

No. 668,836.

Patented Feb. 26, 1901.

G. E. HASZINGER.  
MAGAZINE TACK HAMMER.

(Application filed Mar. 21, 1899.)

(No Model.)

2 Sheets—Sheet 2.

FIG. 7.

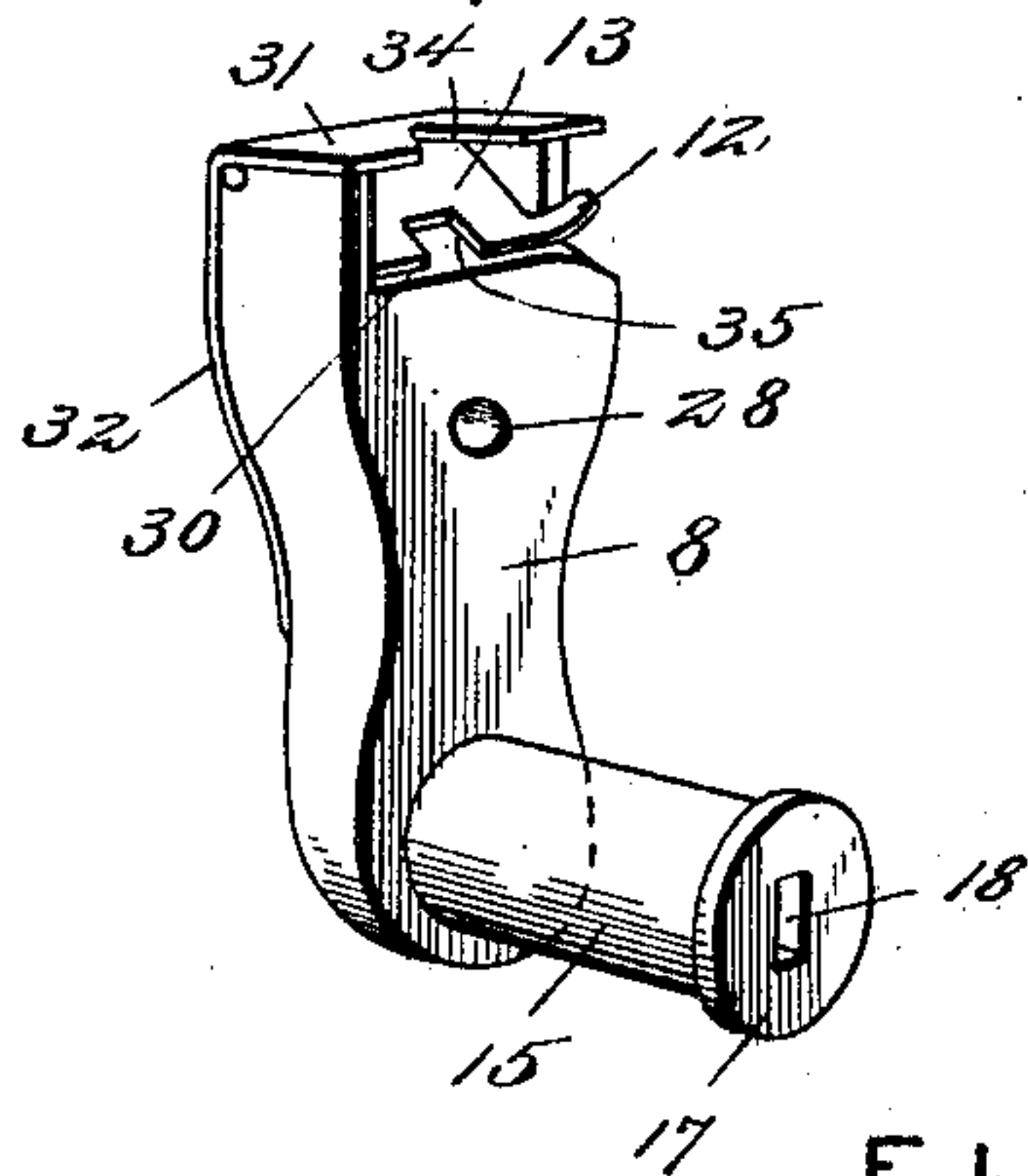


FIG. 8.

