

March 7, 1944.

D. KELLER

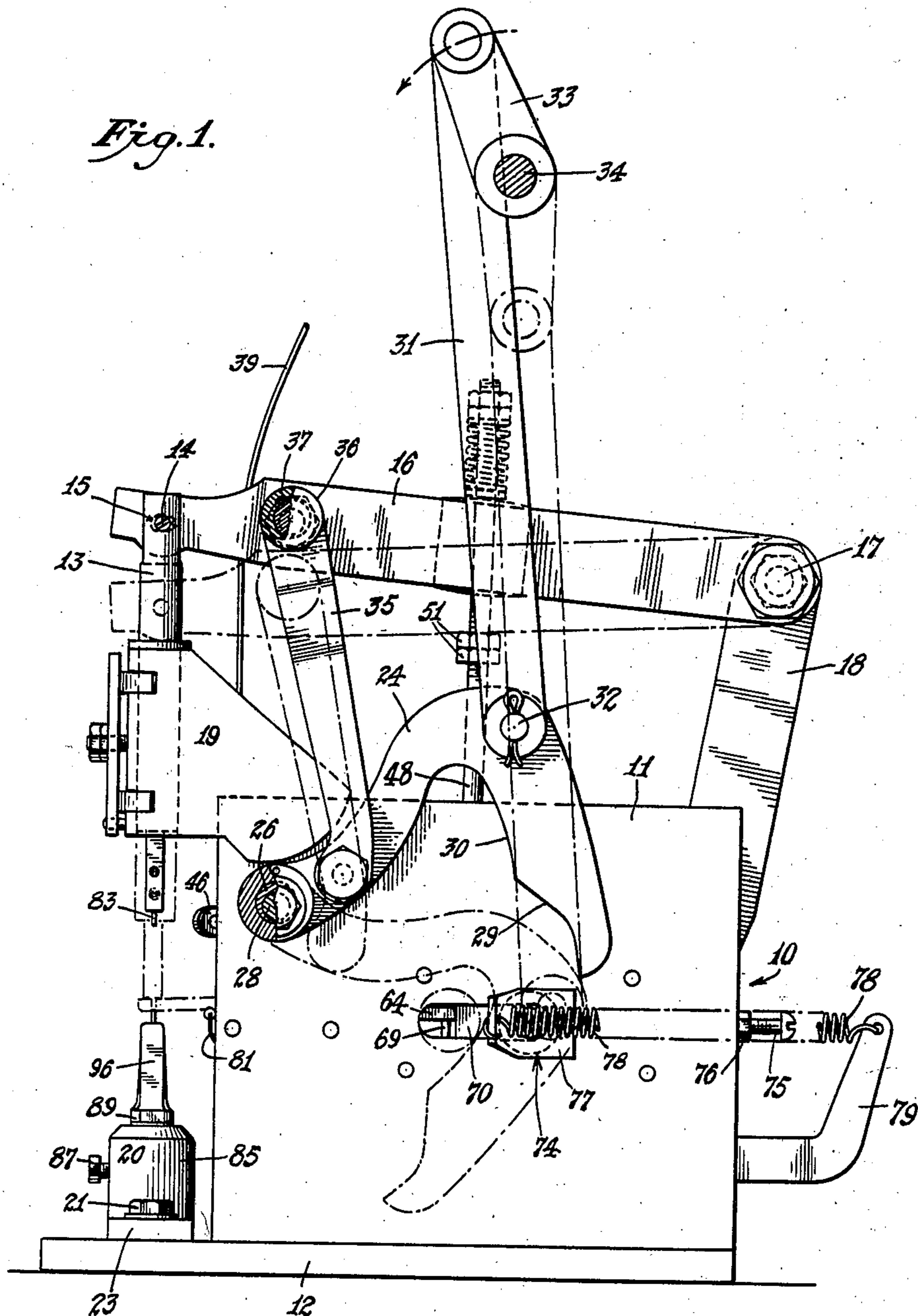
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PINTLE APPLYING MACHINE

