

**No. 675,032.**

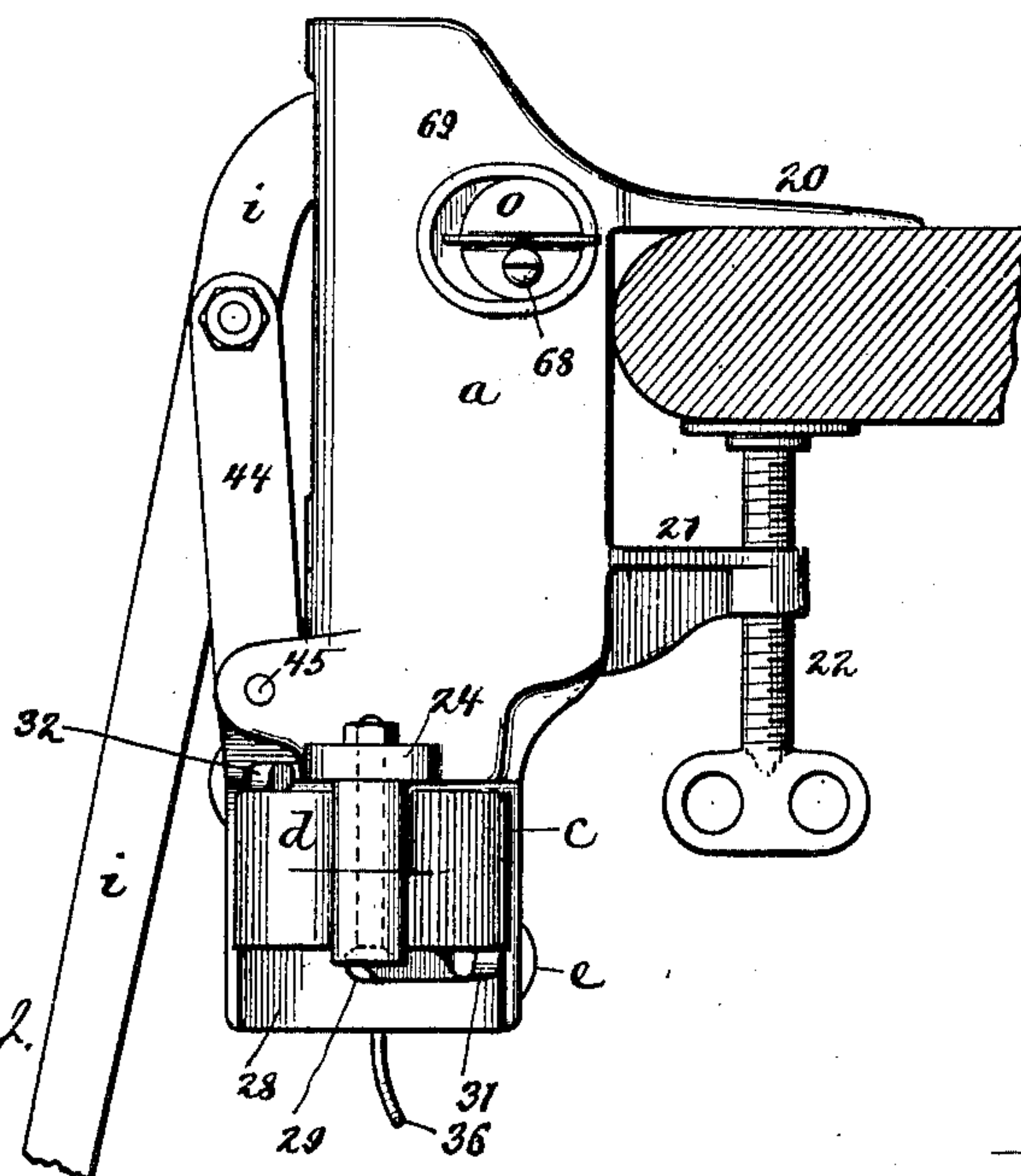
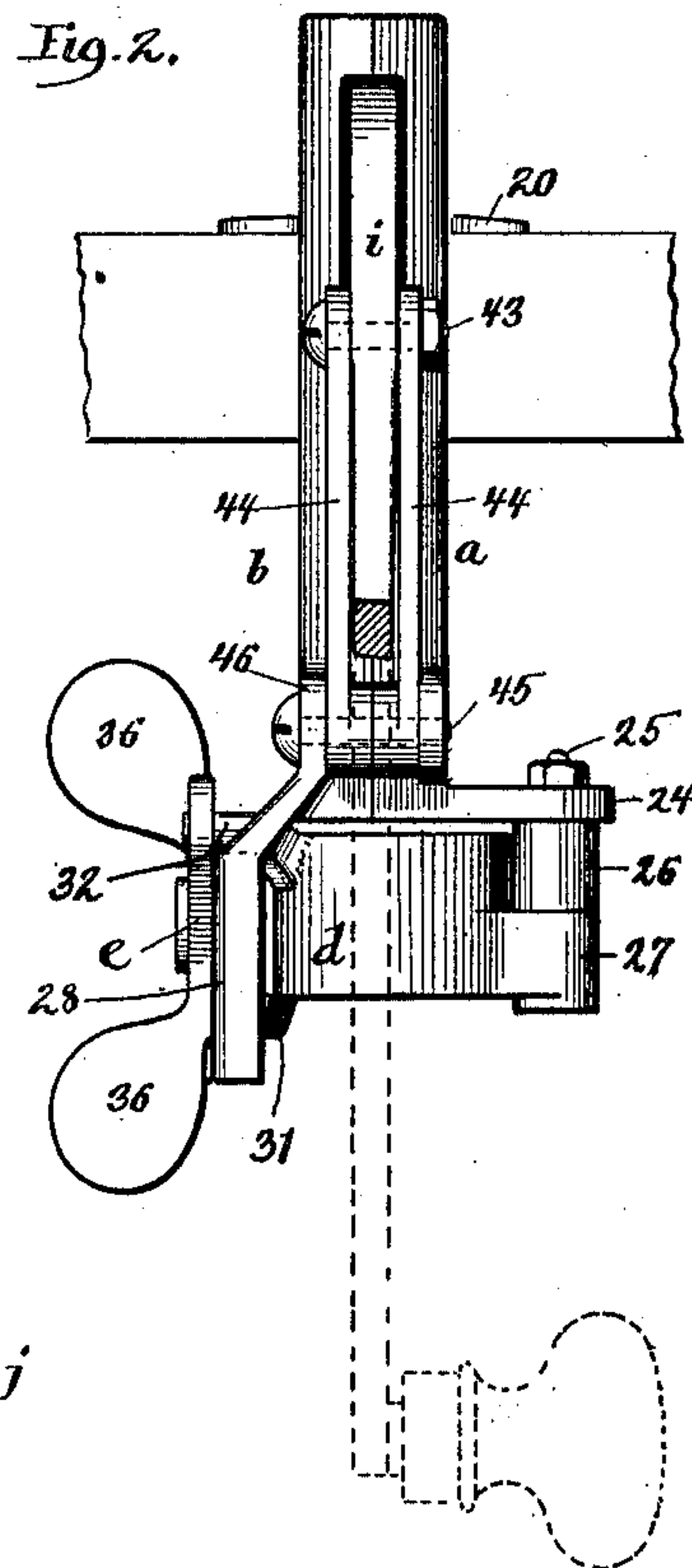
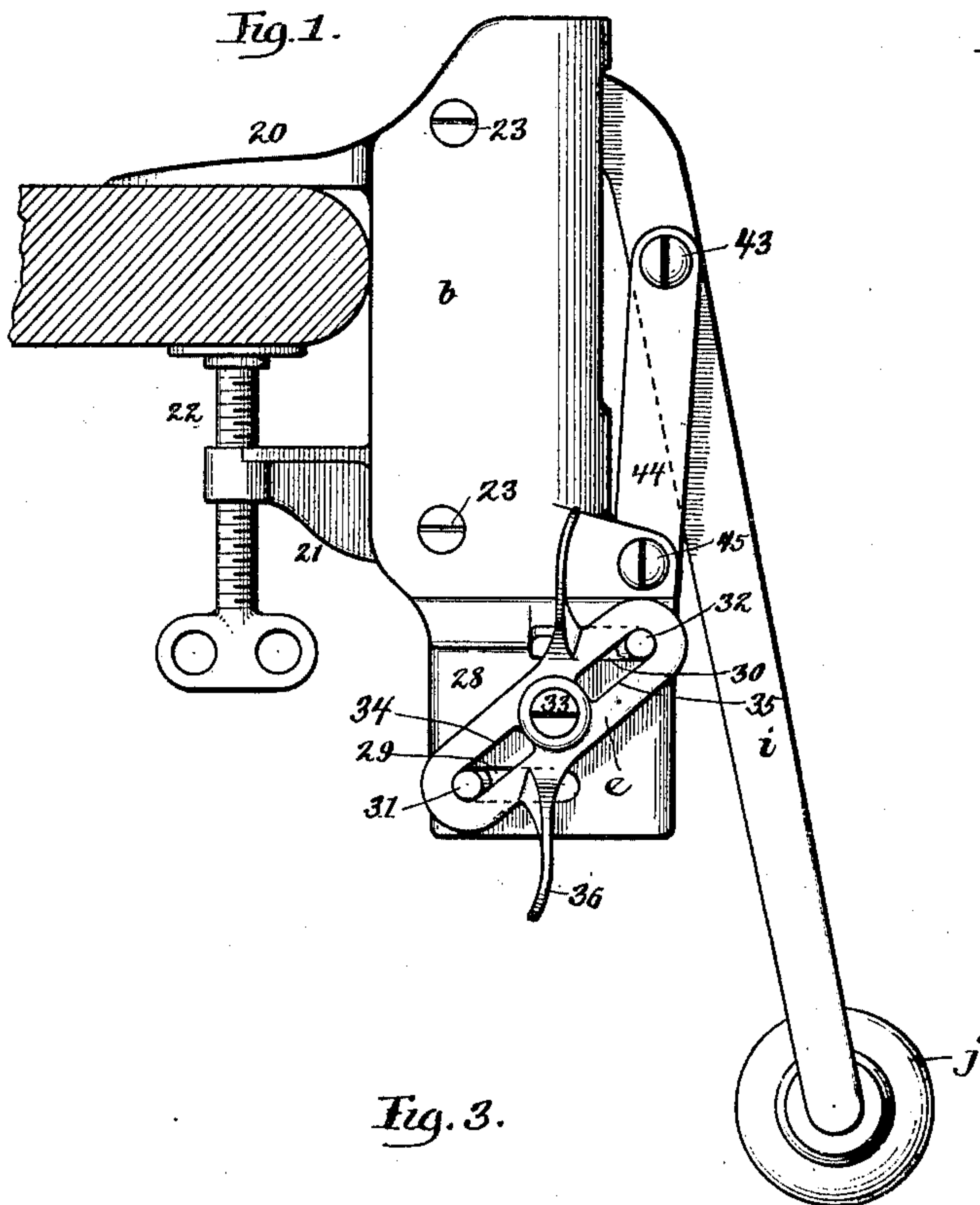
**Patented May 28, 1901.**

**A. BAUMGARTEN.**  
**CORK EXTRACTOR.**

(Application filed Feb. 2, 1900.)