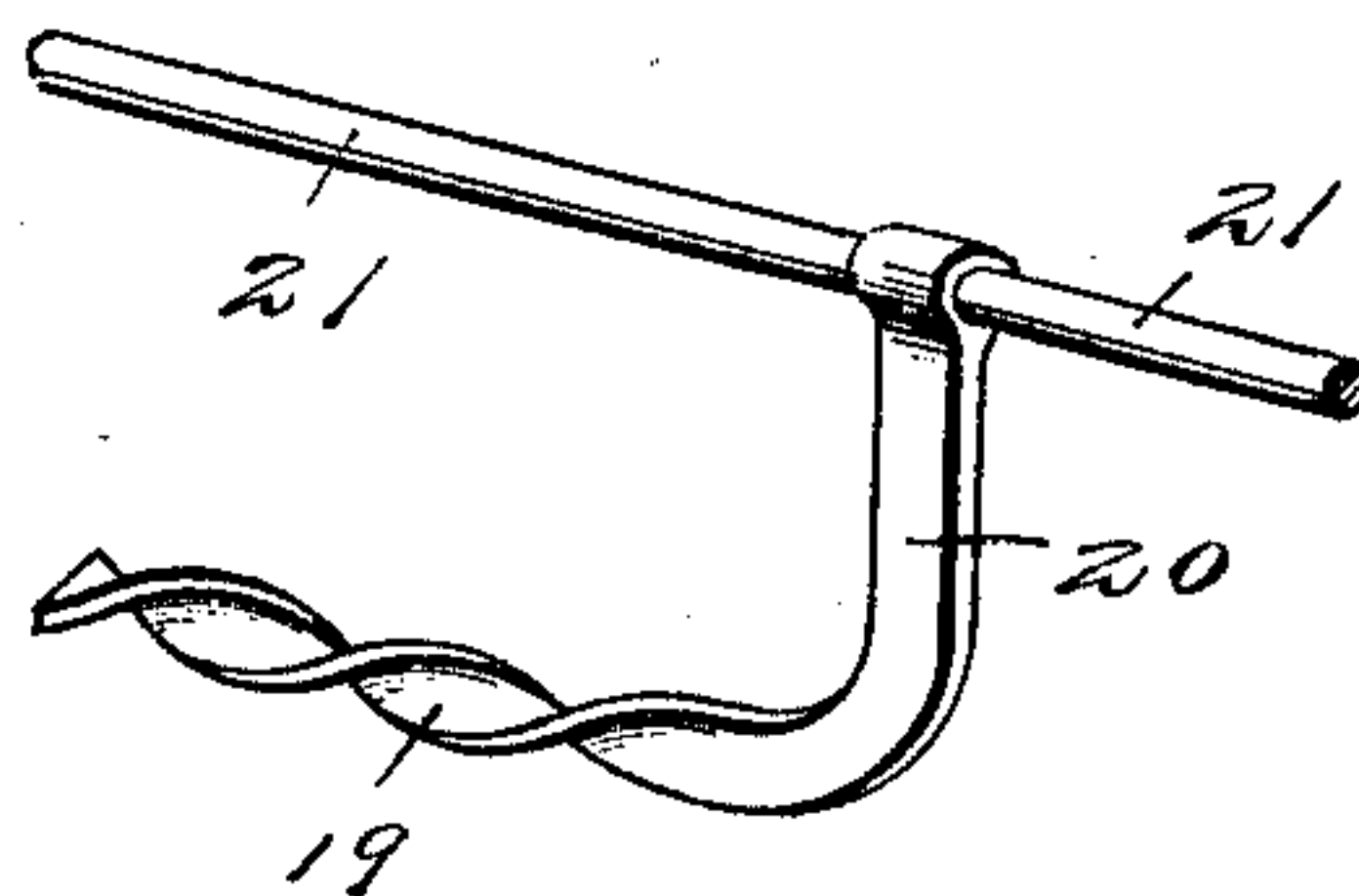


FIG. 9.

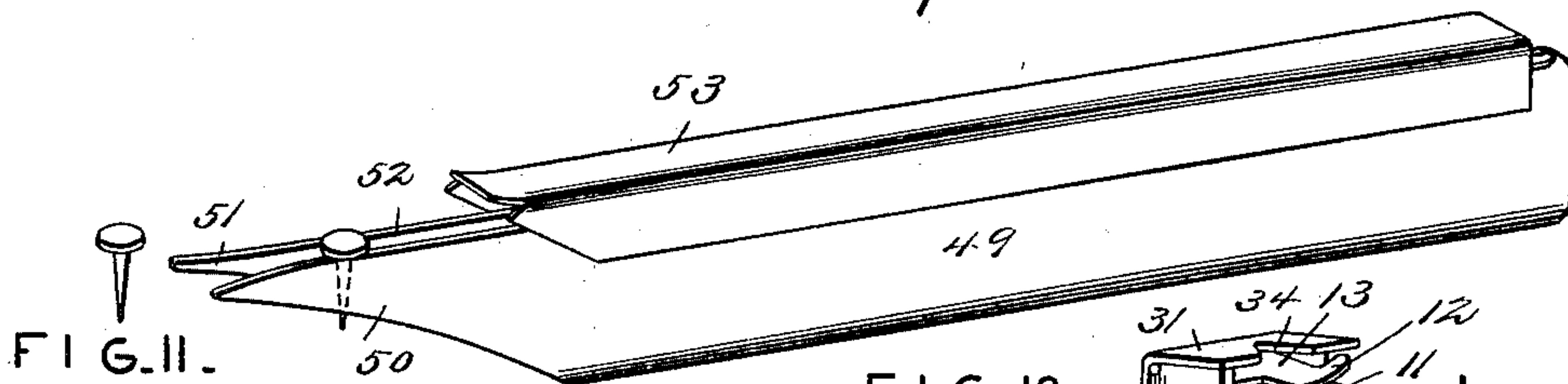


FIG. 10.