Filed Feb. 9, 1943

3 Sheets-Sheet 1

*Fig. 1.*



INVENTOR

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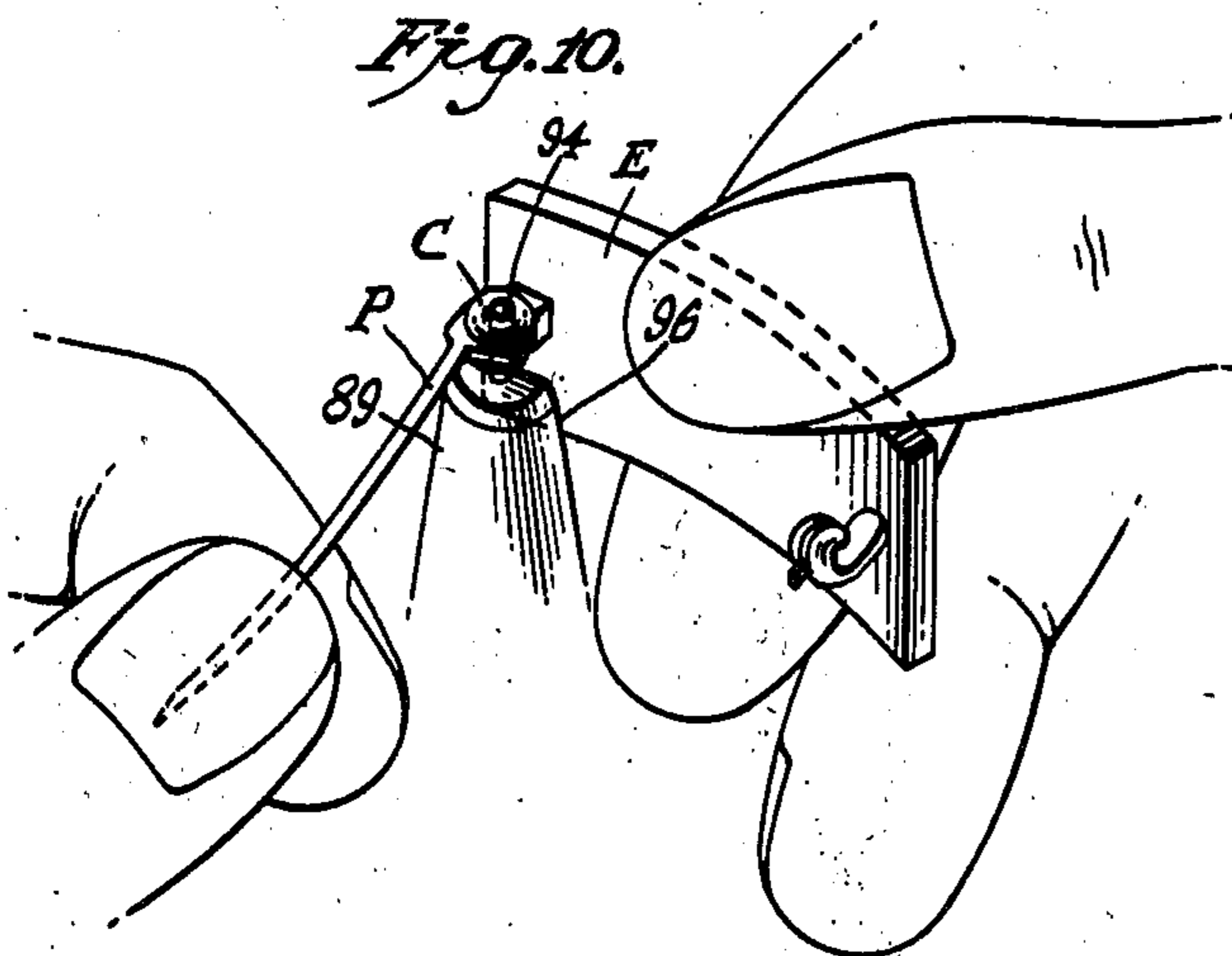