(No Model.)

**4 Sheets—Sheet 1.**



Witnesses:  
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*Albert Baungarten*  
*By Fred Gerlack*  
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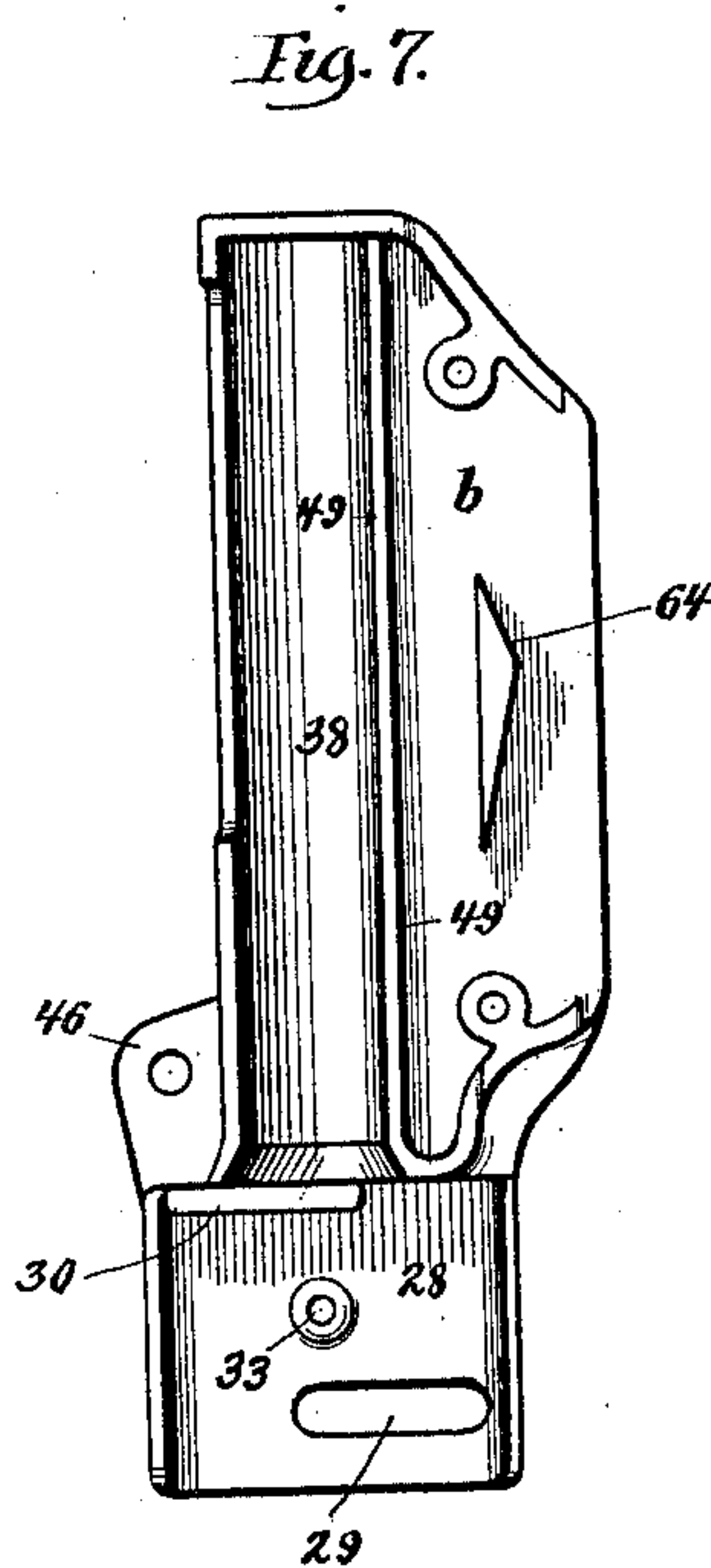
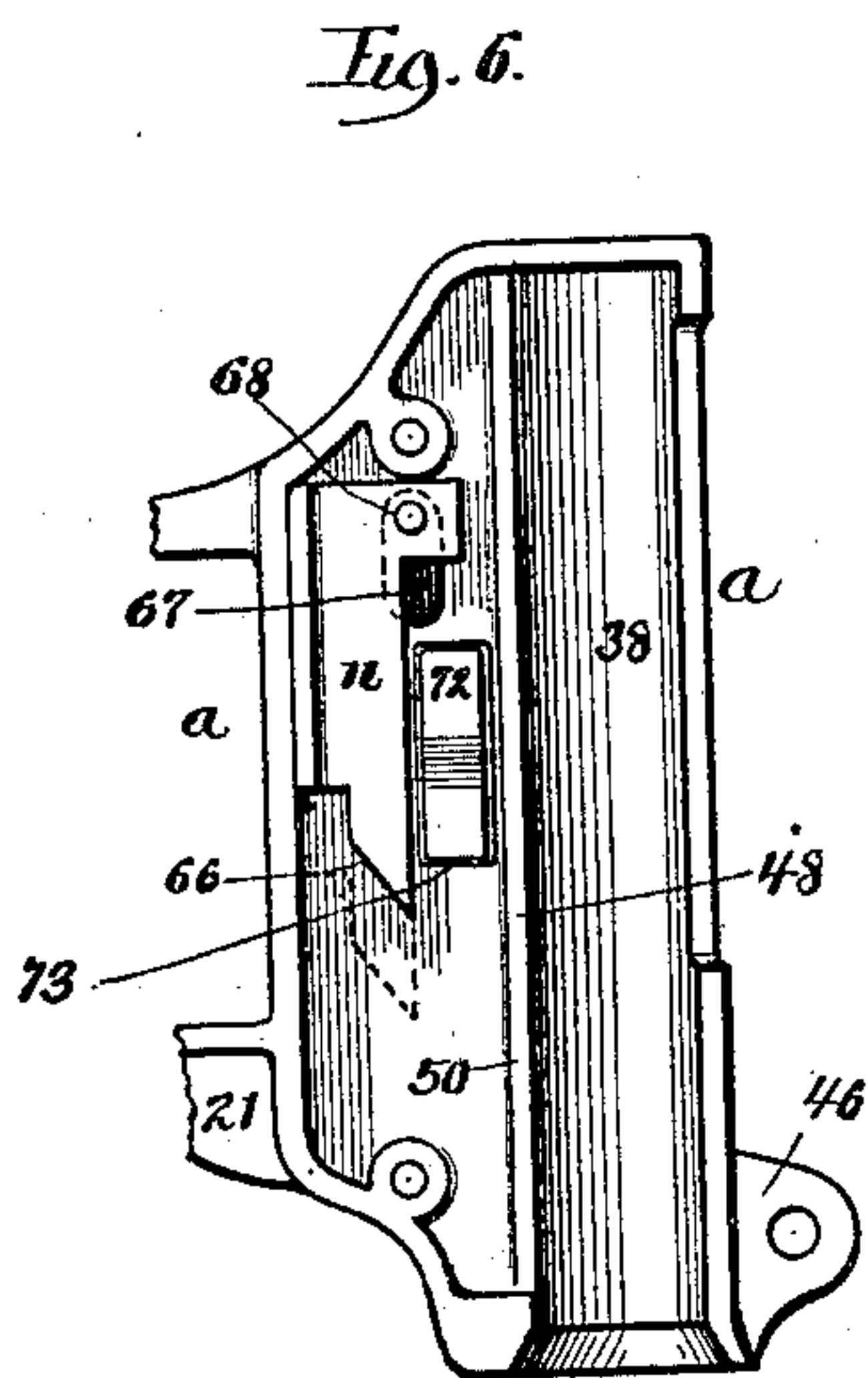
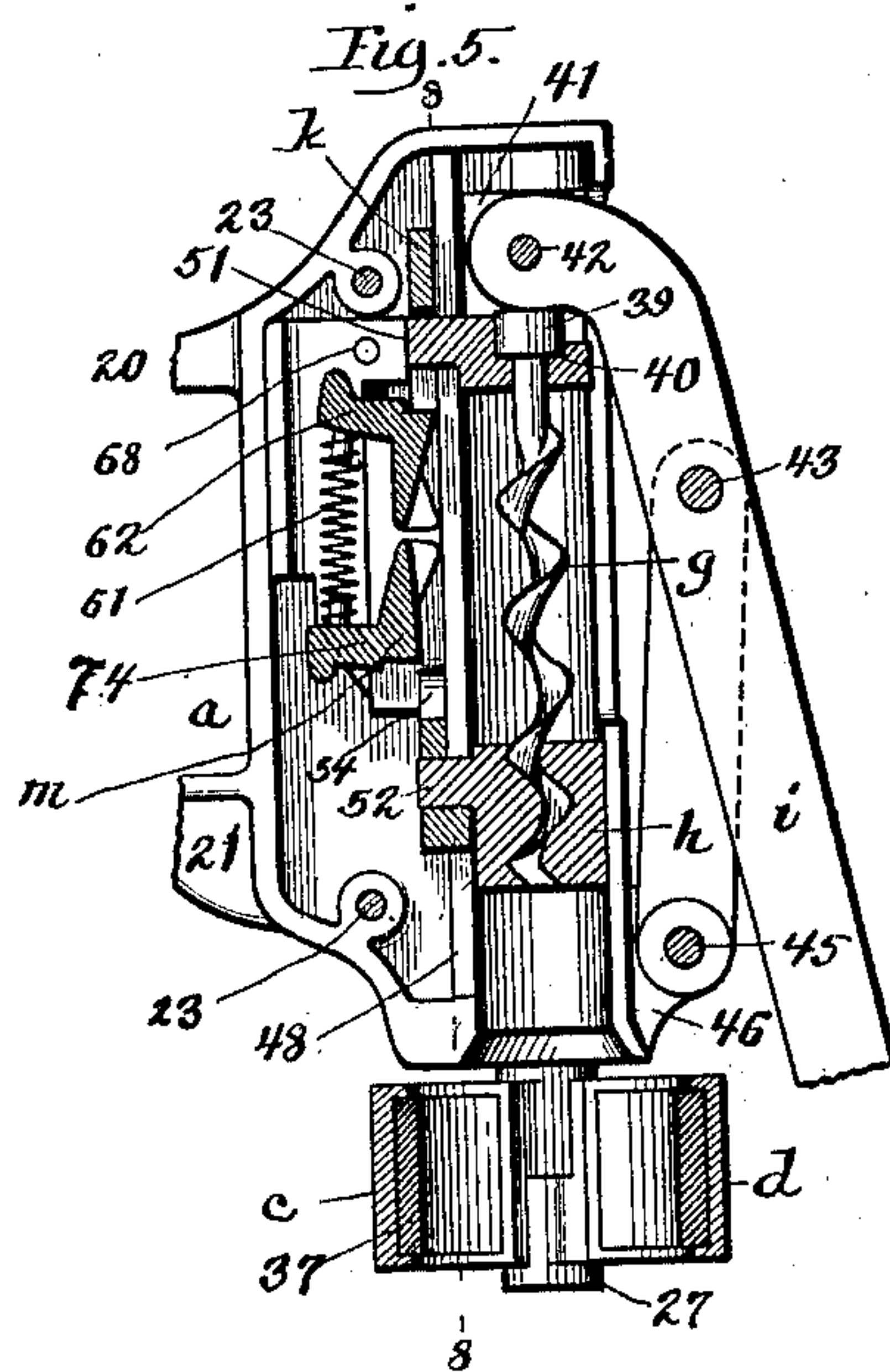
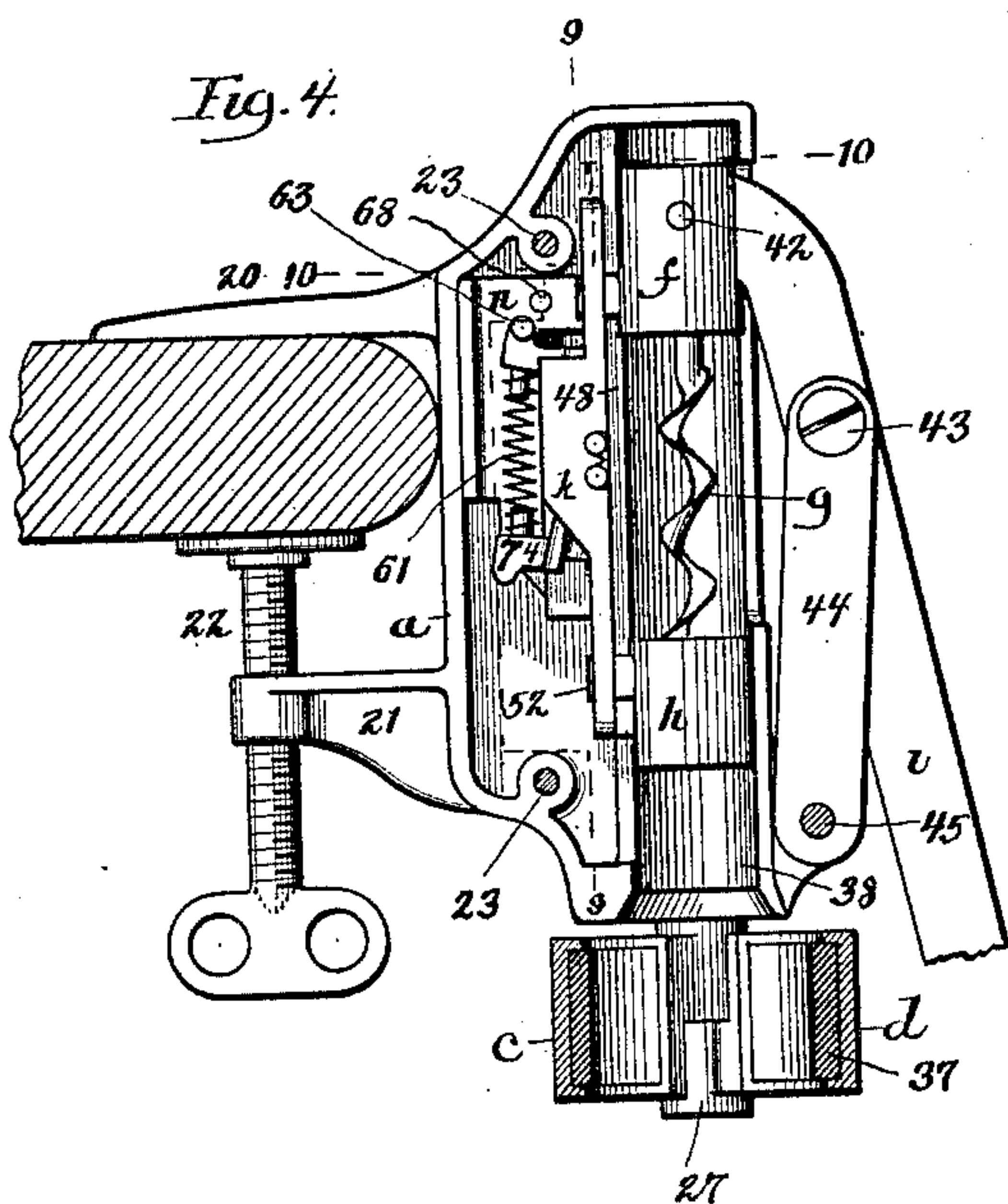
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4 Sheets—Sheet 2.