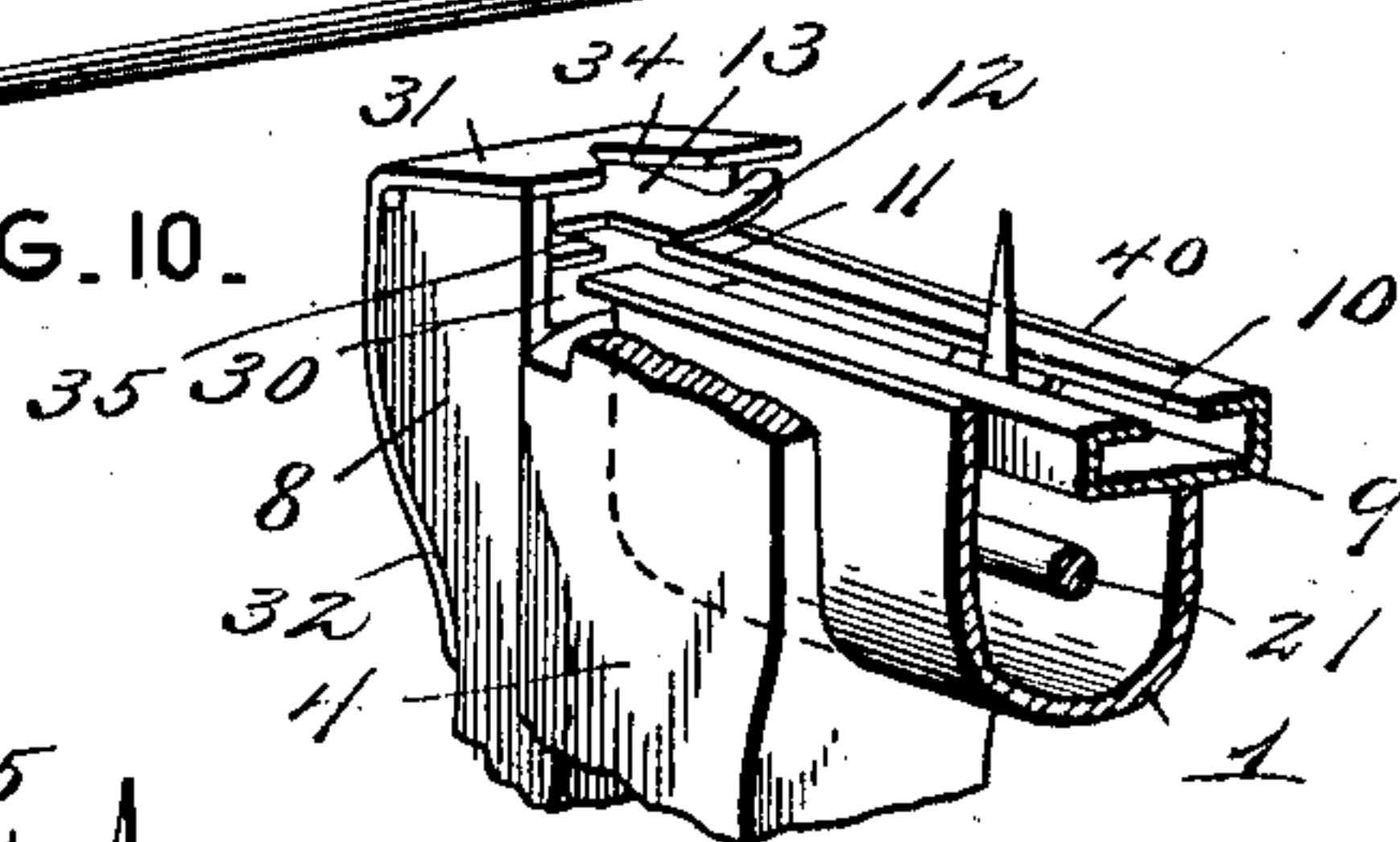


FIG. 12.

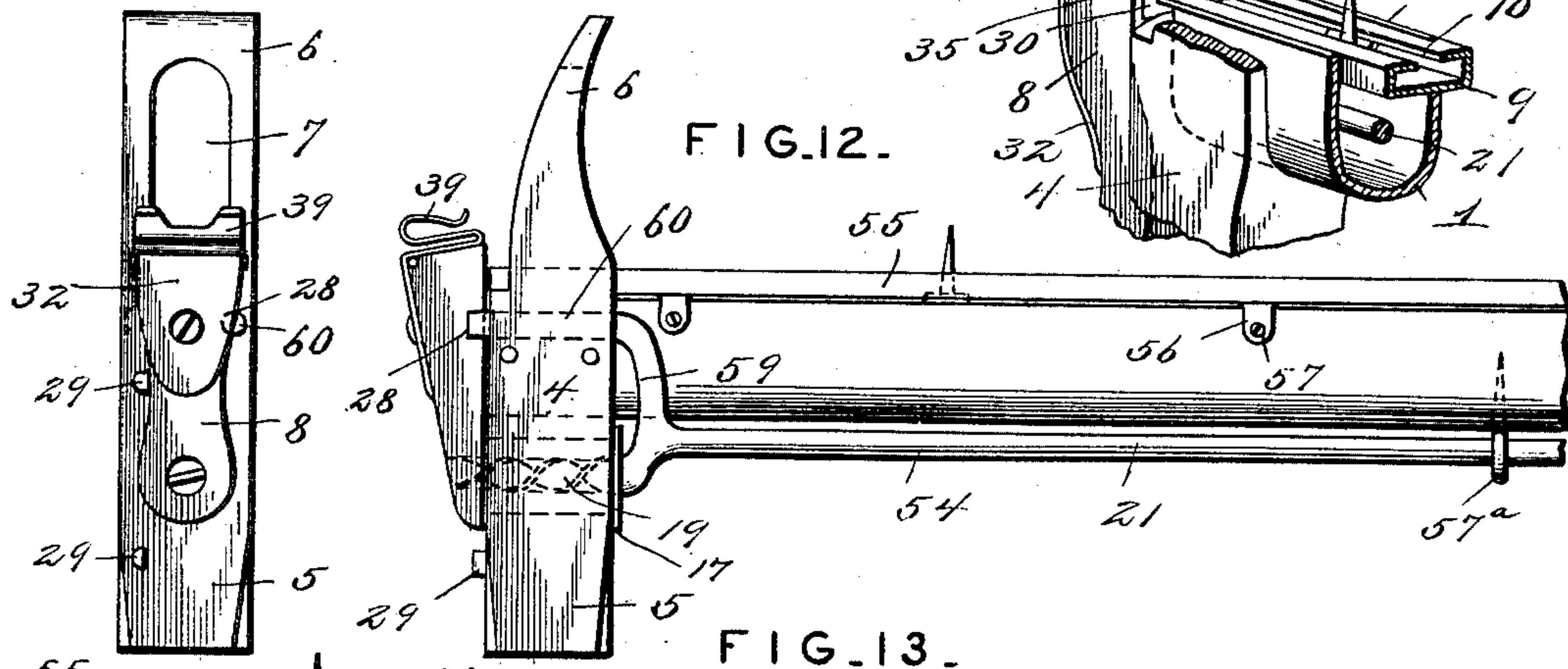
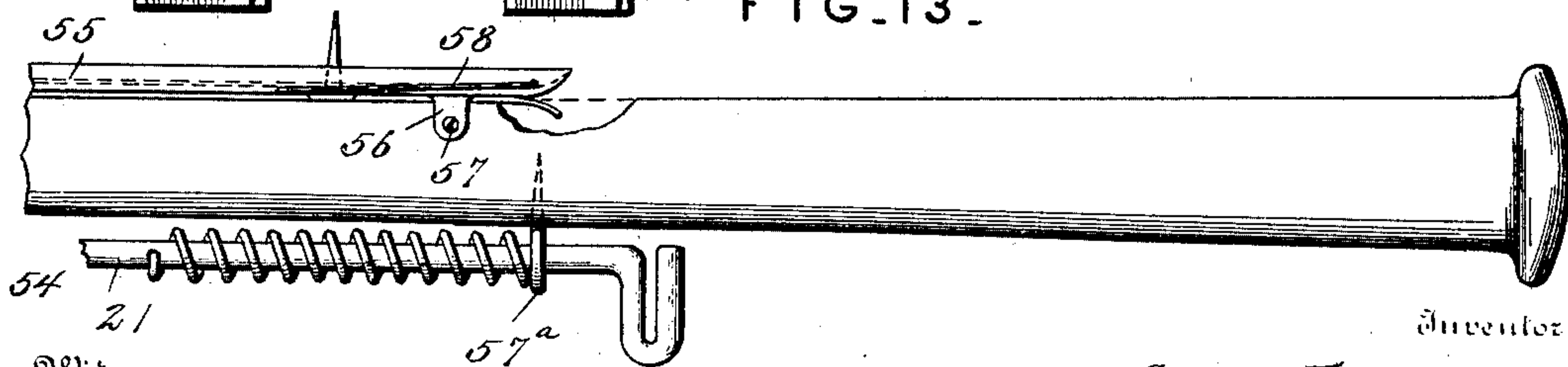


FIG. 13.