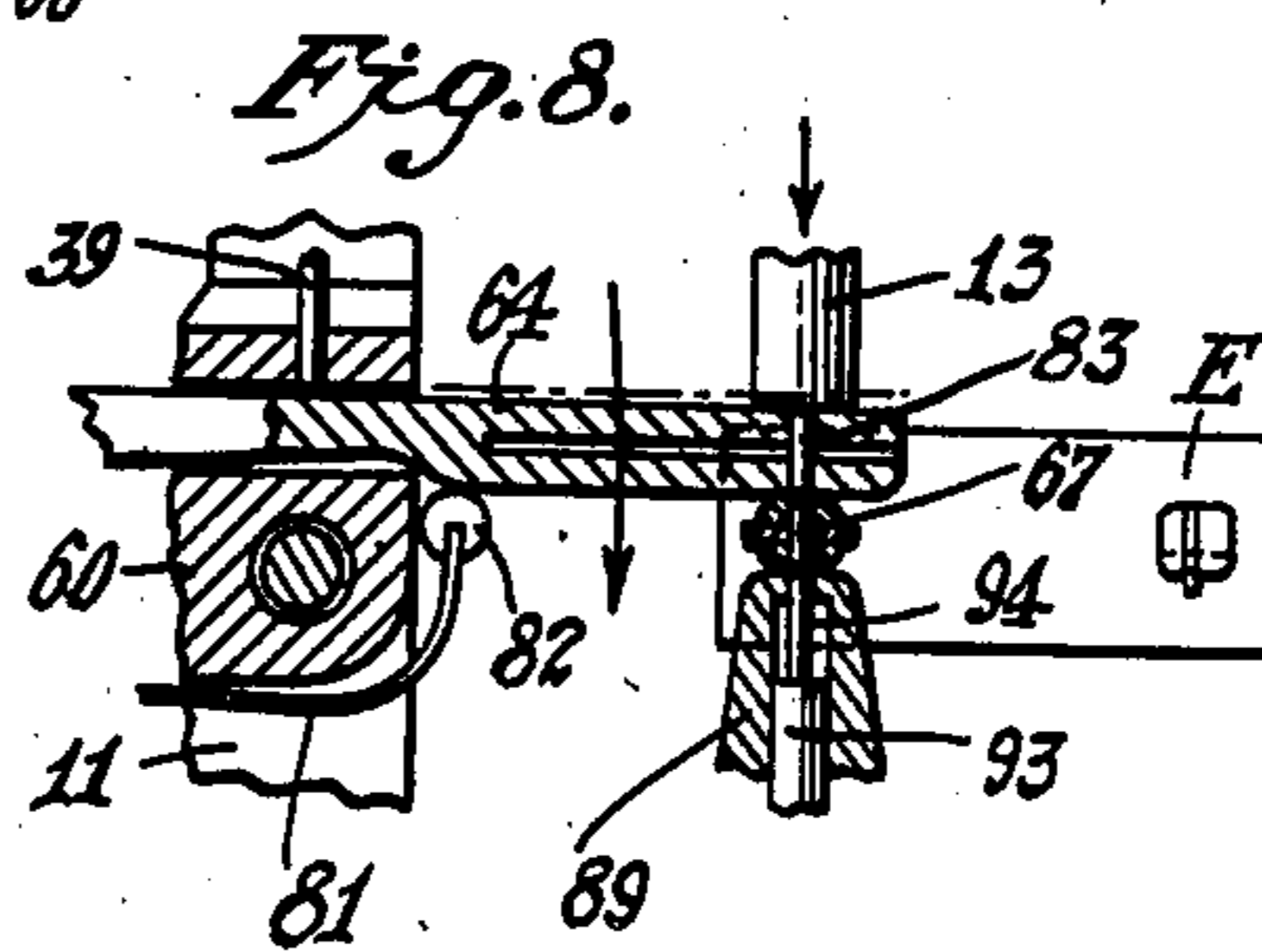
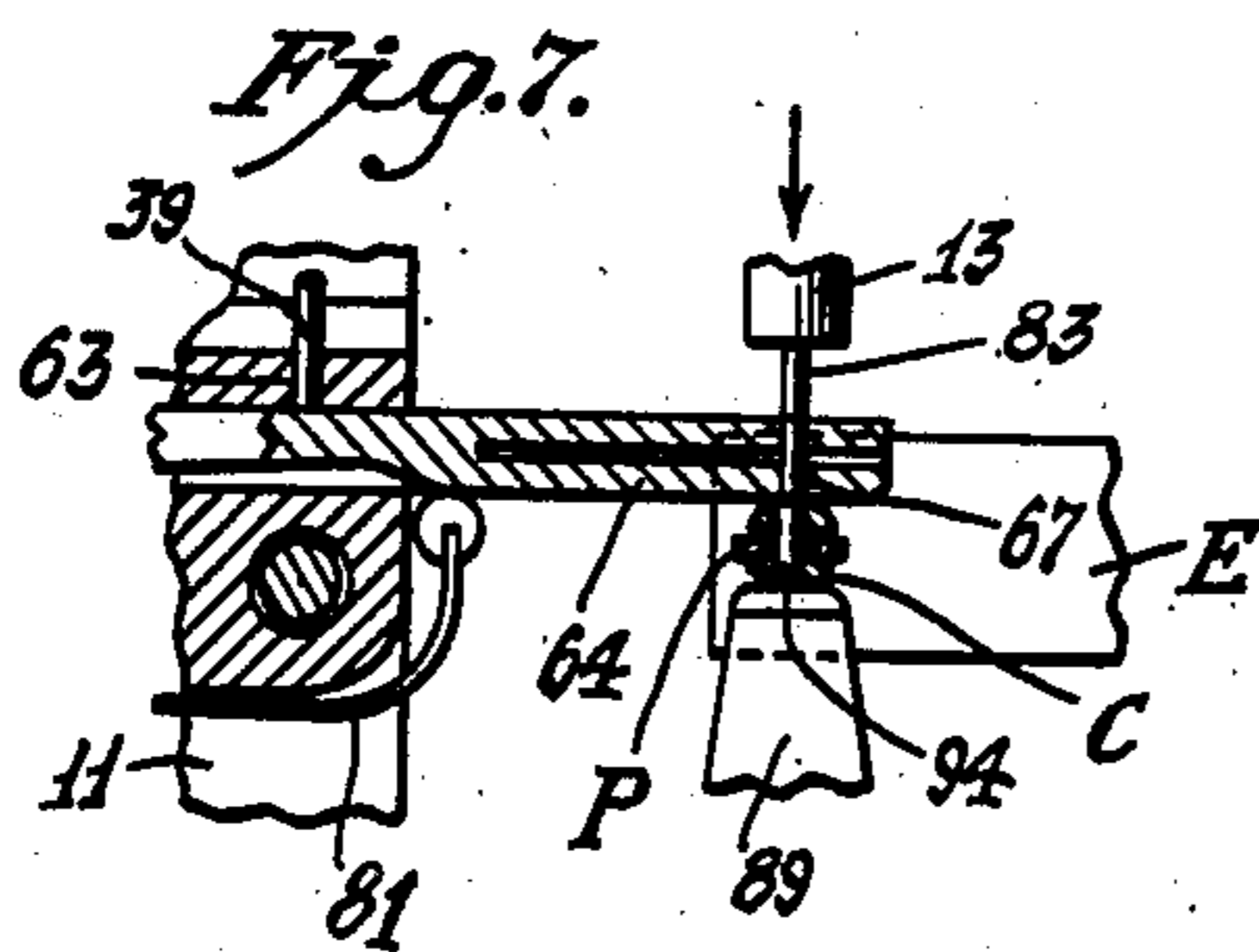
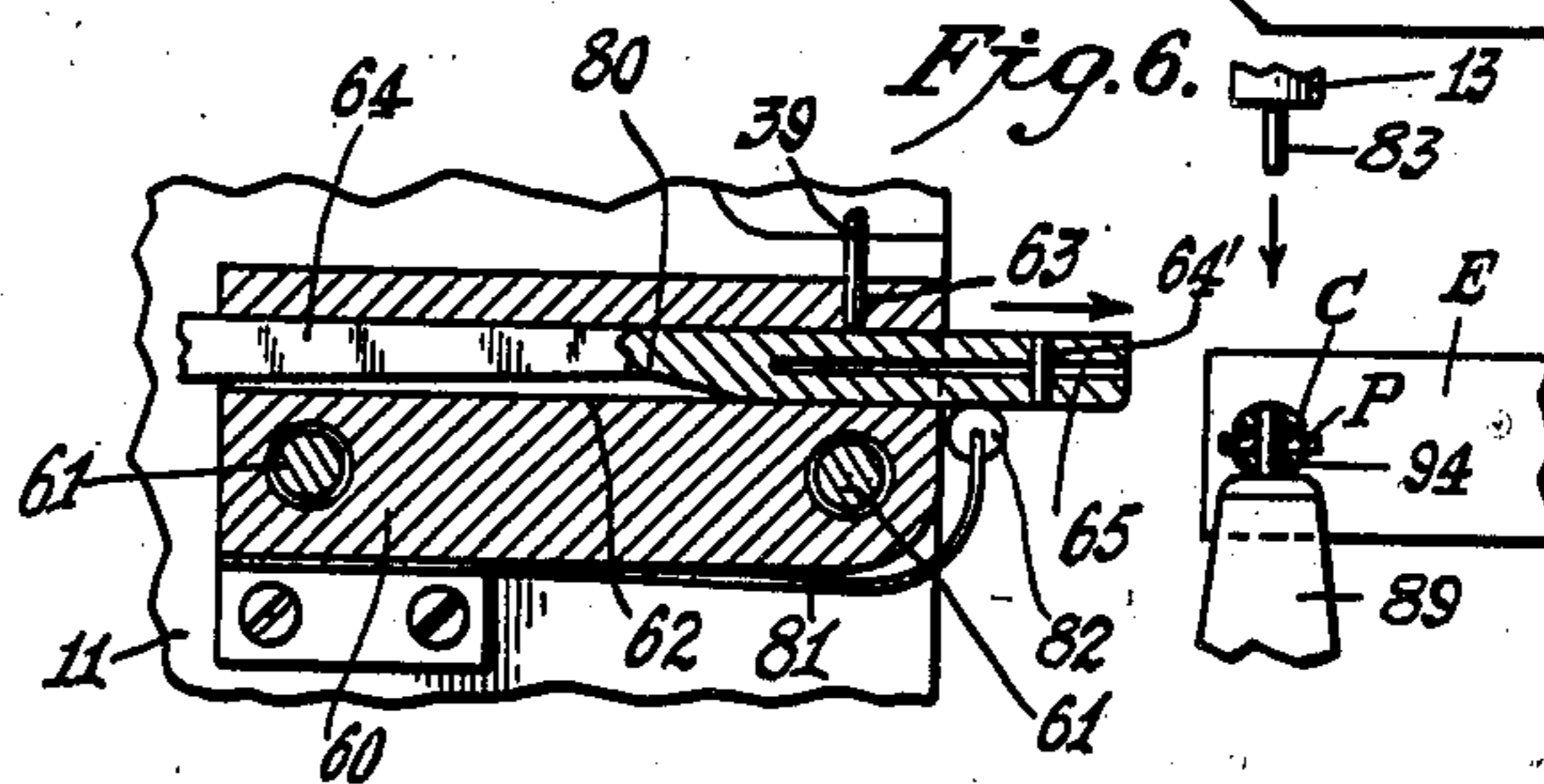
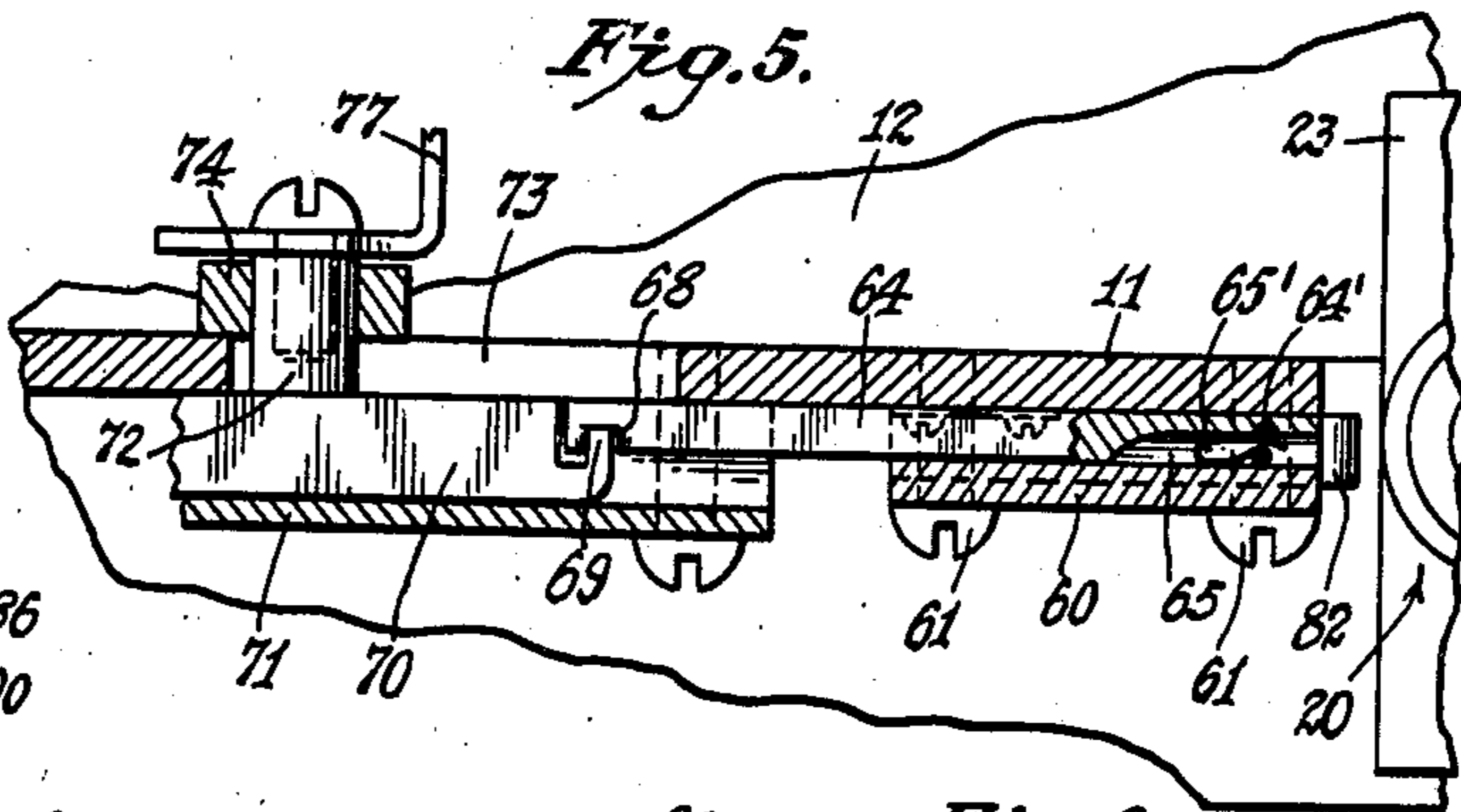