(No Model.)



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4 Sheets—Sheet 3.

Fig. 8.

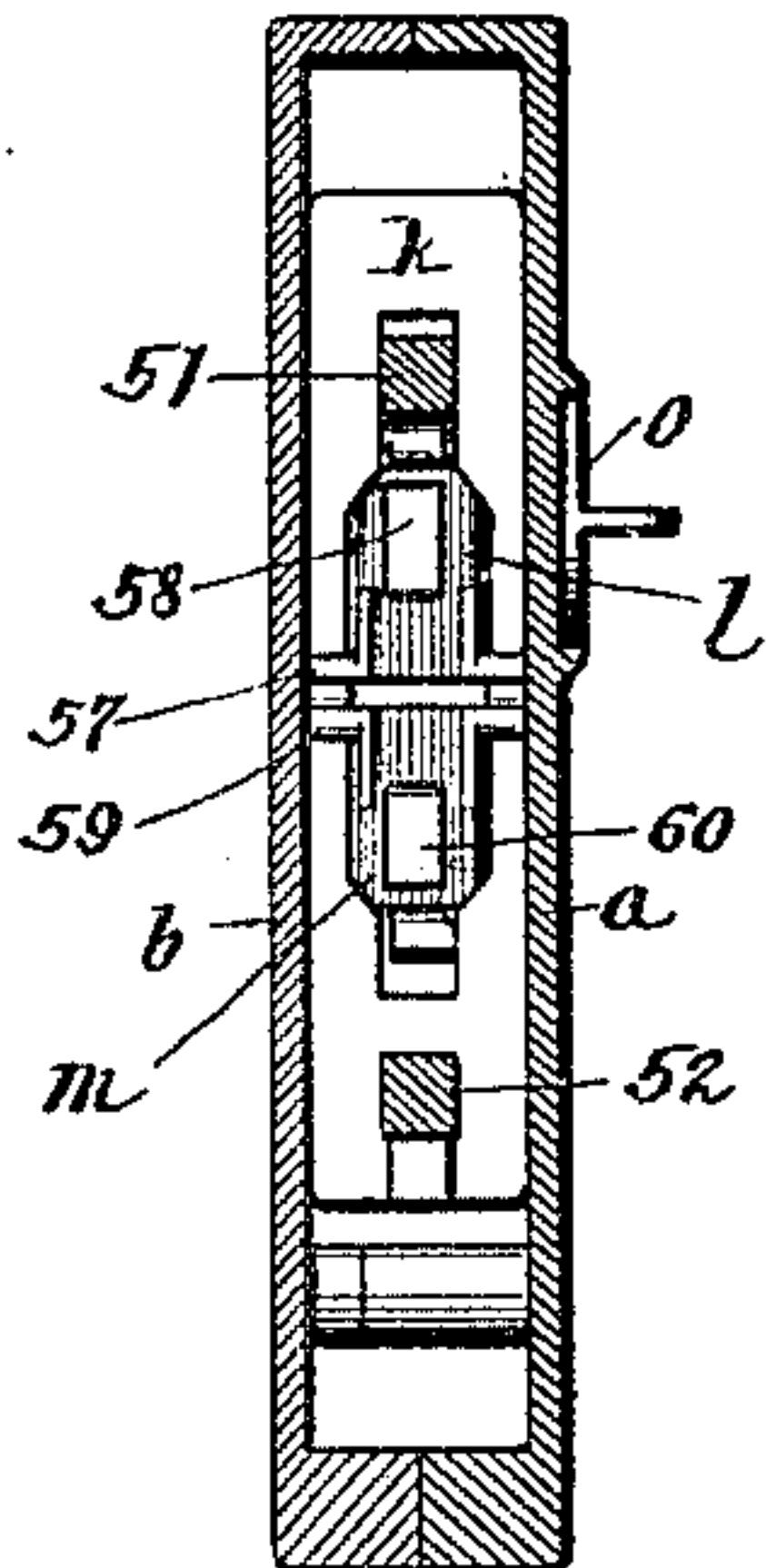


Fig. 9.

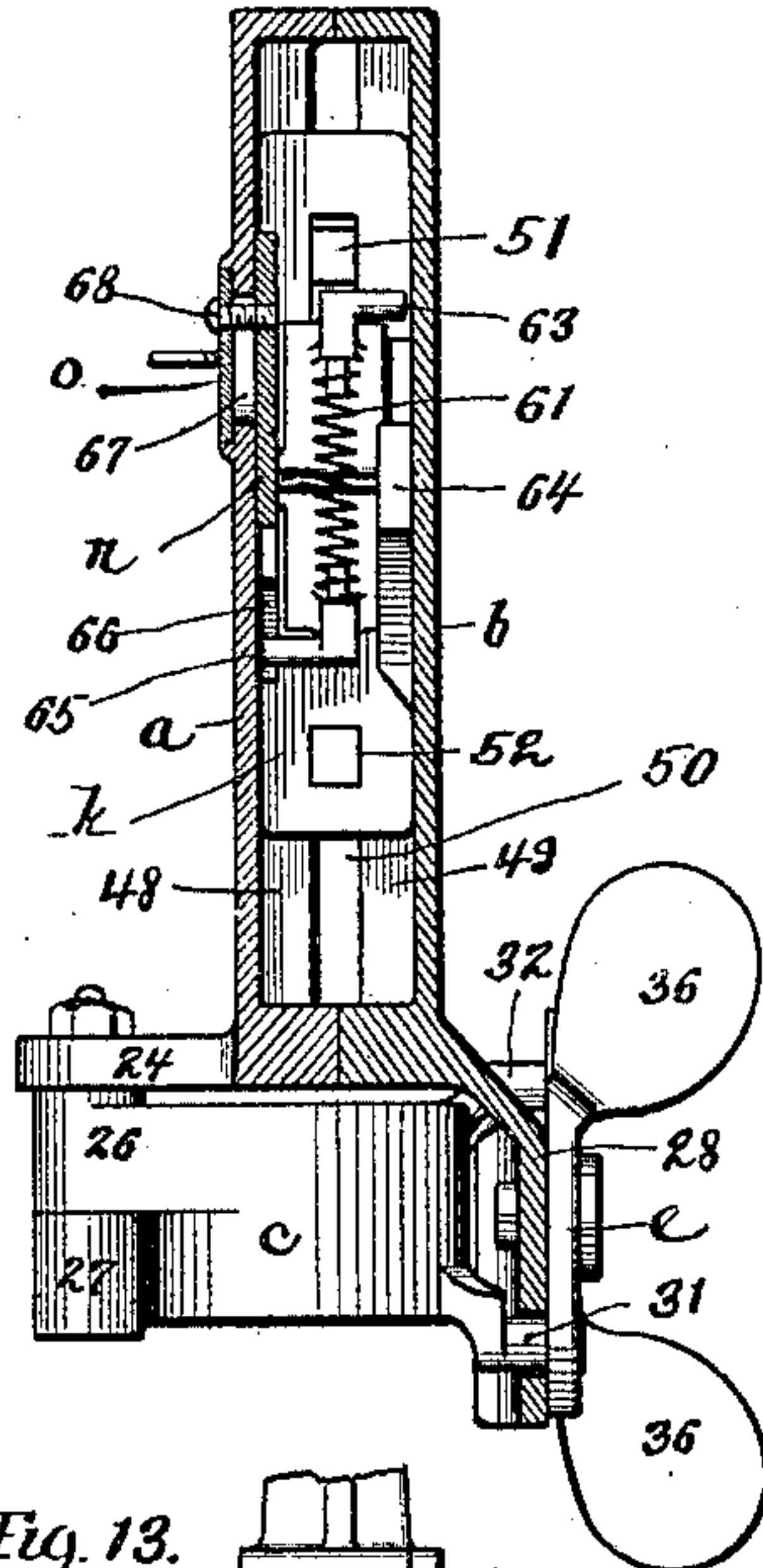


Fig. 10.