Witnesses

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2 Sheets—Sheet 1.

FIG. 1.

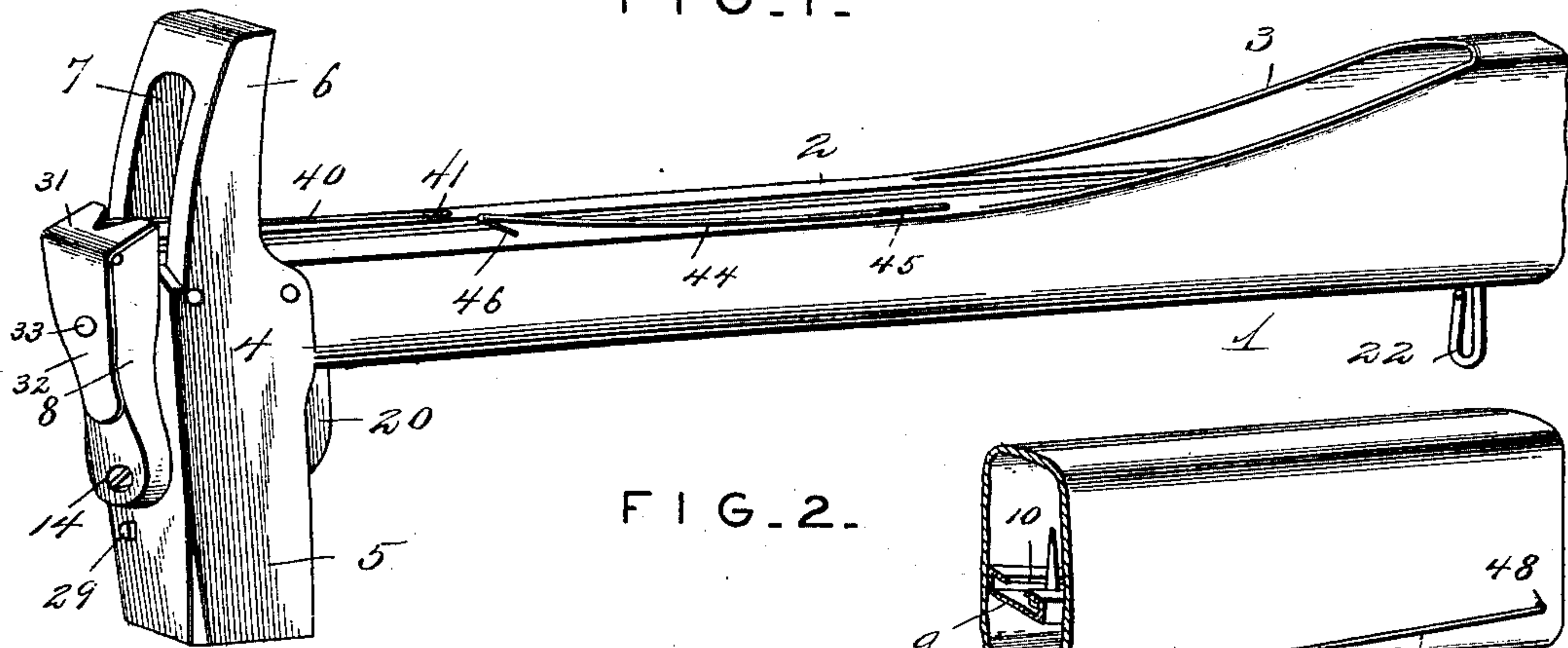


FIG. 2.