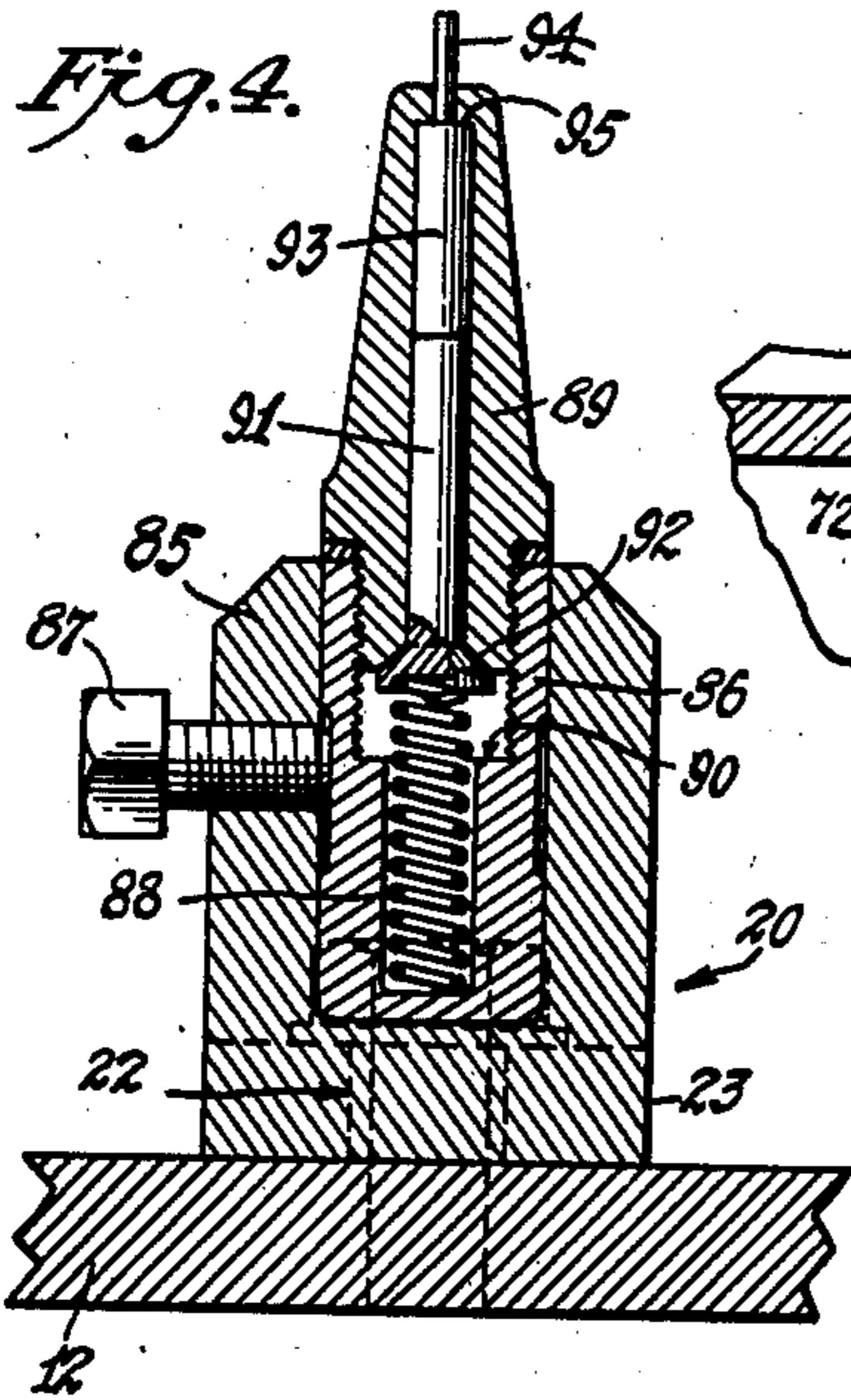
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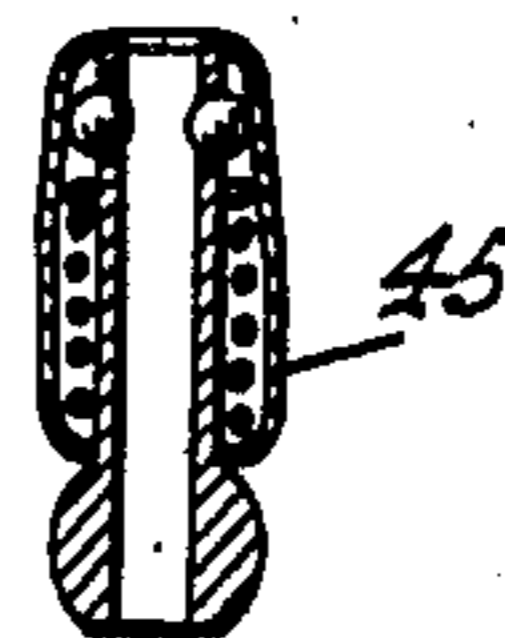
PINTLE APPLYING MACHINE