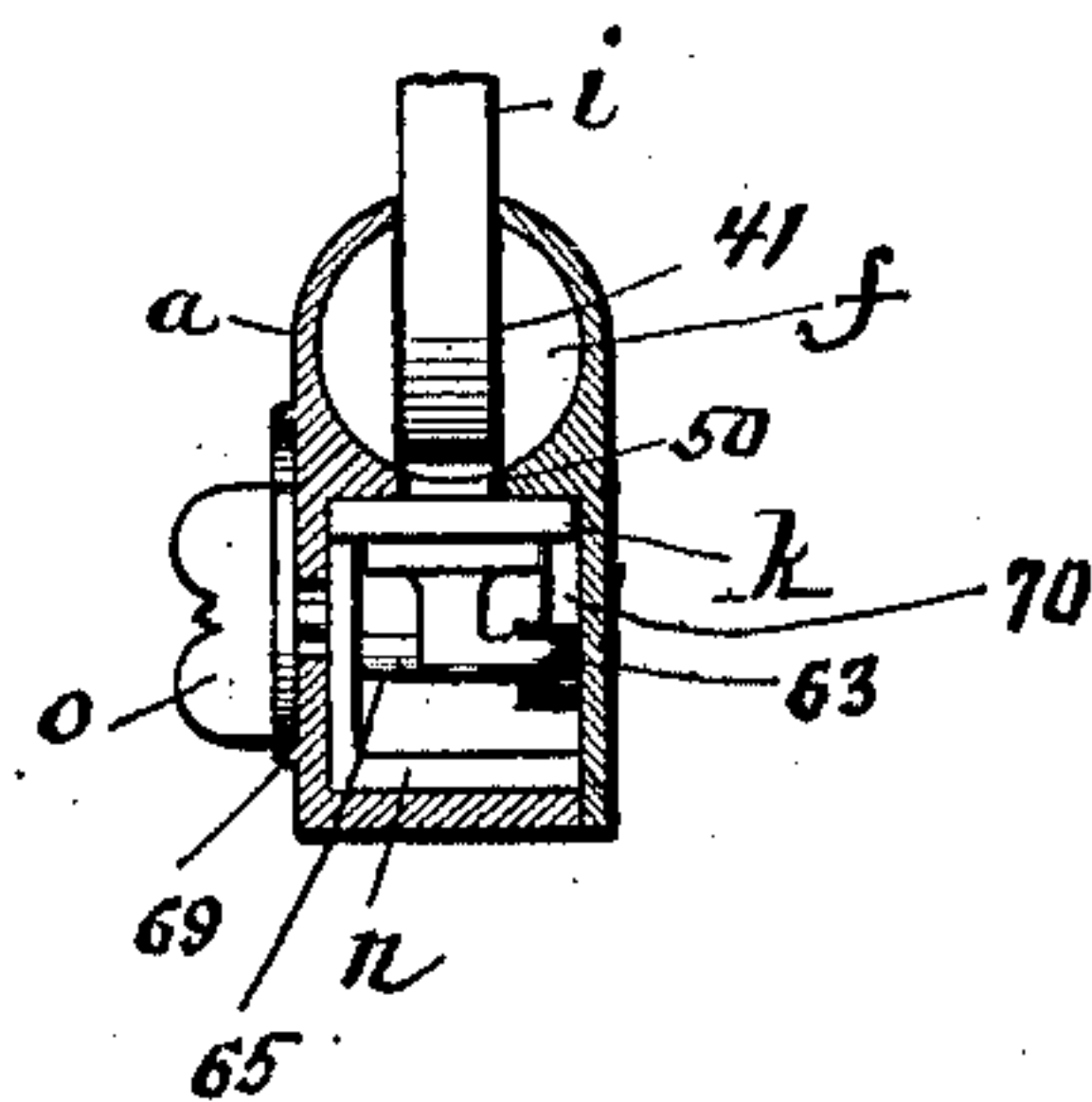


Fig. 11.

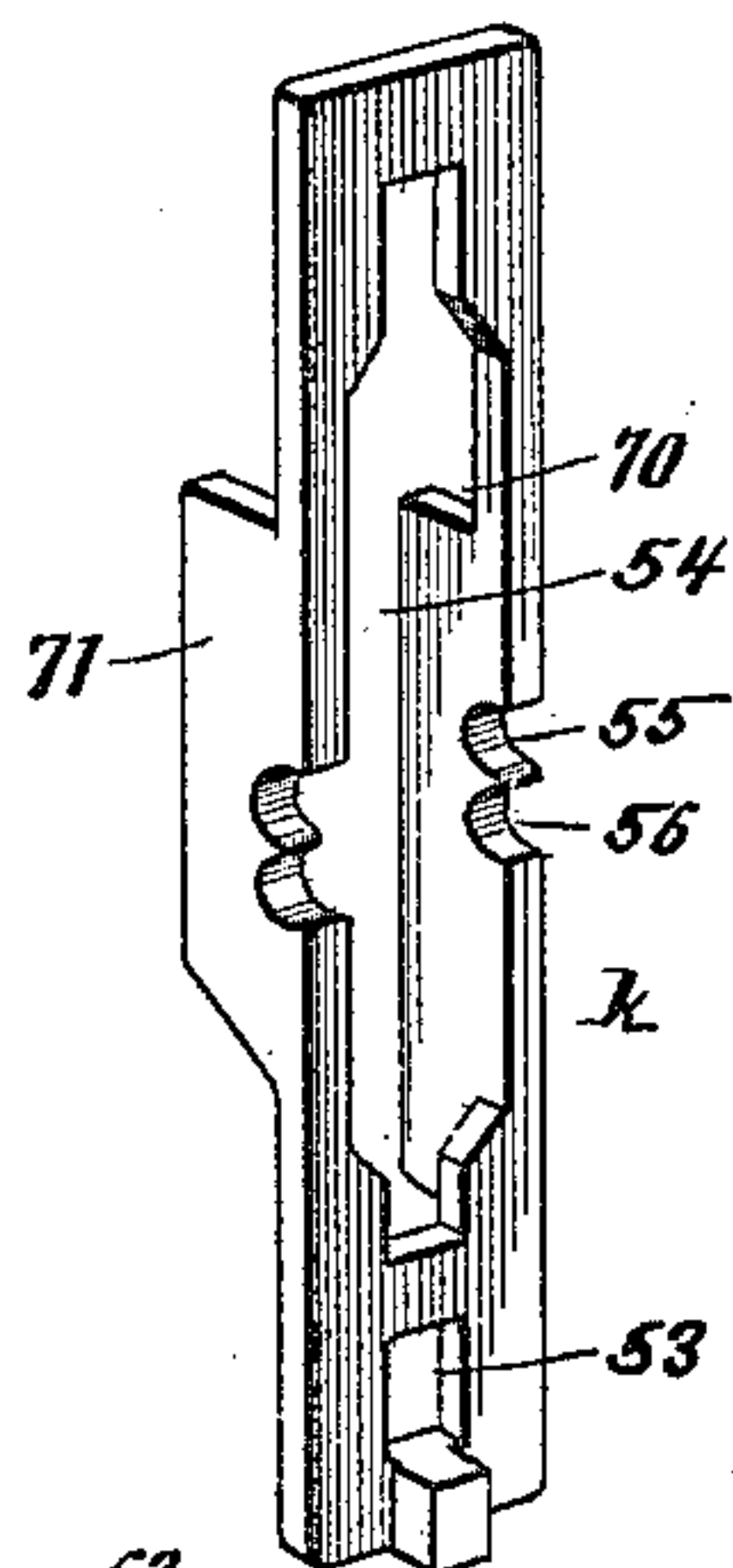


Fig. 13.