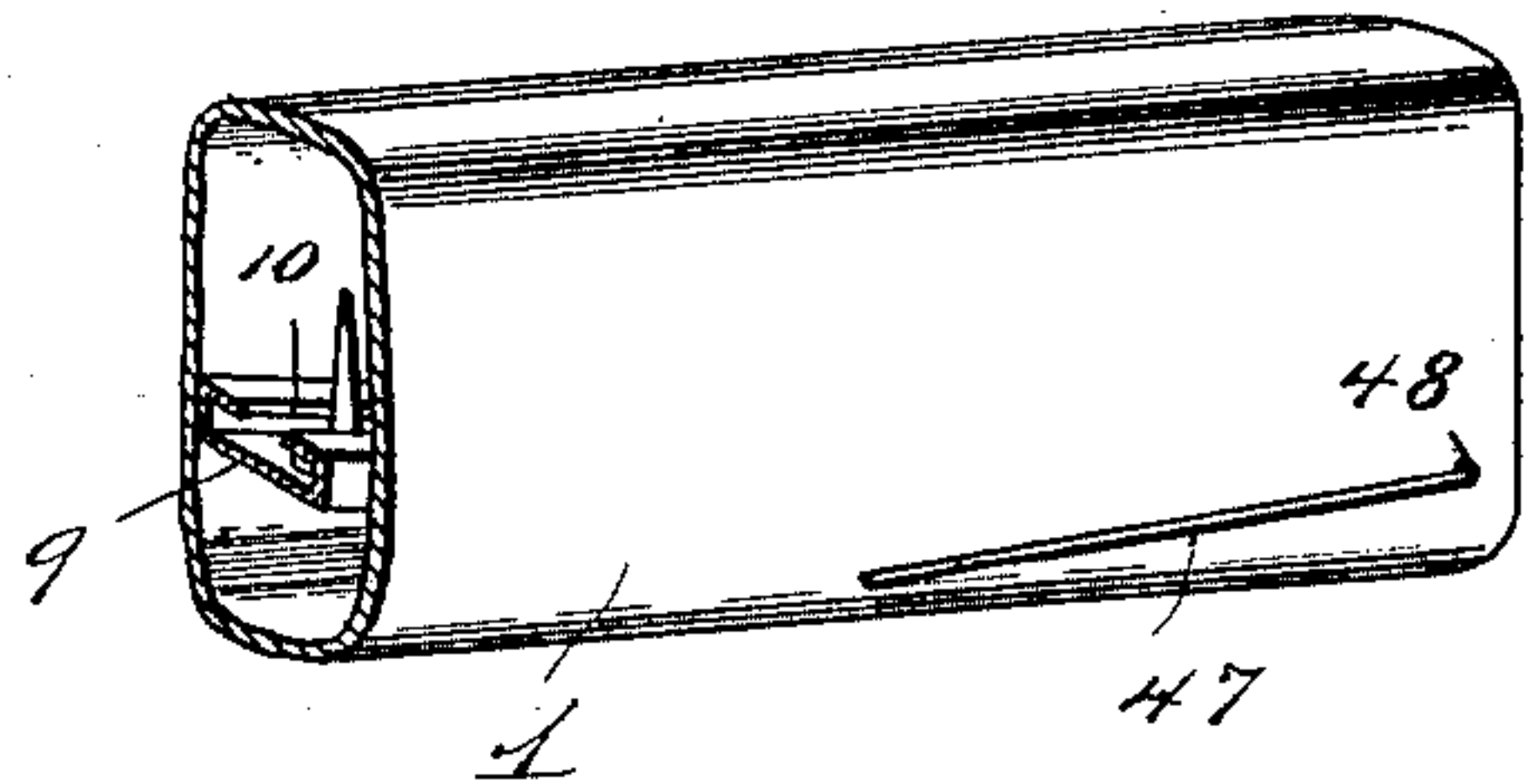


FIG. 3.

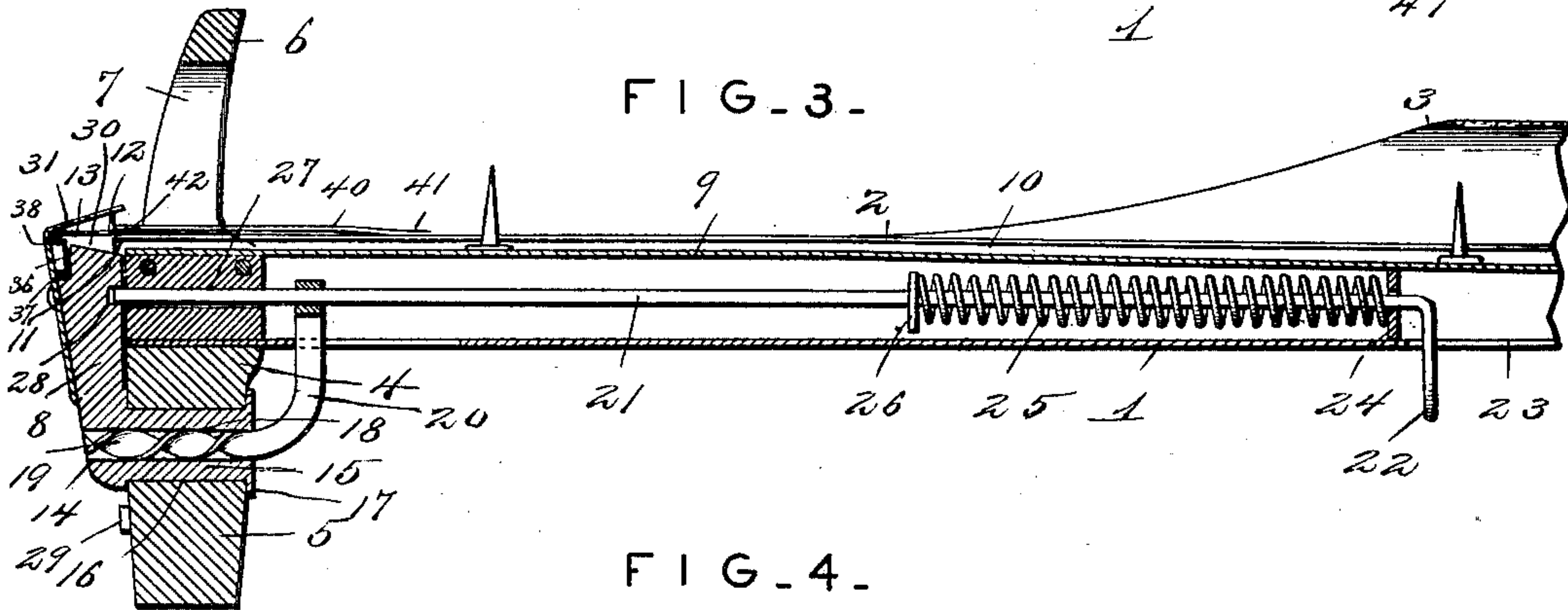


FIG. 4.

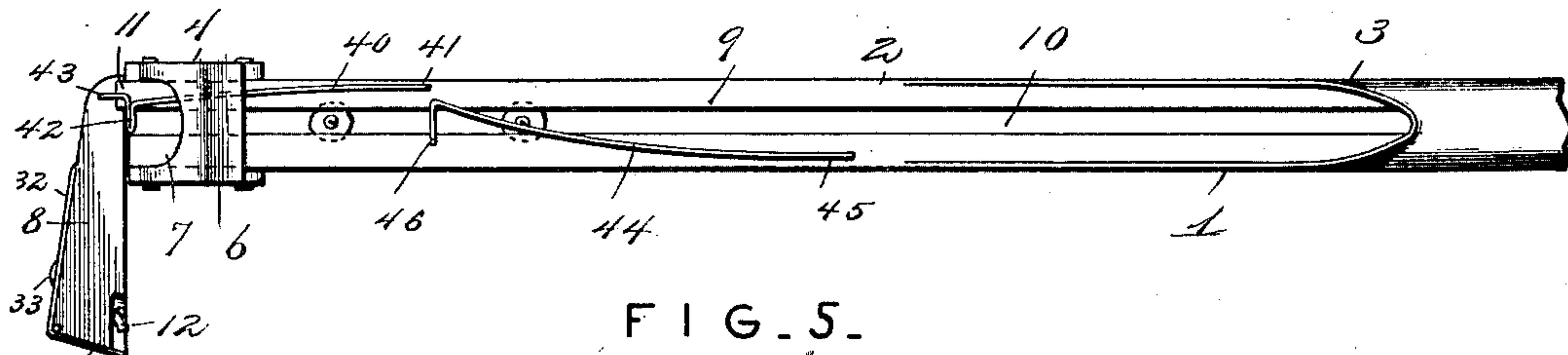
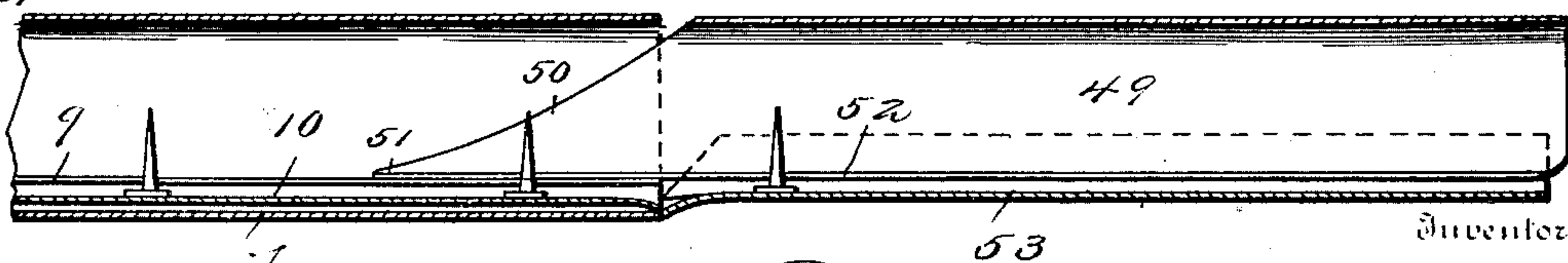