Filed Feb. 9, 1943

3 Sheets-Sheet 3.



*Fig. 9.*



INVENTOR

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## UNITED STATES PATENT OFFICE

2,343,854

## PINTLE APPLYING MACHINE

David Keller, Brooklyn, N. Y.

Application February 9, 1943, Serial No. 475,315

13 Claims. (Cl. 29—34)

This invention relates to a pintle cutting and applying machine, and an object of the invention is to provide mechanism for automatically cutting pintles of suitable length from an intermittently fed wire. Another object of the invention is to provide automatic mechanism for applying the cut pintle to an emblem to pivotally secure a clasp pin thereto.

A further object of the invention resides in mechanism for riveting the ends of the pintle in such fashion that the pivotal joint will be a desirably stiff and durable one in order to facilitate attachment of the emblem to a garment.

Other objects and advantageous features of the invention will become apparent in the following description.

The invention consists generally of mechanism for intermittently feeding the wire into a combined cutter and carrier which operates to first cut off a pintle of a predetermined length, and then to carry the cut increment into registration with a retractable work-positioning pin mounted on an anvil, and which pin is in alignment with the terminal pin of a plunger reciprocally mounted for pushing the pintle through the carrier and into the holes in the jaws of a clevis ordinarily attached to an emblem such as the lieutenant bar shown in the drawings, and while the pierced head of a clasp pin is positioned within the clevis, such parts being manually held in alignment on the pin of the anvil.

As the descending plunger pin pushes the pintle into position the latter displaces the anvil pin against the urge of a spring beneath it, until it reaches a fixed position in which it is solidly supported on a contacting surface of the anvil structure. A further slight downward movement of the plunger now causes the carrier to close the jaws of the clevis against the contiguous surfaces of the head of the clasp pin, and simultaneously pressure is applied to the opposite ends of the pintle by reason of the engagement of such ends respectively with the depressed anvil pin and the plunger pin, resulting in an upsetting or riveting of the ends of the pintle to hold the jaws in such closed position.

The invention will be more fully set forth in the following detail description, reference being had to the accompanying drawings forming a part of this specification in which—

Fig. 1 is a side elevation of a pintle applying machine embodying the invention, and in which the parts are shown by broken lines in an alternate position.

Fig. 2 is a similar view, partly in section, of the

opposite side of the machine with the wire feeding mechanism shown in another position in dotted lines.

Fig. 3 is a front elevation of the machine shown in Figures 1 and 2.

Fig. 3A is a detail section on the line 3A—3A of Figure 2 showing eccentrically adjustable means for controlling the riveting operation.

Fig. 3B is a detail section on the line 3B—3B of Figure 2 showing eccentrically adjustable means for accurately registering the wire carrier and the plunger.

Fig. 4 is an enlarged detail vertical section on the line 4—4 of Figure 3 showing details of the anvil structure.

Fig. 5 is an enlarged fragmentary horizontal section on the line 5—5 of Figure 2 showing details of the wire carrier and related parts of the machine.

Fig. 6 is a sectional detail view showing the wire carrier in an intermediate position following the wire cutting operation.

Fig. 7 is a similar view showing the same parts in an advanced position in which the cut wire is ready for insertion in the clevis by the plunger.

Fig. 8 is a similar view showing the parts in the final position in which the clevis is closed and the riveting is effected.

Fig. 9 is an enlarged vertical section through the wire feeding clutch, and,

Fig. 10 is a perspective view showing the manner in which the emblem and clasp pin are manually positioned on the pin of the anvil for application of the pintle.

Referring now in detail to the drawings, the frame 10 of the machine consists of a plate 11 with a base 12 secured thereto for suitable attachment to a bench.

A plunger 13 is slidably mounted in a bracket 19 secured to the plate 11 and is in vertical alignment with an anvil 20 adjustably secured to the base 12 by bolts 21 which pass through slots 22 in a base plate 23 forming a part of the anvil structure. The plunger 13 is pivoted at 14 to one end of a lever 16 through a slot 15 in the lever. Lever 16 is pivoted at 17 to an arm 18 secured to the plate 11.

A cam lever 24 is adjustably pivoted to the plate 11 by means of a bushing 25 (Fig. 3B) having a cylindrical barrel 26 extending through a corresponding hole in the arm 24, and an enlarged knurled head 27. Bushing 25 is bored eccentrically to receive a bolt 28 threaded in the plate 11. By loosening the bolt 28 the bushing 25 may be rotated to change the pivotal point of the lever

24 on the plate 11 for a purpose which will presently be apparent. Lever 24 is provided with a cam surface 29, and a dwell 30 concentric to the barrel 26 of bushing 25.

Lever 24 is oscillated about the barrel 26 by means of a link 31 pivoted thereto at 32. The other end of link 31 is pivoted to a crank arm 33 secured to a drive shaft 34 suitably mounted transversely above the machine and adapted to be periodically driven by well known single cycle trip clutch mechanism not shown.

Another link 35 is pivoted at its lower end to the lever 24 adjacent the pivotal point of the latter. The other end of link 35 is adjustably pivoted to lever 16 adjacent pivot point 14, by means of a bolt 36 having a cylindrical barrel portion 37 (Fig. 3A) extending through a corresponding hole in link 35, and a threaded shank portion 37' eccentric to barrel 37. Bolt 36 is secured to lever 16 by a nut 38.

Upon loosening nut 38 bolt 36 may then be rotated, and because of the eccentricity of portion 37 the effective length of link 36 may thus be changed to slightly raise or lower the plunger 13 and correspondingly change its operative relationship to the anvil 20 respecting the riveting operation of the machine.

The wire 39 to be cut for the purpose set forth is threaded through a friction detent 40 consisting of a block 41 having an overhanging top plate 42 which is apertured to receive the wire. The face of the block 41 is grooved and a flat spring 43 secured to block 41 is adapted to urge the wire 39 against the groove.