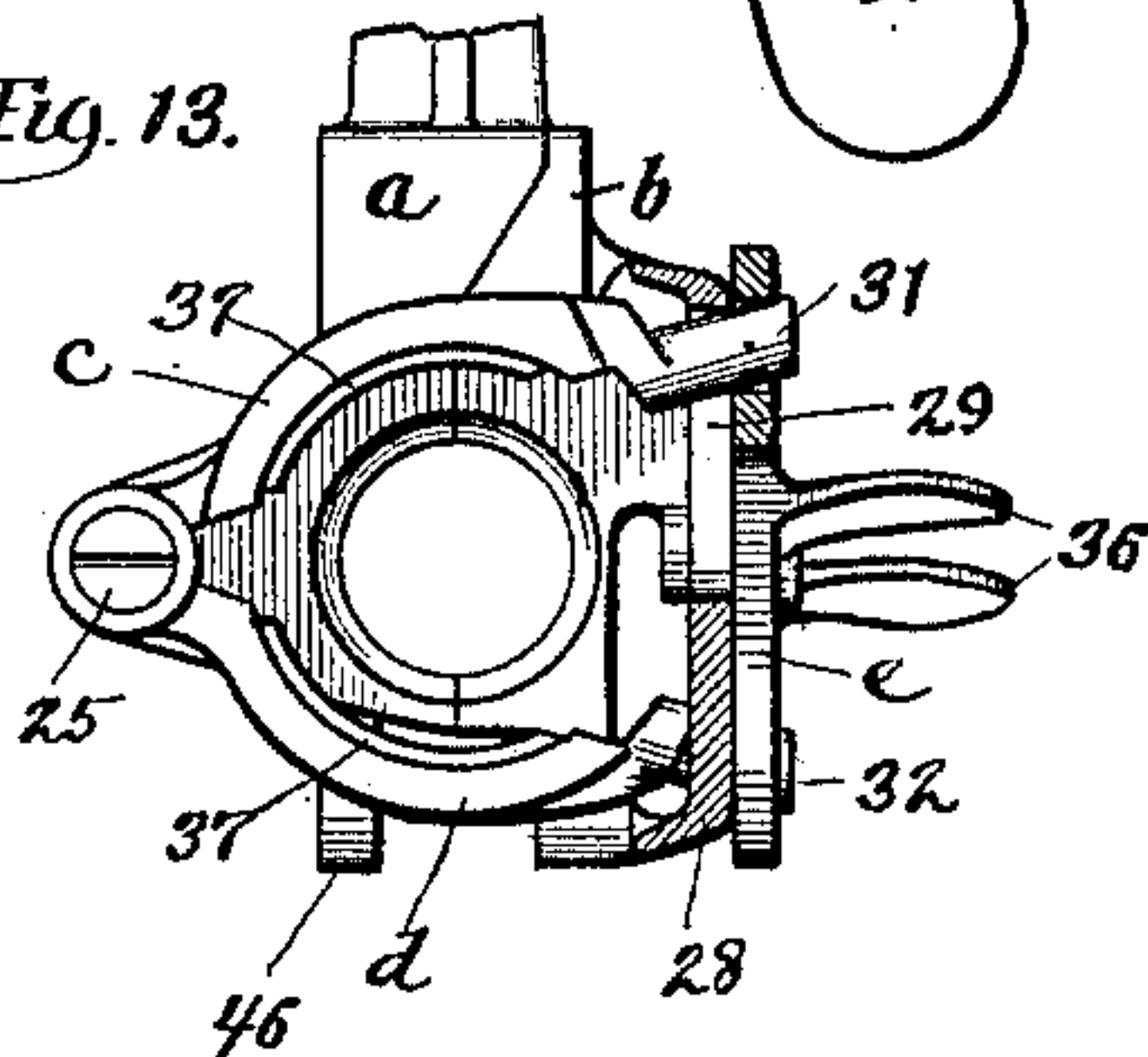


Fig. 14.

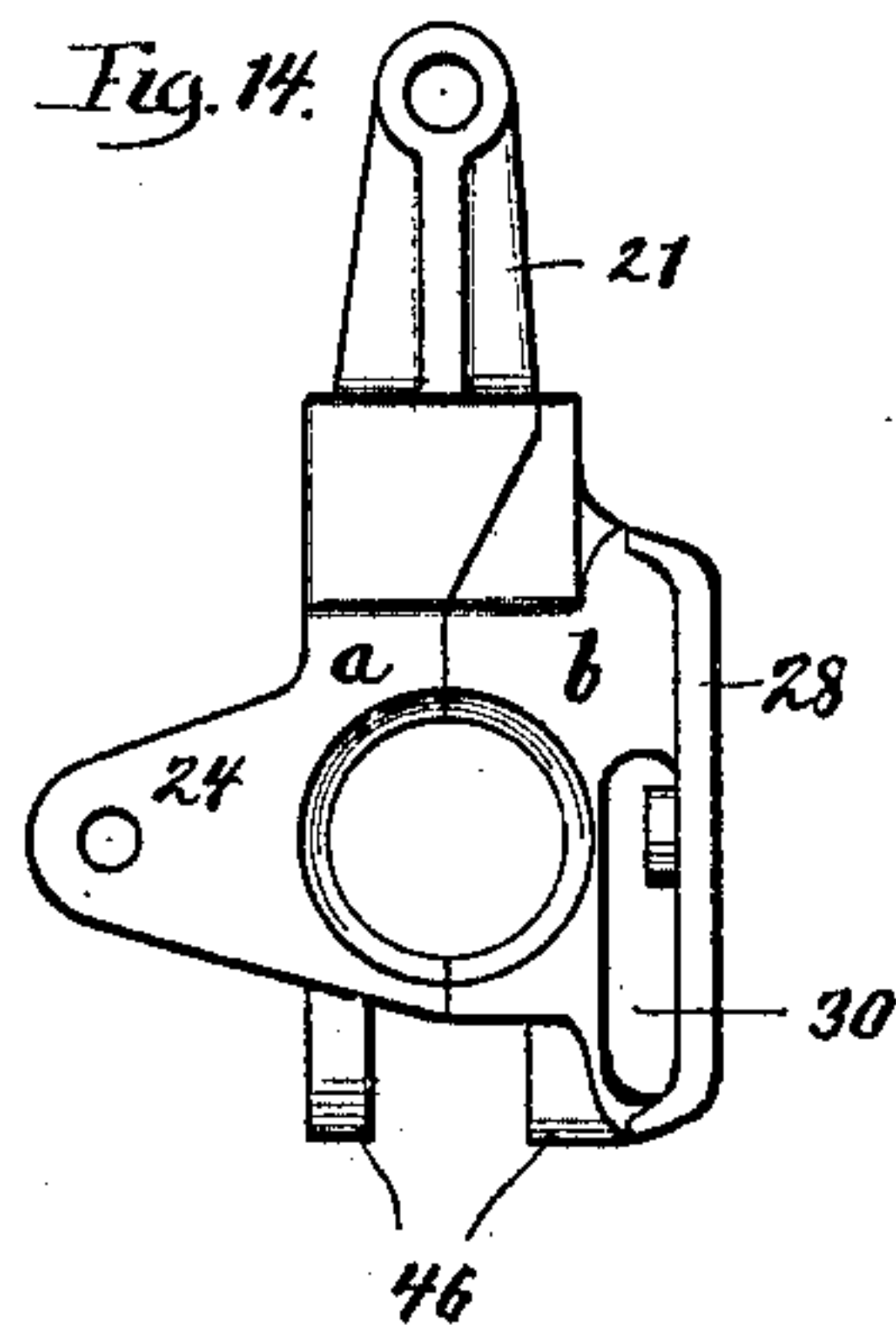
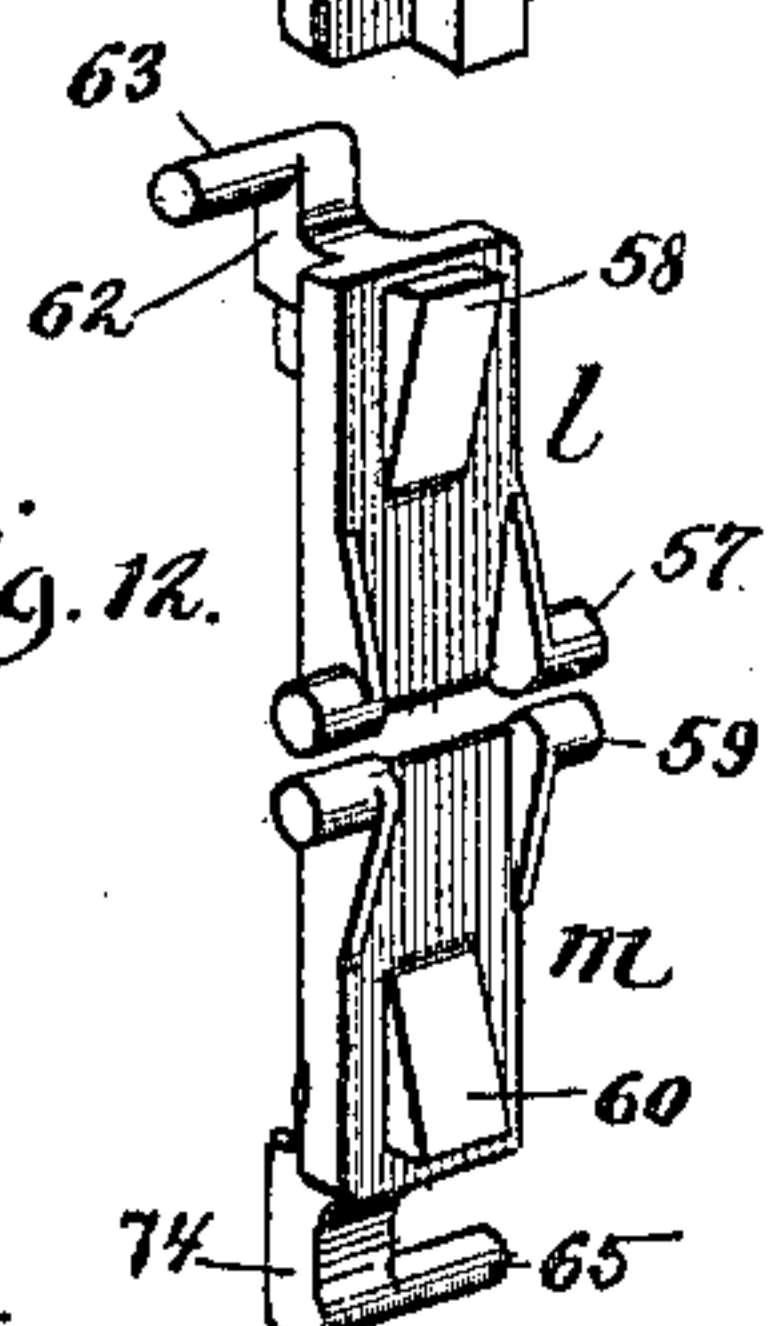


Fig. 12.



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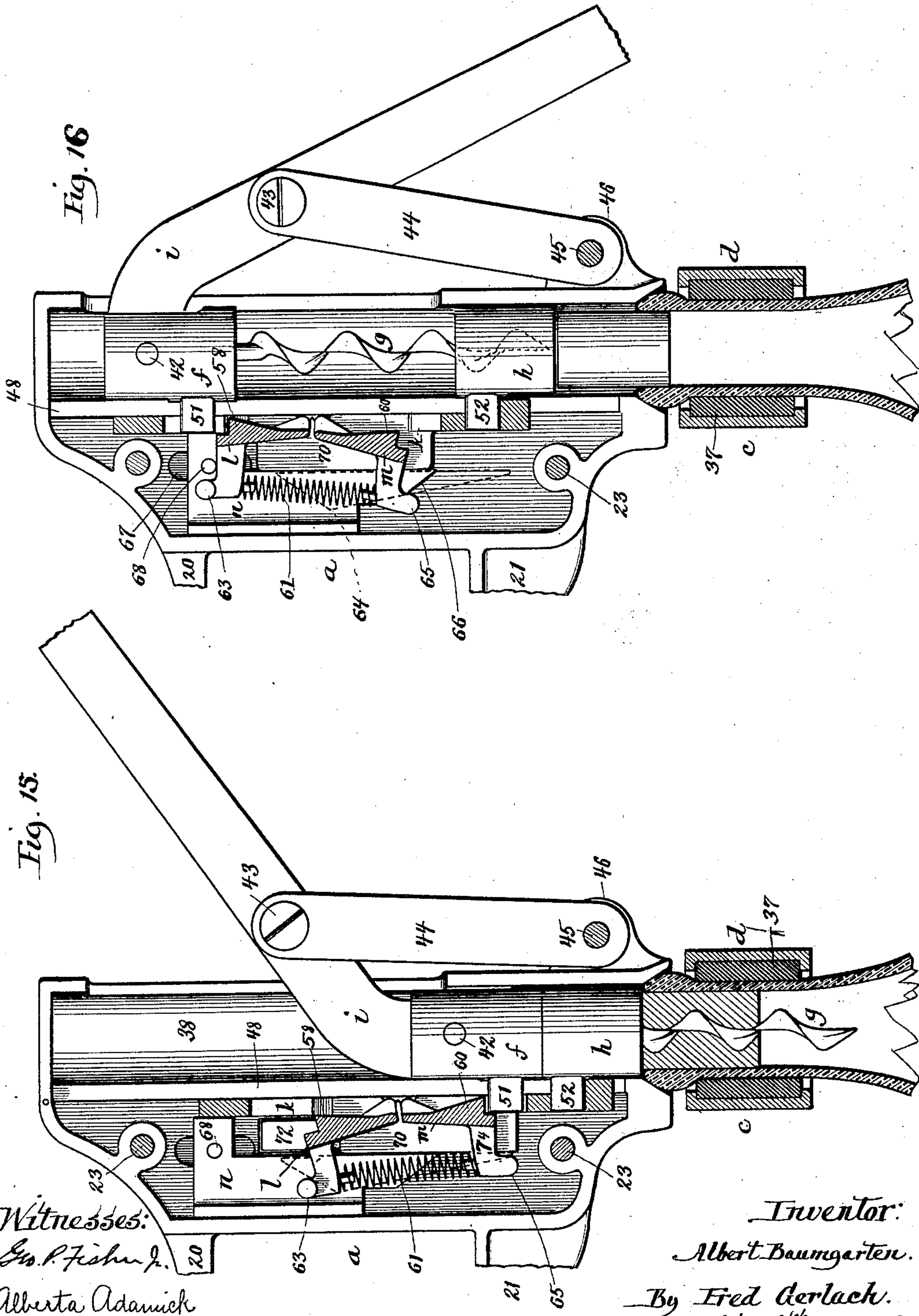
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4 Sheets—Sheet 4.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