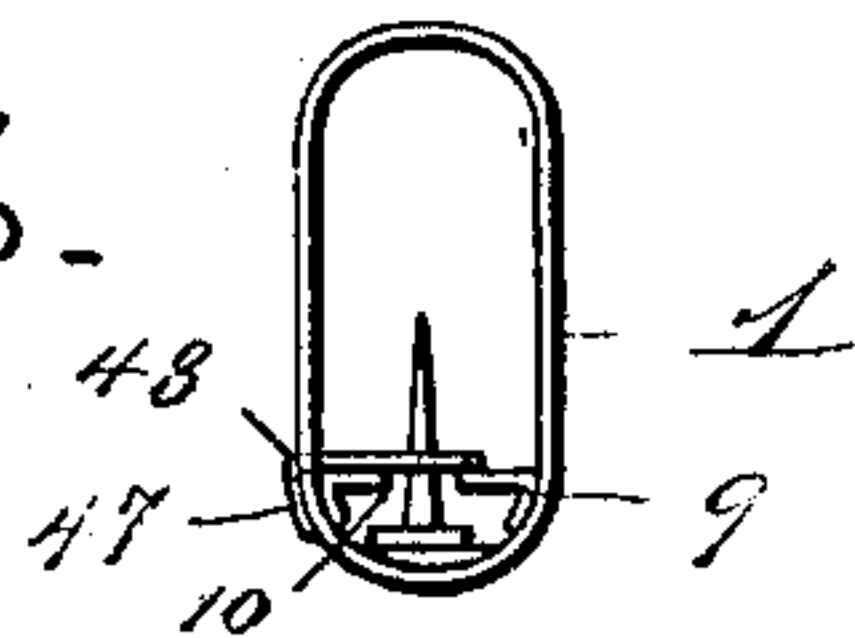
FIG. 5.



Witnesses

Harry L. Amer.  
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FIG. 6.



George E. Haszinger.  
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His Attorney



# UNITED STATES PATENT OFFICE.

GEORGE ERNEST HASZINGER, OF VICKSBURG, MISSISSIPPI.

## MAGAZINE TACK-HAMMER.

SPECIFICATION forming part of Letters Patent No. 668,836, dated February 26, 1901.

Application filed March 21, 1899. Serial No. 710,002. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE ERNEST HASZINGER, a citizen of the United States, residing at Vicksburg, in the county of Warren and State of Mississippi, have invented certain new and useful Improvements in Magazine Tack-Hammers; 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.

This invention relates to magazine-hammers adapted to use tacks or small nails, brads, &c., and is in the nature of an improvement upon the construction disclosed in Letters Patent No. 609,672, granted to me on or about August 23, 1898.

One of the objects of the present invention is to do away with the lost motion from the engagement between the screw or spiral and the operating-rod and lip described in said patent.

Another object of the invention is to provide a reliable lock for securing the tack carrier or feeder in position to successively receive the tacks or nails one at a time, the construction at the same time preventing any tendency of the carrier or feeder to rebound.

By the improvements hereinafter described a magazine-hammer is provided which presents a neater appearance, which operates with greater smoothness, and which is stronger and more durable and in many respects more satisfactory.

The detailed objects and advantages of the invention will appear more fully in the course of the subjoined description.

The invention consists in a magazine-hammer embodying certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and incorporated in the claims hereto appended.

In the accompanying drawings, Figure 1 is a perspective view of a magazine-hammer constructed in accordance with the present invention, showing the tack carrier or feeder in position to receive a tack from the raceway or channel-plate. Fig. 2 is a detail perspective view of the rear portion of the handle, showing the form of channel-plate and the cut-off spring at the rear of the handle. Fig. 3

is a longitudinal section through Fig. 1, showing the actuating and locking mechanism for the tack carrier or feeder. Fig. 4 is a plan view of the hammer, showing the tack carrier or feeder thrown outward laterally. Fig. 5 is an enlarged detail longitudinal section through a portion of the handle and filler or loading-fork, showing the same in engagement. Fig. 6 is an end view of the handle. Fig. 7 is a detail perspective view of the pivoted tack-carrier, showing the nut in connection with which the actuating-spiral operates. Fig. 8 is a similar view of the actuating-spiral and locking-stem. Fig. 9 is an inverted perspective view of the filler or loading-fork. Fig. 10 is a detail perspective view of a portion of the poll or head of the hammer and the tack carrier or feeder, showing the manner in which the tack-clamp coöperates with the channel-plate or raceway. Fig. 11 is an end elevation of the hammer. Fig. 12 is a side elevation of a hammer of slightly-modified form, showing a wooden handle applied thereto. Fig. 13 is a similar view showing the rear portion of the handle, &c., omitted from Fig. 12.

Similar numerals of reference designate corresponding parts in all the figures of the drawings.