The mechanism for feeding the wire consists of a one way clutch element 45 (Figs. 2 and 9) secured in the forward bifurcated end of a rock lever 46 which is pivoted to the plate 11 at 47. The other end of lever 46 is also forked to receive the lower end of an actuating rod 48 pivotally secured at 49 to lever 46. Rod 48 extends upwardly and passes loosely through a block 50 attached to the side of lever 16, or forming an integral part thereof. Block 50 is provided with an opening therethrough of sufficient size to freely accommodate rod 48 during the angling of the latter about the pivot 49 while the lever 16 is moving from the position shown in full lines to that indicated in broken lines. Nuts 51 provide an adjustable abutment on rod 48 for engagement by lever 16 when the block 50 is approaching the position shown in broken lines, in order to rock lever 46 and move clutch 45 upwardly along the wire 39, and which is the direction of movement in which the clutch slides idly along the wire 39.

When lever 16 is raised into its full line position the block 50 engages a collar 52 loose on the rod 48 and which is secured to one end of a coil spring 53 also carried by rod 48. The other end of spring 53 is secured to a boss on a nut 54 threaded on rod 48 and locked thereto by a terminal nut 55.

It will now be apparent that the rod 48 will be lifted by the lever 16 acting on the spring 53 which will cause lever 46 to rock into the position shown in full lines and move the clutch 45 to positively move wire 39 downwardly toward a cutter and carrier mechanism 56. During the upward movement of the clutch 45 the wire 39 will be restrained from any participating movement by the frictional detent 40 through which, however, the wire 39 may be pulled during the positive downward movement of clutch 45.

The cutter and carrier mechanism 56 consists

of a guide block 60 secured to the plate 11 by screws 61. Guide block 60 is provided with a groove 62 on its inner face contacting plate 11, and has a drilled hole 63 for wire 39 opening into groove 62. Within the groove 62 is mounted a slide 64 having an outwardly extending groove 65 at one end bisecting a hole 64' drilled through the slide. Mounted in groove 65 is an elbow spring 65' formed of bent wire and adapted to engage the cut increment or pintle 67 and prevent it from falling away during the movement of slide 64 to the position shown in Fig. 7. The other end of the slide 64 is provided with a notch 68 adapted to engage a hook 69 on a block 70 slidably mounted in a housing 71 secured to plate 11. Block 70 has secured thereto a stub shaft 72 which passes through a slot 73 in plate 11, and carries a roller 74 lying in a plane coinciding with cam lever 24.

An adjustable stop is provided for the block 70 consisting of a bolt 75 threaded in the rear edge of plate 11 and extending into housing 71. A lock nut 76 serves to secure bolt 75 in a fixed position abutting block 70.

Secured to the end of stub shaft 72 which extends slightly beyond roller 74, is a clip 77 to which is fastened one end of a coil spring 78. The other end of spring 78 is secured to a bracket 79 attached to plate 11. Spring 78 urges the block 70 against the end of bolt 75. By adjusting bolt 75 the position of block 70 may be shifted, and consequently slide 64 will also be shifted to thereby accurately register the drilled hole 63 through the fixed block 60 with the drilled hole 64' through the movable slide 64, so that the wire 39 may be fed into the slide 64 prior to the wire cutting operation, and into engagement with the lower side of groove 62 which limits such feeding movement of the wire.

It will now be understood that each time the wire 39 is fed to the cutter and carrier mechanism 56, the desired pintle length, equal to the depth of the slide 64, will be accurately measured before the cutting takes place. Any excess movement of lever 16 beyond the required stroke will be absorbed by the spring 53.

Slide 64 is cut away at 80 so that when it is in the position shown in Figure 8 it will be free to rock in guide block 60, notch 68 and hook 69 providing a suitable free connection for such angling of slide 64.

Beneath block 60 and secured to plate 11 is a flat spring 81 which extends upwardly around the outer end of block 60 and is provided with a cylindrical end piece 82 adapted to be engaged by the slide 64 when the latter moves partially out of the block 60. Spring 81 urges the slide 64 against the upper wall of groove 62 at this time in order that it may clear the clevis C of the emblem E.

A terminal pin 83 is adjustably secured to the lower end of the plunger 13 by a set screw 84. Pin 83 is preferably made from piano wire, and can be readily replaced when desired.

Referring to Figure 4, the anvil 20 consists of a cylindrical housing 85 which may be constructed integral with the base plate 23, or separately secured thereto. Housing 85 is bored to receive a plug 86 which is rotatably adjustable, and secured in the housing by a bolt 87 in the desired position. Plug 86 is bored to provide a well for a spring 88 which seats on the bottom wall of the well. Plug 86 is counter bored and tapped for threaded engagement with a spindle 89, and to provide a shoulder 90. Within the

spindle is a plunger 91 having a head 92 adapted to contact shoulder 90, and to seat the upper end of spring 88. Above the plunger 91 is a rod 93 which rests on the top of the plunger 91. Mounted in a drilled hole in rod 93 is a pin 94 5 also preferably made from piano wire, and which can be readily replaced when worn. Pin 94 projects above the top of the spindle 89 through a hole therein less in diameter than that of rod 93 to provide a shoulder 95 against which rod 93 is urged by spring 88.

When pin 94 is depressed by pin 83 to a point substantially flush with the top of spindle 89, the head 92 of plunger 91 engages shoulder 90. Pin 94 is then in a solidly backed position on the anvil and free of the yielding support of spring 88. 10

Spindle 89 is faced off at 96 so that the emblem E can be closely positioned in order that the holes in the clevis C and head of the pin P may be strung on the pin 94 as shown in Figure 10. By loosening bolt 87 the plug 86 and spindle 89 may be turned as a unit in the anvil housing 35 to adjust the position of the faced off surface 96 to suit the convenience of the operator of the machine. 15 20

The machine operates as follows:

Assuming the parts are at rest in the position shown in Figures 1 and 2, and the operator has positioned the emblem and clasp pin as in Figure 10, the single cycle clutch is then tripped and shaft 34 will turn in a counterclockwise direction. Link 31 will then cause cam lever 24 to rock clockwise, and link 35 acting on lever 16 will cause plunger 13 to descend slowly. The timing and relative movements of the parts are such that cam surface 29 will first engage roller 74 and motion will be imparted to block 70 and to the slide 64 toward the right as viewed in Figure 2, and since the wire 39 has been previously fed to the cutter and carrier mechanism 56 at the very end of the previous cycle of the machine, the initial movement of slide 64 will sever the wire, the cut increment constituting the pintle 67 being held in place by the elbow spring 65' while subsequently being carried along in a horizontal plane toward the anvil 20. 25 30 35 40