ALBERT BAUMGARTEN, OF FREEPORT, ILLINOIS.

## CORK-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 675,032, dated May 28, 1901.

Application filed February 2, 1900. Serial No. 3,682. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT BAUMGARTEN, a resident of Freeport, Stephenson county, Illinois, have invented certain new and useful  
5 Improvements in Cork-Extractors, of which the following is a full, clear, and exact description.

The invention relates to devices whereby corks may be withdrawn from bottles and  
10 other vessels. In cork-extractors heretofore devised it has been a common practice to provide a suitable casing which contained a reciprocable corkscrew and carrier therefor, a suitable nut for imparting rotation to the  
15 corkscrew to engage and strip the cork, and mechanism for operating such parts. In such constructions the cork was usually withdrawn entirely from the bottle-neck. In practice, however, it has been frequently found to be  
20 desirable—*e. g.*, when the bottle contains an effervescing fluid—to only partially withdraw the cork to prevent the escape of the fluid and so the operator can conveniently remove the cork when ready to pour out the fluid.

25 The invention designs to provide a cork-extractor in which both the longitudinal and rotary shift is effected by a single operation, with mechanism whereby the cork may be only partially or entirely withdrawn from the  
30 bottle, and also to provide mechanism of this character which is adapted to withdraw corks of different lengths.

The invention further designs to provide improved mechanism for intermittently interlocking and releasing the corkscrew-carrier and nut, to insure the positive coöperation of such parts to effect the engagement of the corkscrew and cork, the withdrawal (partial or entire) of the cork, and the stripping  
40 of the cork from the screw.

The invention also designs to provide a simple and effective construction of bottle-holder, whereby the bottle will be held during the operation of the extractor mechanism, and, further, to improve the construction of cork-extractors generally.

50 The invention consists in the several novel features hereinafter set forth, and more particularly defined by the claims at the conclusion hereof.

In the drawings, Figure 1 is a view in side elevation of a cork-extractor embodying the

preferred form of the invention, being shown as secured to the edge of a table. Fig. 2 is a front view, a portion of the operating-lever  
55 being broken away. Fig. 3 is a view in side elevation, showing the reverse side of that shown in Fig. 1. Fig. 4 is a side elevation, a section of the casing being removed to show the parts within the casing. Fig. 5 is a view  
60 in central vertical section, a section of the casing being shown in elevation. Fig. 6 is an inner view, in side elevation, of one of the casing-sections. Fig. 7 is a similar view of the other of the casing-sections. Fig. 8 is a view  
65 in vertical transverse section through the casing at line 8 8 of Fig. 5, the sliding connector and parts carried thereby being shown in elevation. Fig. 9 is a view in vertical transverse section, taken on line 9 9 of Fig. 4. Fig.  
70 10 is a view in horizontal section, taken on line 10 10, Fig. 4. Fig. 11 is a perspective view of the sliding connector. Fig. 12 is a perspective view of the latch-plates which are carried by the connector. Fig. 13 is an inverted plan  
75 view, parts being shown in section. Fig. 14 is an inverted plan view of the casing. Fig. 15 is a view, partly in vertical section, upon a larger scale, showing the parts in position assumed when the extractor has been operated  
80 to engage the cork. Fig. 16 is a similar view showing the parts in the position assumed when the cork has been partially withdrawn and the corkscrew has been withdrawn from the cork.

85 In the drawings, *a* and *b* denote sections of a casing within which a corkscrew is carried. The casing is usually secured to a table, counter, or shelf. A section of the casing *a* has integrally formed therewith a rearwardly-projecting lug or shoulder 20, adapted to rest  
90 upon a shelf or table, and an arm 21, through the rear end of which a jam-screw 22 is passed, which serves as an adjustable clamp for securing the cork-extractor in convenient and  
95 desired position, as well understood in the art. The casing is formed of sections *a* and *b* to permit the operating parts to be arranged within the casing, these sections being secured together by screws 23. The front portion of  
100 the casing is of cylindrical shape and forms a socket or guide, wherein the corkscrew and its carrier may be moved longitudinally.

Adjacent its lower edge the section *a* of



the casing is provided with a lug or ear 24, extending laterally therefrom, wherein is secured a vertically-disposed screw or pin 25, on which the coacting jaws *c* and *d* of the bottle-holder are pivotally secured in position beneath the cylindrical portion or socket of the casing. Jaws *c* and *d* are provided, respectively, with lateral ears or lugs 26 and 27, through which the pin 25 is extended. The section *b* of the casing is formed with a dependent support 28, having horizontal slots 29 and 30 formed therein, through which project studs 31 and 32, formed on jaws *c* and *d*. Centrally between the slots 29 and 30 and intermediate the studs 31 and 32 a finger-lever *e* is pivotally secured to the support 28 of the casing by a screw or pivot-pin 33. The finger-lever *e* is provided with slots 34 and 35, wherein the studs 31 and 32 are held, and wings 36, projecting laterally, whereby the lever may be conveniently grasped and shifted. Each of the jaws *c* and *d* is curved to fit around the neck of a bottle and provided with elastic linings or strips 37, which impinge against the bottle-neck when the jaws are forced together. It will be seen that the studs 31 and 32 are normally at the outer ends of the slots 29 and 30, are held against vertical play therein, and are arranged, respectively, on opposite sides of the pivot 33 of the finger-lever *e*. Assuming the jaws to be in the normal position shown in the drawings and it is desired to hold a bottle beneath the casing, the neck thereof will be placed against the under side of the casing between jaws *c* and *d*. The finger-lever *e*, which is in convenient reach of the left hand of the operator, can then be turned about its pivot 33, when the studs in the slots 34 and 35 will be simultaneously moved toward each other, and thus cause the rubber strips 37 of the jaws *c* and *d* to securely hold the bottle-neck. To release the bottle, it is merely necessary to reverse the movement of the finger-lever. Such mechanism for holding the bottle is simple and effective. By employing the finger-lever the jaws are under positive control and excessive pressure is not apt to be applied by the operator, and, moreover, the lever is in convenient position for the left hand of the operator and at one side of the casing, where the operation of the mechanism for extracting the cork is not interfered with.

Within the cylindrical socket 38 a corkscrew-carrier *f* is held in a manner free to slide. The upper end of a corkscrew *g* is journaled in the carrier *f* and is free to rotate in said carrier. The corkscrew is preferably provided with an enlarged head 39, fitting within a seat 40 in the carrier *f*. A nut *h*, having a spiral channel or groove corresponding to the corkscrew, is also held within the cylindrical socket 38 of the casing in the lower portion thereof. Both the carrier *f* and nut *h* are non-revolubly held within the casing. The upper terminal of an operating-lever *i* serves to impart longitudinal movement to

the corkscrew *g*, fits within a recess 41, formed in the carrier *f*, and is pivotally secured to the carrier by a cross-pin 42. The upper terminal of the operating-lever *i* is formed with a concentric edge or surface, which engages the enlarged head 39 of the corkscrew and retains the corkscrew against longitudinal movement in the carrier. The operating-lever *i* is fulcrumed on a pin 43, carried in the upper end of dual links 44, which are arranged on opposite sides thereof, and pivotally sustained by a pin 45, secured in ears or lugs 46, projected forwardly from the casing. In normal position the operating-lever extends downwardly from the casing. Links 44, carrying fulcrum-pin 45, serve as a shifting fulcrum, which permits the end of the lever which is secured in the corkscrew-carrier to travel in direct longitudinal path within the casing. The distal end of the operating-lever is provided with a handle *j*.

It will be understood that when the operating-lever *i* is swung upwardly the corkscrew and carrier will be moved downwardly and longitudinally in the socket 38, and vice versa. It will also be understood that if the corkscrew and non-revoluble nut are shifted in unison longitudinally the corkscrew will be held against rotation by the nut, and if the nut be held against longitudinal movement while the corkscrew is being shifted longitudinally the corkscrew will be forced to rotate, thus resulting in a gyratory movement, which movement is necessary to cause the corkscrew to enter a cork when in a bottle, and a reverse gyratory movement strips the cork from the corkscrew.