Referring to the drawings, 1 designates the handle of the improved magazine-hammer, the said handle in its preferred form and as shown in Figs. 1 to 6, inclusive, being constructed of metal and in the form of a hollow tube oblong in cross-section, as shown in Fig. 6, and cut away on its upper side, as shown at 2, the edges being rolled, as indicated at 3, for the purpose of reinforcing the stock or handle of the hammer and imparting a greater strength thereto. Connected to the end of handle 1 is a head 4, having a poll 5 for driving purposes, and also an oppositely-extending portion 6 of the poll, which is provided with a slot 7, through which the tacks or nails pass to the carrier or feeder, (indicated at 8.) Extending longitudinally through the handle is a channel-plate 9, having a closed bottom, as shown, and provided in its upper side with a slot 10, through which the shanks of the tacks move, the heads of the tacks resting on the bottom of the channel-plate and the points of the tacks extending upward through



the slot 10. The channel-plate 9 extends also through the slot 7 and terminates flush with the outer surface of the head, with the exception that one of the flanges on one side of the slot 10 is extended, as shown at 11, so as to coöperate with the laterally-extending and upwardly-inclined lip 12 of the tack-clamp 13, hereinafter particularly referred to.

The tack carrier or feeder is arranged outside of the head 4, as clearly shown in Figs. 1 and 2, for example, and is pivotally mounted at the point 14, where it has a rearwardly-extending nut or hollow spindle 15, which passes through and is journaled in a cylindrical opening 16 in the poll 5 and is held therein by means of a circumferential flange 17 at its rear end, which bears against the inner surface of the poll. Extending longitudinally through the nut or spindle 15 is a round bore 18 with a rectangular entrance, in which fits an actuating-spiral 19, which is preferably formed of a piece of flat steel or other metal, which is twisted to form the spiral 19. The spiral 19 extends longitudinally of the hammer or in parallel relation to the handle and constitutes the free end of an L-shaped bracket or arm 20, which is secured to a stem or rod 21, which extends longitudinally through the hollow handle 1 beneath the raceway or channel-plate 9, as shown in Fig. 3. At its rear end the stem 21 is bent laterally and downward to form a finger-grip 22, which operates in a slot 23 in the casing and which is in convenient position to be grasped by one of the fingers of the operator while manipulating the hammer, the grip 22 being drawn rearwardly for actuating the tack-carrier. Intermediate its ends the stem 21 passes through suitable bearings 24 and is also encircled by a coiled expansive spring 25, which operates to thrust the stem 21 forward or in the direction of the hammer-head, said spring being seated at one end against one of the bearings 24 and engaging at its opposite end a collar or pin 26 on the stem 21. The stem 21 is extended beyond the arm 20 and passes through an opening 27 in the hammer-head 4 and intermittently enters a socket 28 in the inner face of the tack-carrier 8, so as to lock said carrier in position to receive the tacks.

From the above description it will be seen that as the finger-grip 22 is drawn back and the stem 21 slipped rearward its extremity will move out of engagement with the socket 28, thereby unlocking or freeing the carrier or feeder 8. Just after the stem moves out of the socket 28 the spiral 19 coöperates with the hollow spindle 15 and begins to rotate the carrier or feeder 8. The coöperation of the spiral and the nut or hollow spindle is sufficient to turn or oscillate the carrier or feeder 8 through a half-revolution, thereby enabling the carrier or feeder to receive the tack point upward and deliver it point downward. In order to limit the extremes of movement of the oscillating carrier or feeder 8, two stops

29 are provided, (see Fig. 11,) one of which regulates the upward position of the carrier and the other the downward position thereof. Just as the feeder 8 strikes the upper stop 29 the stem 21 locks the carrier and prevents it from rebounding, thereby holding it in position to receive the next tack.

By reference to Figs. 7 and 10 it will be seen that the carrier 8 is provided at its free end with a recess 30 to receive the tacks. The said recess extends to the extremity of the carrier and is closed by means of a cap 31, which is bent to extend around and against the outer face of the carrier 8, as shown at 32, where it is secured by a removable fastener 33, thereby enabling the cap to be detached for inserting a number of interchangeable clamps 13 for different-sized tacks. The cap 31 is provided with a notch 34, through which the points of the tacks project, and the tack-clamp 13 is also provided with a notch 35 for the same purpose. By reference to Fig. 3 it will be seen that the clamp 13 is held downward by a spring 36, secured at its lower end by a wedge or block 37, the free end of the spring bearing against the recurved outer edge 38 of the clamp, said parts being arranged in a suitable recess in the carrier. A spring-clasp 39 may be applied to the free end of the carrier 8 for the purpose of clamping or holding a bill-poster or other article previous to driving a tack therein when operating at a considerable distance above the head of the operator. After driving the tack and as the carrier or feeder 8 swings backward to its normal position the lip 12 of the tack-clamp strikes against the extension 11, hereinabove described, and serves to lift the clamp-plate, thereby enabling the tack to pass from the raceway or channel-plate into the notch 35. As the carrier 8 is moved laterally for the purpose of feeding the tack the clamp-plate 13 passes out of engagement with the extension 11 and immediately the clamp-plate is thrust downward by the mechanism hereinabove described, thus clamping the head of the tack between it and the bottom of the recess 30, leaving the point of the tack projecting beyond the cap-plate 31, so that it may be driven.

A spring-stop 40 is applied to the handle near the poll and consists of a piece of spring-wire secured at one end, as indicated at 41, to the handle and bent near its free end to form a transverse stop 42, which projects across the discharge end of the raceway or channel-plate, as clearly shown in Fig. 4. After forming the stop 42 the wire is bent to form a longitudinally-extending lip 43, which lies in the path of the pivoted carrier 8. As the carrier or feeder 8 is moved upward to receive a tack it strikes against the projecting lip 43 of the spring-stop and moves the transverse stop 42 away from the raceway and out of the path of the tacks, thereby enabling a tack to be fed by gravity into the recess in the carrier. As the carrier 8 is started down-



ward the spring-stop 40 is released and the part 42 moves across the raceway and cuts off the other tacks.