When the pintle 67 is brought into alignment with pins 83 and 94 (Fig. 7) slide 64 remains stationary because at this time roller 74 is on the dwell 30 of cam lever 24. Plunger 13 has now brought its pin 83 into a position in which its continued movement, while roller 74 is still on dwell 30, will cause the pintle 67 to be pushed by pin 83 through slide 64 and into the aligned holes of the clevis C. During this operation pin 94 will be depressed and displaced from its former position within the clevis C by the pintle 67, and into a position in which the head 92 of plunger 91 will be in contact with shoulder 90. Hence the pintle will now be applied to the clevis with its opposite ends respectively in contact with pins 83 and 94, and with the shoulder of plunger 13 above pin 83, in contact with the top surface of the slide 64. 45 50 55 60

The final downward movement of plunger 13 will now rock slide 64 downwardly (Fig. 8), and because its lower surface impinges the clevis supported on the top of spindle 89, the jaws of the clevis will be squeezed firmly together against the head of the pin C. At the same time pin 83 will press the pintle 67 against pin 94, and the ends of the pintle will be thereby riveted and permanently hold the jaws of the clevis in such 65 70 75

closed position to provide a tight pivotal joint for the clasp pin.

During the upward movement of crank arm 33 the described parts will be restored to their initial position, spring 78 causing roller 74 to follow the cam surface on cam lever 24 until block 70 is again abutting bolt 75. The operation of the wire feeding mechanism has already been described.

The advantages of the adjustable features of lever 24 and link 35 will now be more fully understood. For example, slide 64 at the end of its forward stroke must carry the pintle into accurate registration with the aligned pins 83 and 94. If it falls short of such registration the cam surface 29 may be advanced by turning bushing 25 counterclockwise as in Figure 1, which shifts cam lever 24 toward the left. Obviously the procedure is reversed if slide 64 moves too far.

Bolt 36 provides a convenient means for finely adjusting the stroke of plunger 13, sometimes necessary because of wear on pins 83 and 94. It will be apparent that cam lever 24 is normally held in a fixed position, and since link 35 is pivotally secured to it, any shifting of bolt 39 will lower or raise lever 16 depending upon the relative position of the eccentric portion 38, and that corresponding movement will be transmitted to plunger 13. Therefore, if the downward stroke of plunger 13 is too short respecting the anvil 20, to perform an effective riveting operation, an adjustment of bolt 36 may be made to secure the desired results. 35 40 45

It is obvious that various modifications may be employed to secure substantially the same results without departing from the spirit of the invention and therefore I do not wish to be understood as limiting myself to the exact form of construction shown, as such modifications will readily suggest themselves to those skilled in the art.

I claim:

1. In a pintle applying machine, a combined pintle cutter and carrier mechanism comprising a fixed member and a horizontally movable slide member having normally aligned holes therein respectively, means for intermittently advancing a continuous wire into said aligned holes, an anvil for supporting a clevis secured to an emblem or the like, said anvil having a spring-pressed pin for engaging and aligning the holes through said clevis and through the head of a clasp pin positioned within said clevis, a plunger having a terminal pin in alignment with said anvil pin, mechanism operative alternately respecting said wire feeding means for moving said slide member to cut and carry said pintle into alignment with and between said anvil and plunger pins, and means for maintaining such alignment and for simultaneously moving said plunger into engagement with said slide member to thereby close the jaws of the clevis against the head of said clasp pin, and so that said terminal pin will engage and push said pintle through said slide member and displace said anvil pin into a solidly supported position whereby the riveting of the ends of the pintle will be effected by the pintle-contacting ends of said pins while the jaws of the clevis are held closed, the means for moving the plunger including adjusting means for changing the position of the plunger at the end of its movement toward the anvil for regulating the riveting operation.

2. In a pintle applying machine, a combined

pintle cutter and carrier mechanism comprising a fixed member and a horizontally movable slide member having normally aligned holes therein respectively, means for intermittently advancing a continuous wire into said aligned holes, an anvil for supporting a clevis secured to an emblem or the like, said anvil having a spring-pressed pin for engaging and aligning the holes through said clevis and through the head of a clasp pin positioned within said clevis, a plunger having a terminal pin in alignment with said anvil pin, mechanism operative alternately respecting said wire feeding means for moving said slide member to cut and carry said pintle into alignment with and between said anvil and plunger pins, and means for maintaining such alignment and for simultaneously moving said plunger into engagement with said slide member to thereby close the jaws of the clevis against the head of said clasp pin, and so that said terminal pin will engage and push said pintle through said slide member and displace said anvil pin into a solidly supported position whereby the riveting of the ends of the pintle will be effected by the pintle-contacting ends of said pins while the jaws of the clevis are held closed, said mechanism for moving the slide member including adjusting means for coordinating the terminal pin of said plunger and the hole in said slide member when the latter is in a pintle applying position, and the means for moving the plunger including adjusting means for changing the position of the plunger at the end of its movement toward the anvil for regulating the riveting operation.

3. In a machine of the character described the combination of means for intermittently feeding a continuous wire, means for measuring and cutting pintles from said wire, and for moving a part of said cutting means having a hole for said pintle to thereby carry a pintle into registration with a support having a spring-pressed pin mounted thereon for engaging and aligning the holes in the component parts of an article to which said pintle is to be applied, said pin being adapted for solid support when depressed, a plunger having a terminal pin in alignment with said spring-pressed pin, and means for reciprocating said plunger whereby said terminal pin will operate to push said pintle through said carrying means part of the cutting means and into said holes, displacing said spring-pressed pin therefrom, and then cooperate with said depressed pin and rivet the ends of said pintle, the said means for moving said part of the cutting means including eccentrically adjustable means to align the pintle hole in the movable part and the pin of said plunger.

4. The combination set forth in claim 3 in which there are other eccentrically adjustable means operative to change the relative position of the plunger and anvil for regulating the riveting operation thereof.

5. In a pintle applying machine, a combined pintle cutter and carrier mechanism comprising a fixed member and a horizontally slidable member having normally aligned holes therethrough, a vertically movable plunger having a terminal pin at its lower end, a spring-pressed pin mounted in opposing relation to said plunger pin and in alignment therewith for positioning the component parts of an article to which said pintle is to be applied with the pintle holes thereof aligned, a plunger lever pivoted at one end to the frame of said machine, and at its other end to the upper end of said plunger, a cam lever pivoted to said

frame and fashioned to operate said slidable member, a link operatively connecting said plunger lever and cam lever, means for intermittently advancing a continuous wire into the aligned holes of said cutter and carrier mechanism comprising a pivoted lever having a one-way clutch at one end thereof effective to feed said wire when said lever is rocked, an actuating rod pivotally secured at one end to the other end of said lever, said rod being operatively connected to said plunger lever and providing for lost motion therebetween when said plunger is moved downwardly, and means for rocking said cam lever whereby a pintle will be cut, and carried in said slidable member into alignment with and between said pins, and be inserted in the aligned holes of said component parts by said plunger.

