

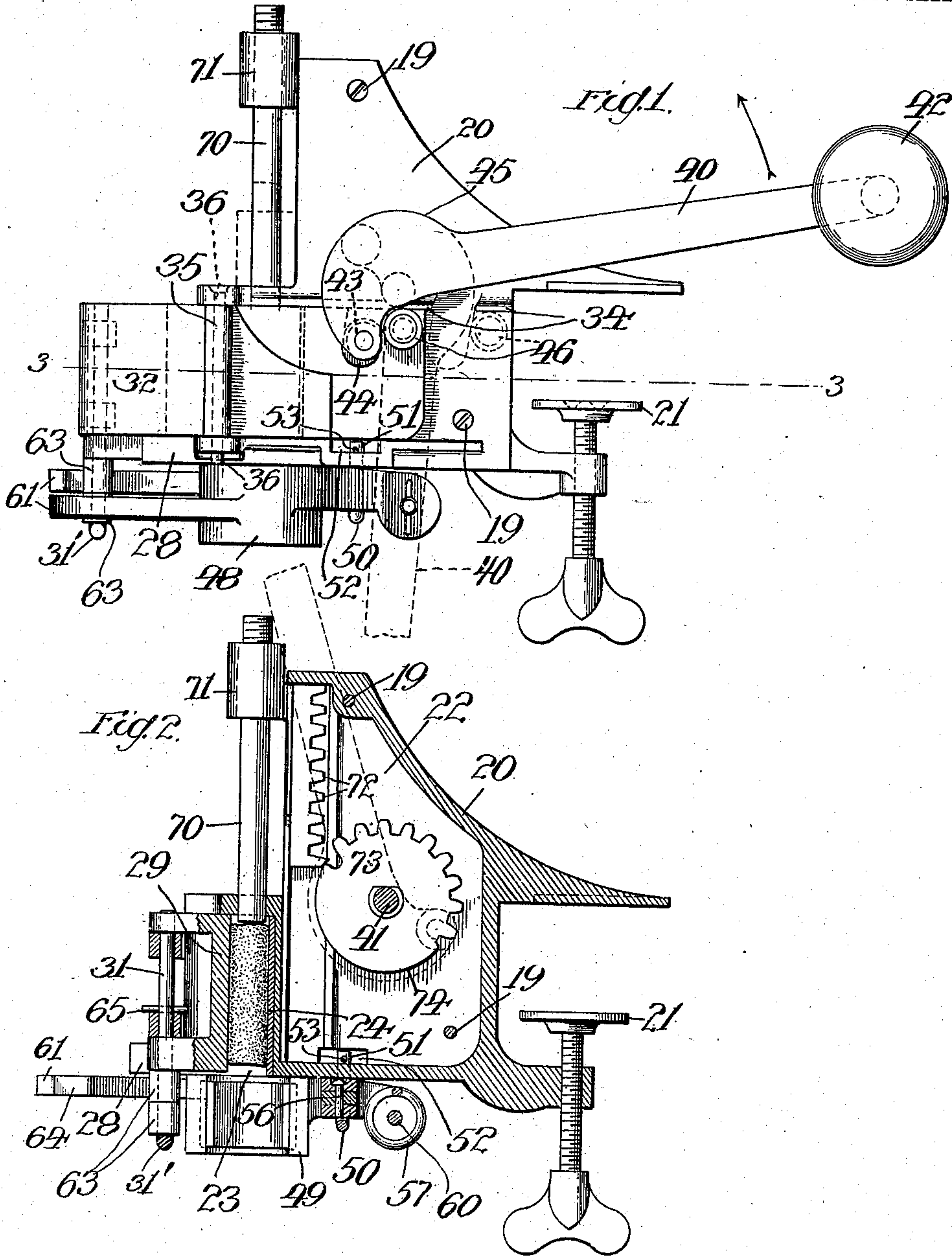
R. B. GILCHRIST.
CORKING MACHINE.

APPLICATION FILED MAR. 3, 1906. RENEWED JULY 28, 1908.

899,525.

Patented Sept. 29, 1908.