In rear of the spring-stop 40 is a check-spring 44, secured at one end, as shown at 45, and extending obliquely across the raceway, where its free end is bent back at an acute angle to form a transverse stop or check 46. The check-spring 44 is quite light and enables  
 10 the tacks by reason of their weight to deflect it, so as to pass beyond the extremity 46 thereof. When the head of the hammer is raised for driving a tack, the part 46 prevents the farthest tacks from receding.

At the rear end of the handle is a cut-off spring 47, fastened at one end, with the free end passing through an opening 48 in the handle, as shown in Fig. 2, and extending across the raceway or channel-plate, as shown in  
 20 Fig. 6, thereby preventing the tack from falling off of the rear end of the handle. In connection with the handle 1 I employ a filler or loading-fork 49, which is also hollow or tubular and provided with tapering forward  
 25 ends 50, which are also flaring or deflected laterally to form a mouth 51, into which the tacks are easily inserted, the rear end of the filler being closed to prevent the escape of the tacks. In loading the filler the latter is in-  
 30 verted, as shown in Fig. 9, and the tacks are passed in through the flaring mouth 51 points downward, with the heads resting on the edges 52 of the raceway, the heads of the tacks passing beneath the bottom 53 of the  
 35 filler or loading-fork. After the filler 49 has been loaded the lips 50 are inserted in the rear end of the handle, where one of said lips is engaged by the operator with the end of the cut-off spring for pushing said cut-off to  
 40 one side and leaving the raceway free, so that the tacks may slide by gravity from the filler into the raceway in the handle. Upon withdrawing the filler the cut-off automatically moves across the raceway and prevents the  
 45 escape of the tacks contained in the handle.

In Figs. 12 and 13 I have shown the manner of applying a wooden handle 54 to the hammer, the head 4 being mounted directly on the end of said handle. The channel-  
 50 plate forming the raceway is made quite shallow, being shown at 55 and being provided with lips or ears 56, which extend down upon the sides of the handle and are secured thereto by suitable fastenings 57. The channel-  
 55 plate 55 is provided at its rear end with a cut-off spring 58, similar to that of 47, hereinabove described. On the under side the handle 54 is provided with eyes 57<sup>a</sup>, through which the stem 21 passes. Instead of mak-  
 60 ing the arm 20 and spiral 19 separately and attaching them to the stem 21, by reference to Fig. 12 it will be seen that the spiral 19 is formed integral with the stem 21, and said stem is also extended laterally, as indicated  
 65 at 59, and then laterally, as at 60, to form a locking-finger similar to that of 21, above described, which enters the socket 28 in the tack

carrier or feeder. Instead of placing the part 60 in the center of the head it is in some cases preferable to arrange the same a little to one  
 70 side, so as not to weaken the handle 54, in which event instead of engaging a centrally-located socket 28 in the carrier 8 the extremity of the part 60 will engage the side face of the carrier 8 or else be received in a notch in  
 75 the side of the carrier 8, as shown in Fig. 11.

By means of the construction described there is no lost motion—an objection found in the construction described in my former patent referred to. The lost motion would cause  
 80 the carrier to stand or move out from the raceway, thereby leaving an open space and at times enabling two tacks instead of one to find their way out of the raceway at the same time. In using the hammer it is best to strike  
 85 a rapid blow, thus causing the tacks to be thrown forward by centrifugal force, after which they will be prevented from moving backward by means of the check-spring 44. The plug in the end of the handle is to ac-  
 90 commodate the trigger-lock and rivets and to give a rigid connection.

It will of course be understood that a handle of any desired or required length may be employed and that the device as a whole may  
 95 be adapted to different-sized tacks, nails, or other fastenings by removing the cap-plate 31 and substituting clamp-plates 13 of different sizes. These and other changes in the form, proportion, and minor details of con-  
 100 struction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention.

Having thus described the invention, what I claim as new, and desire to secure by Letters  
 105 Patent, is—

1. In a magazine-hammer, the combination with a hammer-head, of a pivoted tack carrier or feeder, a hollow spindle fast thereon  
 110 journaled in the head and provided with an angular entrance-slot, and a retaining-flange on its inner end, an operating-rod, and a reciprocating screw or spiral rod attached to said rod and entering said hollow spindle for oscillating the carrier, substantially as described.  
 115

2. In a magazine-hammer, in combination, a hammer-head, a pivoted tack carrier or feeder thereon, a hollow spindle fast on the tack-carrier and journaled in the head, a  
 120 spring-retracted stem or rod for engaging and locking said carrier, means for reciprocating the rod to be moved, and a spiral or screw connected to and reciprocated by the rod or stem and entering said hollow spindle, substantially as described.  
 125

3. In a magazine-hammer, the combination with a hammer-head, of a pivoted tack carrier or feeder journaled therein and having a tack-receiving recess, a cap-plate detachably connected to said carrier and covering  
 130 the recess, a tack-clamp mounted in said recess and having a recurved edge, and a spring bearing against the recurved edge of said tack-clamp, substantially as described.



4. In a hammer, the combination of a handle, a hammer-head, a tack-magazine, an oscillatory tack-feeder located upon the outside of the head and arranged to swing in a plane parallel with the head, and a sliding operating-bar having an extension passing through the hammer-head and adapted to interlock with the tack-feeder and secure the same against its own momentum, substantially as described.

5. In a magazine-hammer, the combination with a hammer-head, of a pivoted tack carrier or feeder, a movable rod or stem adapted to engage and lock said carrier, and actuating means on said movable stem for turning or swinging the tack-carrier, substantially as described.

6. In a magazine-hammer, the combination with a handle, having a longitudinal raceway for the fasteners, of a check-spring extending obliquely across the raceway and having its free end bent to again cross the raceway, and form a transverse stop, substantially as described.

7. In a magazine-hammer, a hollow handle, a head applied thereto, a pivoted tack carrier or feeder journaled on the head, and an operating stem or rod extending longitudinally within and inclosed by the hollow handle, and having an arm adapted to engage and lock the carrier, substantially as described.

8. In a magazine-hammer, the combination with a hollow handle and a head thereon, of a pivoted tack carrier or feeder, a reciprocating screw or spiral for operating said carrier, an actuating-rod carrying said spiral and passing through the hollow handle and adapted to engage the feeder for preventing rebound thereof, and a spring encircling said rod or stem and acting thereon, substantially as described.

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

GEORGE ERNEST HASZINGER.

Witnesses:

JOHN SCHWAB,

H. H. BUDENHAUS, Jr.