6. In a pintle applying machine, a combined pintle cutter and carrier mechanism comprising a fixed member and a horizontally slidable member having normally aligned holes therethrough, a vertically movable plunger having a terminal pin at its lower end, a spring-pressed pin mounted in opposing relation to said plunger pin and in alignment therewith for supporting and positioning a clasp pin, and a clevis secured to an emblem or the like, a plunger lever pivoted at one end to the frame of said machine, and at its other end to the upper end of said plunger, a cam lever pivoted to said frame and fashioned to operate said slidable member into an engageable position with said plunger, a link operatively connecting said plunger lever and cam lever, means for intermittently advancing a continuous wire into the aligned holes of said cutter and carrier mechanism comprising a pivoted lever having a one-way clutch at one end thereof effective to feed said wire when said lever is rocked, an actuating rod pivotally secured at one end to the other end of said lever, said rod being operatively connected to said plunger and providing for lost motion therebetween when said plunger is moved downwardly, and means for rocking said cam lever whereby a pintle will be cut, and carried in said slidable member into alignment with and between said pins, and be inserted in the aligned holes of said clevis and clasp pin by said plunger, and whereby said slidable member will engage and close said clevis against the head of said clasp pin, and the ends of said pintle will be upset by said opposing pins for the purpose set forth.

7. In a machine for cutting rivet blanks from a continuous wire, and having a plunger for applying and riveting said blanks to articles to be joined thereby, the sub-combination comprising wire-feeding means, and wire-cutting means, the latter consisting of a fixed member and a movable cutting member, and means for actuating said cutting member to both cut and carry a rivet blank into registration with a work support, said cutting member being mounted and fashioned to be responsive to movements of said plunger so as to be engaged thereby at the end of the carrying movement of said cutting member, and to clamp said articles together during the riveting thereof.

8. In a machine of the character described means for pivotally attaching a clasp pin to an emblem or the like having a clevis secured thereto, comprising automatic mechanism operative to cut pintles from a continuous wire, and including a fixed member and a slidable cutting member, the latter being operatively adapted to transport a cut pintle into registration with said clevis, and means including a plunger for applying and rivet-

ing said pintle, the said slidable cutting member being engageable with said plunger at the end of the pintle-carrying movement of said member, and mounted so as to be responsive to the movement of the plunger and to engage and close the jaws of said clevis against the head of the clasp pin during said riveting.

9. A machine of the character described comprising, in combination, means for automatically cutting pintles from a continuous wire, and means including a plunger for applying said pintles to pivotally attach a clasp pin within a clevis secured to an emblem or the like, supporting and aligning means for said clevis and pin, a slidable cutting member of said cutting means being operatively adapted to carry a cut pintle, and being mounted so as to be tiltable at the end of its pintle-carrying movement and engage said clevis, and in cooperation with said plunger to close and hold the jaws of the clevis in frictional engagement with the head of said pin after the application of a pintle, and further means for simultaneously upsetting the opposed ends of said pintle to maintain such frictional engagement of the said parts.

10. In a machine of the character described the combination of means for intermittently feeding a wire, means for measuring and cutting pintles from said wire, and for moving a slidable cutting member of said cutting means having a hole for said pintle, to thereby carry a pintle into registration with a support having a spring-pressed pin mounted thereon for engaging and aligning the holes in the component parts of an article to which said pintle is to be applied, said pin when depressed being in solid engagement with said support, a plunger having a terminal pin in alignment with said spring-pressed pin, and means for reciprocating said plunger whereby said terminal pin will operate to push said pintle through said cutting member of the cutting means and into said holes displacing said spring-pressed pin therefrom, and then cooperate with said depressed pin and rivet the ends of said pintle, the said pintle-carrying cutting member being slidably supported with provision for its movement by and with said plunger effective to press said component parts together during the aforesaid riveting.

11. In a pintle applying machine, a combined pintle cutter and carrier mechanism comprising a fixed member and a horizontally movable slide member having normally aligned holes therein respectively, means for intermittently advancing a continuous wire into said aligned holes, an anvil for supporting a clevis secured to an emblem or the like, said anvil having a spring-pressed pin for engaging and aligning the holes through said clevis and through the head of a clasp pin positioned within said clevis, a plunger having a terminal pin in alignment with said anvil pin, mechanism operative alternately respecting said wire feeding means for moving said slide member to both cut and carry said pintle into alignment with and between said anvil pin and said plunger pin, said slide member being engageable with said plunger at the end of the pintle-carrying move-

ment of said slide member, and being responsive to movements thereof, and said mechanism operating to maintain such alignment, and to simultaneously move said plunger and said slide member to thereby close and hold the jaws of the clevis against the head of said clasp pin, and so that said terminal pin will engage and push said pintle through said slide member and displace said anvil pin into a solidly supported position whereby the riveting of the ends of the pintle will be effected by the pintle-contacting ends of said pins while the jaws of the clevis are held closed.

12. In a pintle applying machine, a combined pintle cutter and carrier mechanism comprising a fixed member and a horizontally movable slide member having normally aligned holes there-through respectively, means for intermittently advancing a continuous wire into said aligned holes, an anvil for supporting a clevis secured to an emblem or the like, said anvil having a spring-pressed pin for engaging and aligning the holes through said clevis and through the head of a clasp pin positioned within said clevis, a plunger having a terminal pin in alignment with said anvil pin, mechanism operative alternately respecting said wire feeding means for moving said slide member to cut and carry said pintle into alignment with and between said anvil and plunger pins, said slide member being engageable with said plunger at the end of the pintle-carrying movement of said slide member, and being responsive to movements thereof, and said mechanism operating to maintain such alignment and to simultaneously move said plunger and said slide member to thereby close the jaws of the clevis against the head of said clasp pin, and so that said terminal pin will engage and push said pintle through said slide member and displace said anvil pin into a solidly supported position whereby the riveting of the ends of the pintle will be effected by the pintle-contacting ends of said pins while the jaws of the clevis are held closed, said mechanism for moving the slide member including means for adjusting the relative position of the slide member with respect to the plunger to thereby align the pintle hole in the slide member and the terminal pin of said plunger when the slide member is in a pintle applying position.

13. A pintle applying machine comprising, in combination, an anvil for supporting the component parts of an article to which a pintle is to be applied, a plunger mounted for reciprocation in alignment with said anvil, means for intermittently advancing a continuous wire, means for measuring and cutting pintles from said wire including a slidable cutting member operative to carry said pintle into alignment with said plunger, and means for actuating said plunger whereby a pintle will be transferred from said slidable cutting member and applied to said article, said plunger being engageable with said slidable cutting member at the end of the pintle-carrying movement of said member, to tilt the same against said component parts and clamp them together, and operative to simultaneously effect the riveting of said pintle.

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