Between the vertical ribs 48 and 49, which form the inner wall of the cylindrical socket of the casing, is formed a slot or guideway 50, through which extend a stud or lug 51, secured to the corkscrew-carrier, and a stud or lug 52 on the nut *h*. In back of the vertical ribs 48 and 49 a chamber is formed in the casing, within which the mechanism for interlocking and releasing the corkscrew-carrier and nut are held. A connector *k* is held in a manner free to slide between the side walls of the casing and against the ribs 48 and 49. Such connector and parts cooperating therewith serve to control positively the relative movements of the corkscrew-carrier *f* and nut *h*. The lug 52 on nut *h* is securely held in an opening 53 in the connector *k*, and thus the longitudinal shift of the nut *h* will be controlled by the connector. This connector is provided with a long slot 54, into which the stud 51 of the carrier *f* projects and wherein it will travel. The connector is provided with pockets 55, in which the pivot-lugs 57 of a latch-plate *l* are retained. The latch *l* is provided with a cam projection 58, which is normally held in the path of lug 51 of the carrier *f*. Beneath the latch *l* and within pockets 56 in the connector rest the pivot-lugs 59 of a reversely-arranged latch-plate *m*. Latch *l* serves, when engaged by lug 51 of carrier *f*, to impart a



unison movement to the nut *h* during the initial part of the downward movement of the carrier and before the corkscrew is in position to penetrate the cork. Latch *m* is provided with cam 60 and serves to interlock the nut *h* and the carrier to effect a unison movement of these parts when the cork is to be withdrawn. Connector *k* is formed with sides 70 and 71, which fit snugly between the side walls of the casing and the releasing-cams. A friction plate or spring 72, (see Fig. 6,) retained in a shallow recess 73 in the casing-section *a*, bears against the side 70 of the connector and secures it against displacement when the connector is not otherwise retained or locked. The latches *l* and *m* are held normally against the inner face of the connector by a spring 61, arranged intermediate lugs conveniently formed on each of the latches, and in such normal position the cams 58 and 60 are in the path of travel of the lug 51 of the carrier *f*. Latch *l* is formed with a rearwardly-extending release-arm 62, having a lateral stud 63, in the path of which a fixed releasing-cam 64, secured in or formed integral with the casing, is arranged. Cam 64, engaging stud 63 of latch *l*, withdraws the cam 58 from engagement with and out of the path of lug 51 of the corkscrew-carrier *f* before the corkscrew *g* is in position to penetrate the cork and at which time the corkscrew is to be moved independently of the nut to effect the gyration of the corkscrew and cause it to engage a cork. After such gyration the nut and corkscrew are to be moved in unison to effect the withdrawal of the cork. The upper face of cam 60 of latch *m* is inclined, and as the lug 51 descends it will force the cam 60 out of its path. The lug 51, however, descending beneath cam 60 will upon its return engage the lower straight edge of cam 60, which will have been returned to its normal position within the path of the lug by spring 61, and again cause the corkscrew and nut *h* to travel in unison, resulting in the longitudinal movement of the corkscrew necessary to withdraw the cork until the latch *m* is released from the carrier *f*. Latch *m* is provided with a release-arm 74, having a stud 65 projecting laterally therefrom, so as to engage an inclined cam edge 66 of an adjustable release-cam *n*. When the disengagement of the carrier and latch *m* has been effected, the corkscrew, on further shift, will gyrate reversely and strip the cork.

It will be manifest that the extent of withdrawal of the cork is determined by the extent of unison shift imparted to the corkscrew and nut *h* prior to their release from each other to permit the corkscrew to be moved longitudinally and before the reverse gyration, which effects the stripping of the cork from the corkscrew. To effect the release of the corkscrew and of the nut at any desired point in travel thereof, the release-cam *n* is adjustable, so the extent of the unison movement can be varied to permit the re-

lease to occur when the cork is only partially withdrawn and, furthermore, to effect a release when desired according to the length of the cork in the bottle. The release-cam *n* is of angular form, fitting snugly between the walls of the casing and the connector *k*, and is free to slide therebetween. Within the side wall of section *a* of the casing is formed a slot 67, through which passes an eccentric pin 68, carried by a regulating-disk *o*, which is formed with finger-pieces and held within an annular rib 69 on the outer side of the casing-section *a*. As the handle is turned the pin 68 may be raised or lowered to adjust the edge 66 of the cam *n* to bring said edge into position to be engaged by the stud 65 of latch *m* to withdraw the cam 60 from engagement with the carrier, and thus determine the point at which the withdrawal of the cork shall cease, or the release-cam *n* may be shifted to withdraw the entire cork from the bottle before effecting the release of the nut and impart the reverse gyratory movement to strip the cork. In its upward movement after the lug 51 is released from cam 60 it engages the lower inclined face of cam 58 and rides over into position above such cam and in readiness for a succeeding operation.

The operation of the cork-extractor mechanism is as follows, viz: Assuming the parts to be in the normal position (shown in Figs. 1 and 5 of the drawings) and a bottle is being held by jaws *c* and *d* against the lower part of the casing and positioned centrally beneath the cylindrical socket 38 of the casing, the operator will raise the distal end of the operating-lever *i*, causing the inner end to move the corkscrew and carrier downwardly in the socket. At the initial part of such movement the lug 51 of the carrier will move downwardly in the slot 54 of the connector *k* until it encounters the straight face of cam 58 of latch *l*. The lug 51, descending farther, will engage cam 58 of the latch *l* and shift the connector *k* and nut *h* downwardly in unison with the corkscrew. Such unison movement will continue until the cam 58 is withdrawn from engagement with the lug 51 of the carrier by engagement of stud 63 with release-cam 64 of the casing. When such release occurs, the nut *h* will have been positively shifted into position adjacent the cork and in the lower part of the socket 38, as seen in Fig. 15. The carrier *f*, descending farther, will then force the corkscrew through the nut *h*, resulting in a gyratory movement of the corkscrew, which causes the corkscrew to penetrate the cork. During such downward movement the lug 51 of carrier *f* will engage the inclined face of cam 60 of latch *m*, forcing such cam out of its path, and after lug 51 of the carrier has passed beneath the cam 60 the latch will be returned to normal position by spring 61. When the corkscrew and carrier are in lowermost position in the socket, the cork will have been engaged by the corkscrew and the parts will be



in position to withdraw the cork, as seen in Fig. 15. The reverse or downward movement of the lever will then cause the corkscrew and carrier to ascend in the socket 38. During the initial upward movement the lug 51 of the carrier will engage the cam 60 of latch *m*, thus causing the connector and nut *h* to move positively in unison with the corkscrew and carrier during the withdrawal of the cork. Such movement continues until latch *m* is withdrawn from engagement with the carrier, which occurs when the stud 65 engages the inclined edge 66 of the adjustable releasing-cam *n*. The nut *h* and carrier will then remain in the position shown in Fig. 16, while the corkscrew and carrier, ascending farther, will cause the corkscrew to gyrate and strip the cork therefrom.

The release-cam *n* is adjustable to permit the proper point at which the nut and corkscrew are disengaged during the upward movement to be adjusted to regulate the operation to effect such release before the cork has been entirely withdrawn from the bottle and to cause such disengagement to occur at the point to free the corkscrew from either a long or short cork. For example, if a short cork is to be drawn and it is desired to only partially withdraw the cork the release-cam *n* will be adjusted by regulating-disk *o* to assume a lower position in the casing, thus releasing the latch *m* and nut *h* from the carrier before the cork has been entirely withdrawn from the bottle. Manifestly the release-cam *n* may be adjusted to regulate the release of the corkscrew from the nut *h* at the desired point and corresponding to the extent to which a cork is to be drawn. If adjusted to its uppermost position in the casing, the release can be timed to occur after the cork has been entirely withdrawn.

So far as I am aware, the present invention discloses the first instance in the art in which the extent of the withdrawal of the cork could be positively regulated in a cork-extractor wherein a single operating part, such as a lever, effected the positive conjoint longitudinal and rotary shift of the corkscrew by a single operation thereof and without varying the manner of operation and so the operator can by the same operation withdraw a cork to any desired extent after adjusting the mechanism.

The connector and latch mechanism afford a simple and effective construction in which the relative and successive movements of the corkscrew and nut are positively controlled to insure at all times the proper and timely operation of the corkscrew.

The lever mechanism which is used to impart movement to the operating parts is conveniently located in front of the casing and is arranged to apply the force to the corkscrew and carrier in direct manner. Furthermore, the inner end of the lever being in direct engagement with the corkscrew lessens very materially the friction resulting in con-

structions in which the corkscrew is held against vertical play in the carrier by a bearing both above and below. The force of the inner end of the lever in its downward movement being applied directly to the corkscrew, the carrier moves smoothly and easily in the casing.

It will be seen that the operating-lever is pivotally sustained at the front of the casing and extends normally downwardly and forwardly from the casing. Such construction and arrangement provide a lever having its entire throw or shift forward of the casing, and thus makes it possible to secure the casing to a wall without having the wall interfere with the shift of the lever. Furthermore, when the casing is secured to a table or counter the lever will not interfere with the use of the counter in the vicinity of the extractor.

The invention is the first in the art in which mechanism for intermittently interlocking and releasing the corkscrew and nut has been adapted for use in extractors in which the entire operation has been effected during a single continuous shift of the corkscrew in each direction. In devices heretofore constructed which were operated in this manner the mere frictional engagement of the nut and corkscrew was insufficient to prevent disarrangement of the parts. The mechanism described insures the coöperation of the parts positively and effectively.

The construction of bottle-holder is advantageous, because in practice a centrally-pivoted finger-lever is not likely to be excessively pressed against the bottle, and thus breakage, which has often occurred, is avoided by its use.

Obviously the invention presents several novel features, either of which may be used without its adoption as an entirety, and, furthermore, the invention is not to be understood as restricted to the particular construction shown and described, but may be varied within wide limits by the skilled mechanic without departing from the spirit of the invention.

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

1. The combination with a casing having a corkscrew therein, of mechanism for imparting a positive longitudinal movement to the corkscrew, a part engaging said corkscrew, and held by said casing, said part serving when held against longitudinal movement to cause the rotation of the corkscrew during the longitudinal movement imparted to said corkscrew by said mechanism, to effect a gyratory movement of the corkscrew and to effect the engagement of the cork by said corkscrew, and means for positively regulating the extent of the withdrawal of the cork.

2. The combination with a casing having a corkscrew therein, of mechanism for imparting a longitudinal movement to said cork-



screw to effect its operation, a nut non-revolubly held by said casing engaging the corkscrew to cause its rotation during a part of the longitudinal movement imparted to the corkscrew by said mechanism and having a limited unison longitudinal movement with the corkscrew to secure the corkscrew against rotation during a part of its longitudinal travel, and means for positively regulating the extent of the withdrawal of the cork by the corkscrew.

3. The combination with a casing having a corkscrew therein, of mechanism for imparting a longitudinal movement to said corkscrew in one direction to engage the cork and for imparting a continuous longitudinal movement in reverse direction to draw the cork and strip the cork from the corkscrew, a suitable part for effecting the rotation of the corkscrew during a part of its travel and means for positively regulating the extent of the withdrawal of the cork by the corkscrew.

4. The combination with a casing having a corkscrew therein, of mechanism for imparting a longitudinal movement to said corkscrew to effect its operation, a non-revoluble nut engaging the corkscrew to cause its rotation during a part of the longitudinal movement imparted to the corkscrew by said mechanism and having a limited unison longitudinal movement with the corkscrew to secure the corkscrew against rotation during a part of its longitudinal travel and means for regulating the extent of the unison longitudinal travel of the corkscrew and nut.

5. The combination with a casing having a corkscrew therein, of a lever for imparting a longitudinal movement to said corkscrew, a carrier wherein said corkscrew is revolubly held, a nut non-revolubly held in the casing and having a limited longitudinal movement therein for causing the corkscrew to rotate during a part of its longitudinal travel and for securing the corkscrew against rotation, and means for regulating the longitudinal play of said nut.

