 in the said head 14 and through a disk 26 which is fitted in a cupped portion of the head 14, as is shown in Fig. 2, the extremity of the rod being provided with a screw-driver slot or depression 27. A spring 28 is housed within the tube 19, one end thereof being allowed to bear against the end wall 29 of the tube 19 and the other end against the nut 22. The spring 28 tends to force the stem 15 toward the right as viewed in the drawings.

The arm 11 is provided with a short turned over portion 30 at its inner end, the same being loosely fitted to a slot or opening 41 in the base plate 10; at its extremity the said turned over portion 30 is provided with lateral projections 31 which are produced by hammering over or upsetting the ends of the portion 30 after such portion has been inserted through the slot 41. These upset portions will prevent the arm 11 from being removed bodily, once it has been inserted in position and will limit the swinging movement which the co-action of these parts permits. The turned over extension 30 is somewhat narrower than the arm 11 generally, shoulders 43 being thereby formed which rest upon the base plate 10 when the arm is in its normal operative position, the shoulders 43 upon one side of the base plate combining with the extension 30 which rests against the other side, to form a firm and steady construction, as will be readily understood. The head 13 is formed at the other end of the arm 11 preferably by a cupping operation just as the head 14 is formed in the arm 12. In its inner face the said head 40 is provided with an eccentric opening 32 and with a concentric recess 33. The eccentric opening 32 is of such a size as to just receive a head or knob 34 formed in the outer end of the bar or rod 15, while the concentric recess 33 is of such size as to just receive a neck or reduced portion 35 formed in the bar 15 just to the rear of the knob or head 34 (see Figs. 2 and 4).

A disk 40 is fitted in the cup-shaped portion of the head 13 so as to prevent access to the head 34 from the exterior of the device. When the head 13 and arm 11 are in their closed or operative position (such being the position in which they are shown in the drawings) the knob 34 of the bar 15 will have been received within the head 13, the neck 35 resting in the recess 33. This will lock the parts together, and the only way to separate them will be to spring the bar 15 out of line so as to bring the knob 34 in register with the opening 32. When the bar is so sprung out of line the head 13 and arm 11 will be free to be swung aside, as shown in the dotted lines in Fig. 1, and the parts may

be moved back into position by merely swinging the arm 11 into place again, the opening 32 and recess 33 being curved toward the face of the head 13 so as to guide the knob 34 to its position through the recess 32, the parts springing into their proper position with the knob 34 behind the recess 33 directly the head 13 has been pressed home.

It will be readily understood by an examination of the drawings that if a roll of paper to be mounted in the device and the head 13 snapped into position, access to the rod 15 to disconnect the parts will not be possible until the paper has all been used up from the roll. It will, furthermore, be understood that by proper manipulation of the rod 15 so as to adjust the same with respect to its nut 28, tension may be placed upon the bar 15 to tend to draw the heads 13 and 14 together when the roll of paper is in position. In other words, when the parts are locked together, as is shown in the drawings. This tension will cause the ends of the roll to bind frictionally against the inner faces of the arms 11 and 12, so as to prevent the paper roll from over-running when being used. To adjust the amount of tension it is only necessary to insert a screw-driver into the slot 27 and to turn the rod 15 with respect to its nut 22.

It will be seen then that in order to place a roll in position it is merely necessary to mount the roll upon the head 14, and then to snap the head 13 into place. It will then be necessary to use up all of the paper roll before it is possible to open out the heads, because access can only be obtained to the rod 15 to spring the same aside, when the roll has been completely used up. Adjustment of the tension of the spring may, however, be had at any time whether the roll be in position or not.

The device is shown as secured in position upon a wall, or the like, by means of two screws 36 which pass through openings 37 formed in the base plate 10. These openings 37 may conveniently be made by stamping down portions 38 which then form lugs of such depth as to substantially engage the wall to which the device is secured, and thus to prevent springing of the base plate 10 should the screws 36 be screwed down very hard. The lugs 38 which is at that end of the device at which the arm 12 is located, is shown as also passing through an opening 39 in the turned over portion 16 of the said arm 12.

What I claim is:

1. In a roll holder the combination with supporting arms, one of which is movable toward and away from the other, and each of which is provided with a substantially cylindrical trunnion head, of a longitudi-

nally adjustable stem carried by one said arm concentric with its trunnion, the said stem being spring actuated in a direction toward the arm carrying it, the trunnion of the other said arm having a substantially concentric recess for receiving the said stem, and for interlocking therewith to oppose movement thereof in the direction of its spring actuation.

2. In a roll holder the combination with supporting arms, one of which is movable toward and away from the other, and each of which is provided with a substantially cylindrical trunnion head, of a longitudinally adjustable stem carried by one said arm concentric with its trunnion, the said stem being spring actuated in a direction toward the arm carrying it, the trunnion of the other said arm having a substantially concentric recess for receiving the said stem, and for interlocking therewith to oppose movement thereof in the direction of its spring actuation, and means for adjusting the tension of the said spring.

3. In a roll holder the combination with supporting arms one of which is movable toward and away from the other and each of which is provided with a substantially cylindrical trunnion head, of a longitudinally adjustable stem carried by one said arm concentric with its trunnion, said stem being spring actuated in a direction toward the arm carrying it and having at its outer end a knob and a reduced neck to the rear of the said knob, the trunnion of the other said arm having an opening therein slightly out of line with the said knob, and of a size sufficient to receive the same, and having a recess therein in line with the said neck and fitted thereto.

4. In a roll holder the combination with supporting arms one of which is movable toward and away from the other and each of which is provided with a substantially concentric trunnion head, of a tube secured to one of the said trunnion heads concentric therewith, a longitudinally adjustable stem carried by the said arm carrying the tube, the said stem passing concentrically through the said tube, and a spring contained within the tube for pressing the said longitudinal stem in a direction toward the arm carrying it, the said stem being provided at its outer end with a knob and a reduced neck to the rear of said knob, the trunnion of the other said arm having a slightly concentric opening therein, the said opening being of a size sufficient to receive the said knob and having a recess therein in line with the said neck and fitted thereto.

5. A roll holder comprising supporting arms, one of which is movable toward and away from the other, one of the said arms being provided with a projecting tube, a

stem projecting longitudinally through the said tube and having a screw-threaded portion within the tube, a nut mounted upon the screw-threaded portion, said nut held from turning within the tube, and a spring housed within the tube, the said spring bearing at one end against the stem and the other end against the end wall of the tube, the said stem being provided with a knob at its outer end which is adapted to be engaged by the other said arm.

6. A roll holder comprising supporting arms, one of which is movable toward and away from the other, each of the said arms being provided with a trunnion or head formed by cupping the metal of which the arms are composed, one of the said heads having a tube secured thereto, a longitudinally movable stem passing freely through the said tube and through an opening in the said head carrying it, an adjusting nut upon the said stem within the tube, and a spring within the tube for opposing longitudinal movement of the stem, the opposite end of the said stem being provided with a knob and a reduced neck to the rear thereof, and the other said head being provided with an opening therein slightly out of line with the said stem, for receiving the knob, and a recess in line with the stem for receiving the said neck.

7. A roll holder comprising a base having a slot therein, a supporting arm provided with a shouldered portion, and an extension turned over at right angles therefrom, the said extension being adapted to pass through the slot in the base and to lie along the under side of the base with the shouldered portion of the arm resting upon the base, and a stud for securing the said turned over portion fast to the base.

8. A roll holder comprising a base, and two supporting arms, the said base provided with a slot, and one of the said arms being movable and provided with a shouldered portion and an extension therefrom including a part which turns over at right angles to the main portion of the said arm, the said extension portion being fitted to pass freely through the said slot and provided with lateral projections serving to prevent the removal of the arm once it has been fitted to the base, together with means for locking the arms together near their outer ends.

9. A roll holder comprising a base having a flat top and flanges surrounding the same, thereby inclosing a space at the rear of the said flat top, supporting arms carried by the said base, one of said arms being fixed, and the other movable, and means for connecting the outer ends of the said arms together, the said base being provided with slots, and the said arms being provided with shouldered portions which rest upon the

base and extensions which pass through the base, the said extensions being turned over at right angles to the body portion of the said arms and arranged to lie along the rear
5 of the front plate of the said base, means for securing the extension of one arm fast to the said base, the extension of the other said arm having lateral projections to prevent the complete removal of the said arm after it has once been fitted into place.

SETH WHEELER.

Witnesses:

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J. L. OSTRANDER.