6. In a cork-puller, the combination with a frame, of a longitudinally-reciprocating nut guided therein, a reciprocating corkscrew rotated by the nut, a bottle-holding device supported by the frame, means for limiting the travel of the nut and means for varying the distance between the bottle-holding device and the nut when the latter is at the end of its travel away from said device, substantially as described.

7. The combination with a casing having a corkscrew therein, of a lever for imparting longitudinal movement to the corkscrew, a nut non-revolubly held in the casing and having a limited longitudinal movement therein, for alternately causing the corkscrew to rotate during a part of its longitudinal travel and securing the corkscrew against rotation when moving in unison longitudinally therewith, suitable mechanism intermediate the corkscrew and nut for shifting the nut lon-

gitudinally and means for regulating the longitudinal play of said nut.

8. The combination with a casing having a corkscrew therein, of a lever for imparting longitudinal movement to the corkscrew, a nut within said casing and having a limited longitudinal movement therein for alternately causing the corkscrew to rotate during a part of its longitudinal travel and securing the corkscrew against rotation when moving in unison therewith, a carrier wherein said corkscrew is journaled, a connector intermediate said carrier and nut, and means for regulating the longitudinal play of said nut.

9. The combination with a casing having a corkscrew therein, of a lever for imparting longitudinal movement to the corkscrew, a nut within said casing and having a limited longitudinal movement therein for alternately causing the corkscrew to rotate during a part of its longitudinal travel and securing the corkscrew against rotation when moving in unison therewith, a carrier wherein said corkscrew is journaled, a connector intermediate said carrier and nut, a latch carried by said connector and an adjustable release-cam for releasing said latch.

10. The combination with a casing having a corkscrew therein, of a lever for imparting longitudinal movement to the corkscrew, a nut within said casing and having a limited longitudinal movement therein for alternately causing the corkscrew to rotate during a part of its longitudinal travel and securing the corkscrew against rotation when moving in unison therewith, a carrier wherein said corkscrew is journaled, a connector intermediate said carrier and nut, a latch carried by said connector, a slidable release-cam for releasing said latch, a regulating-disk having an eccentric-pin extending through a slot in the casing, said pin being secured to said release-cam.

11. The combination with a casing having a corkscrew therein, said corkscrew having a longitudinal movement in one direction to engage the cork and having a continuous longitudinal movement in reverse direction to draw the cork and strip the cork from the corkscrew, of mechanism for imparting said longitudinal movement to the corkscrew, a part engaging the corkscrew for alternately effecting the rotation of the corkscrew and for securing the corkscrew against rotation, an interlocking part arranged intermediate said corkscrew and said part, and held in position to secure the corkscrew and said part to effect their conjoint shift, during a limited part of the longitudinal movement of the corkscrew in said reverse direction, and means for shifting said interlocking part to permit the corkscrew to travel independently of said part during the remainder of the longitudinal travel of the corkscrew in said reverse direction.

12. The combination with a casing having a corkscrew therein, of mechanism for impart-



ing a longitudinal movement to the corkscrew, in one direction to engage the cork, and for imparting a continuous longitudinal movement in reverse direction to draw the cork and strip the cork from the corkscrew, a suitable part for alternately effecting the rotation of the corkscrew and securing it against rotation, interlocking mechanism intermediate the corkscrew and said part for causing the corkscrew and said part to move in unison during the initial part of the longitudinal movement of the corkscrew in each direction and means for disconnecting said interlocking mechanism and said corkscrew during the remainder of the longitudinal movement in each direction.

13. The combination with a casing having a corkscrew therein, of mechanism for imparting a longitudinal movement to the corkscrew, in one direction to engage the cork, and for imparting a continuous longitudinal movement in reverse direction to draw the cork and strip the cork from the corkscrew, a suitable part for alternately effecting the rotation of the corkscrew and securing it against rotation, a carrier for said corkscrew, and interlocking mechanism intermediate said part and said carrier for causing the corkscrew and said part to move in unison during the initial part of the longitudinal movement in each direction, and means for disconnecting said interlocking mechanism and said carrier during the remainder of the longitudinal movement in each direction.

14. The combination with a casing having a corkscrew therein of mechanism for imparting longitudinal movement to the corkscrew, a carrier in which the corkscrew is journaled, a nut within said casing, and a sliding connector extending between said nut and said carrier, and wherein the carrier has a limited independent movement.

15. The combination with a casing having a corkscrew therein of mechanism for imparting longitudinal movement to the corkscrew, a carrier in which the corkscrew is journaled, a nut within said casing, and a sliding connector extending between said nut and said carrier, said connector being provided with an elongated slot or guide wherein the carrier has a limited independent movement.

16. The combination with a casing having a corkscrew therein of mechanism for imparting longitudinal movement to the corkscrew, a carrier in which the corkscrew is journaled, a nut within said casing, and a sliding connector held against lateral movement by the casing and extending between said nut and said carrier and in which the carrier has a limited independent movement.

17. The combination with a casing having a corkscrew therein of mechanism for imparting longitudinal movement to the corkscrew, a carrier in which the corkscrew is journaled, a nut within said casing, and a sliding connector secured to the nut, and having an elongated slot, said carrier being provided

with a part extended into said slot, and wherein said part has a limited independent movement.

18. The combination with a casing having a corkscrew therein of mechanism for imparting longitudinal movement to the corkscrew, a carrier in which the corkscrew is journaled, a nut within said casing, a sliding connector extending between said nut and said carrier, said connector having a limited movement with the carrier during each shift of the corkscrew in upward direction, and means for restricting the movement of said connector and said nut, to cause said carrier to travel independently of the connector during a part of each shift in upward direction.

19. The combination with a casing having a corkscrew therein, of mechanism for imparting movement to the corkscrew in one direction and for imparting a continuous longitudinal movement in reverse direction to draw the cork and strip the cork from the corkscrew, a carrier wherein said corkscrew is journaled, a suitable part for effecting the rotation of the corkscrew during a part of the longitudinal travel of the corkscrew, said part having a limited longitudinal movement, and a sliding connector extending between said carrier and said part, said carrier having a limited movement independent of said connector.

20. The combination with a casing having a corkscrew therein of mechanism for imparting movement to the corkscrew in one direction, to engage the cork and for imparting a continuous longitudinal movement in reverse direction to draw the cork and strip the cork from the corkscrew, a carrier wherein said corkscrew is journaled, a suitable part for effecting the rotation of the corkscrew during a part of the travel of the corkscrew, a sliding connector extending between said carrier and nut, and a slot or guide in said connector in which said carrier has a limited independent movement.

21. The combination with a casing having a corkscrew therein, of means for imparting longitudinal movement to the corkscrew, a carrier in which the corkscrew is journaled, a nut within said casing, a connector free to slide in said casing and arranged intermediate said nut and said carrier, and a movable part carried by said connector and with which said carrier will engage to cause the nut to move in unison with the corkscrew.

22. The combination with a casing having a corkscrew therein, of means for imparting longitudinal movement to the corkscrew, a carrier in which the corkscrew is journaled, a nut within said casing, a connector free to slide in said casing and arranged intermediate said nut and said carrier, a movable latch sustained in the connector, a spring for holding said latch normally in the path of the connector and a stationary release-cam for effecting its withdrawal.

23. The combination with a casing having



a corkscrew therein, of means for imparting longitudinal movement to the corkscrew, a carrier in which the corkscrew is journaled, a nut within said casing, a connector free to slide in said casing and arranged intermediate said nut and said carrier, a latch pivotally sustained in said connector and wherewith the carrier will engage and a release-cam secured in the casing for shifting said latch.

24. The combination with a casing having a corkscrew therein, of means for imparting longitudinal movement to the corkscrew, a carrier in which the corkscrew is journaled, a nut within said casing, mechanism sliding within said casing for imparting longitudinal movement to said nut by said carrier and release mechanism for effecting the release of said mechanism from the carrier during a part of the longitudinal shift in each direction.

25. The combination with a casing having a corkscrew therein, of means for imparting longitudinal movement to the corkscrew, a carrier in which the corkscrew is journaled, a nut within said casing, a connector free to slide in said casing and arranged intermediate said nut and said carrier, a movable part sustained in said connector, wherewith the carrier will engage during a part of its travel in one direction, another movable part wherewith the carrier will engage during a part of its travel in reverse direction, said parts being also sustained in said connector, and suitable means for withdrawing said movable parts from engagement by said carrier.

26. The combination with a casing having a corkscrew therein, of means for imparting longitudinal movement to the corkscrew, a carrier in which the corkscrew is journaled, a nut within said casing, a connector free to slide in said casing and arranged intermediate said nut and said carrier, a latch sustained in said connector, wherewith the carrier will engage during a part of its travel in one direction, another latch wherewith the carrier will engage during a part of its travel in reverse direction, said latch being also sustained in said connector and suitable cams for withdrawing said latches from engagement by the carrier.

27. The combination with a casing having a corkscrew therein, of means for imparting longitudinal movement to the corkscrew, a carrier in which the corkscrew is journaled, a nut within said casing, a connector secured to said nut, a slot in said connector, a projecting stud or lug on said carrier and within said slot, a latch sustained in the connector and having an inclined cam within said slot wherewith said lug engages, a spring for holding said cam normally in the path of said lug

and a release-cam for withdrawing said inclined cam out of the path of said lug.

28. The combination with a casing having a corkscrew therein, of means for imparting longitudinal movement to the corkscrew, a carrier in which the corkscrew is journaled, a nut within said casing, a connector secured to said nut, a slot in said connector, a projecting stud or lug on said carrier and within said slot, oppositely-arranged latches each having inclined cams normally in the path of said lug, a spring for holding said cams normally in the path of said lug and release-cams fixedly held in the casing for successively withdrawing said inclined cams out of the path of said lug.

29. The combination with a casing having a corkscrew therein, a carrier longitudinally movable in the casing and having the corkscrew journaled therein, and a nut held within the casing for imparting rotation to said corkscrew, of an operating-lever pivotally sustained by said casing, and having its inner end pivoted to the carrier, and formed to engage the upper end of the corkscrew to secure the corkscrew against upward movement in the carrier.

30. The combination with a casing having a corkscrew therein, a carrier longitudinally movable in the casing and having the corkscrew journaled therein, a nut held within the casing for imparting rotation to said corkscrew, of an operating-lever extending forwardly from the casing and having its inner end secured to the carrier and formed to engage the upper end of the corkscrew to secure the corkscrew against upward movement in the carrier, and a link having its lower end pivotally sustained in the casing and having its upper end pivotally connected with the operating-lever.

31. The combination with a suitable casing having a corkscrew therein, and mechanism for operating said corkscrew, of a bottle-holder comprising a pair of coacting jaws arranged to swing horizontally, a pivot therefor secured in a laterally-projecting lug, each of said jaws being provided with a stud or projecting lug, a lever having slots therein engaging said studs or lugs, a dependent support of the casing for said lever, a pivot for said lever centrally located between said studs or lugs, horizontal guide-slots in said support through which said studs or lugs are extended, and wings on said lever on opposite sides of said pivot.

ALBERT BAUMGARTEN.

Witnesses:

LOUIS STROHACKER,  
EDW. STROHACKER.