3 SHEETS—SHEET 1.



WITNESSES:

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James S. Russell

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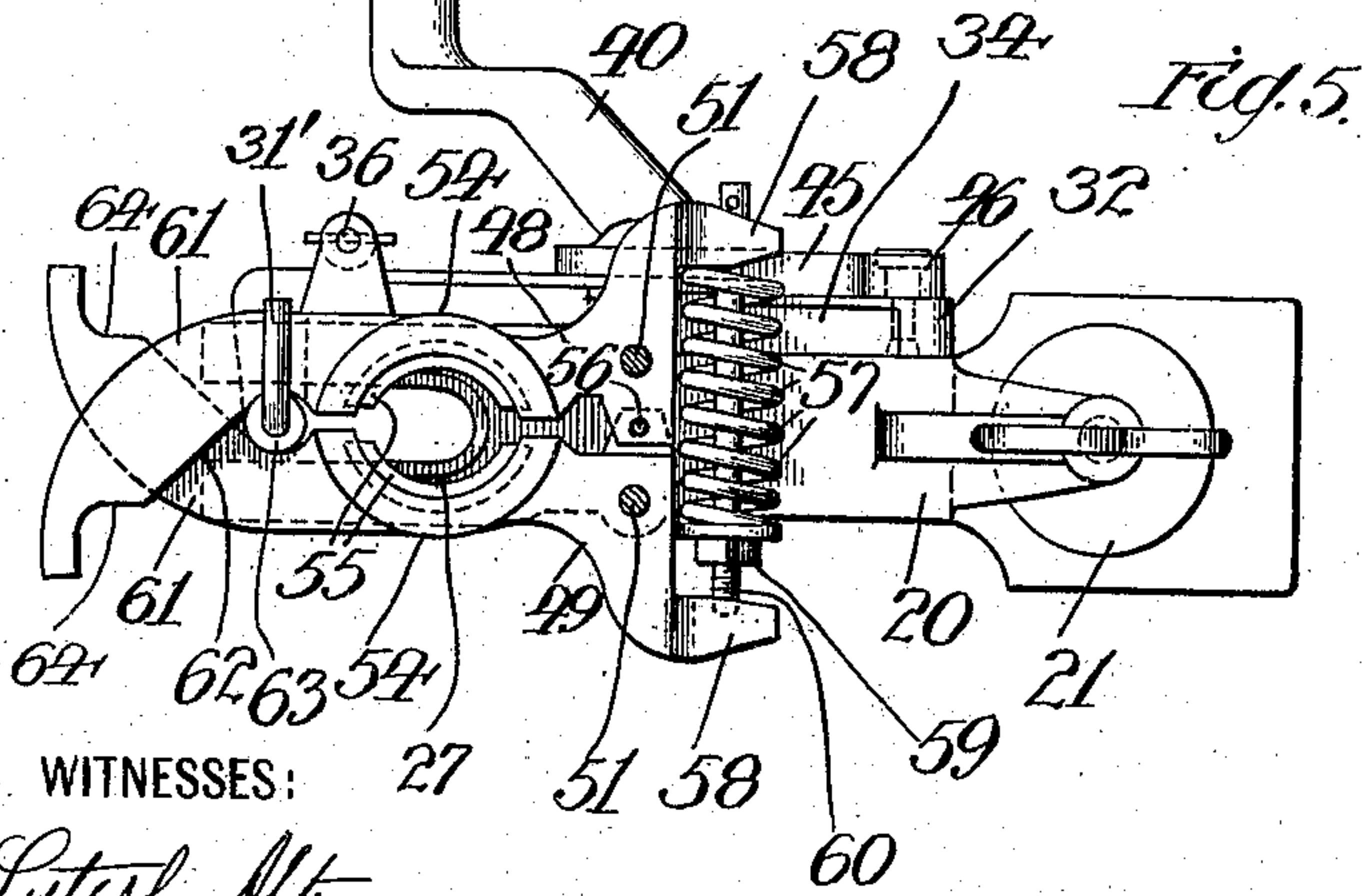
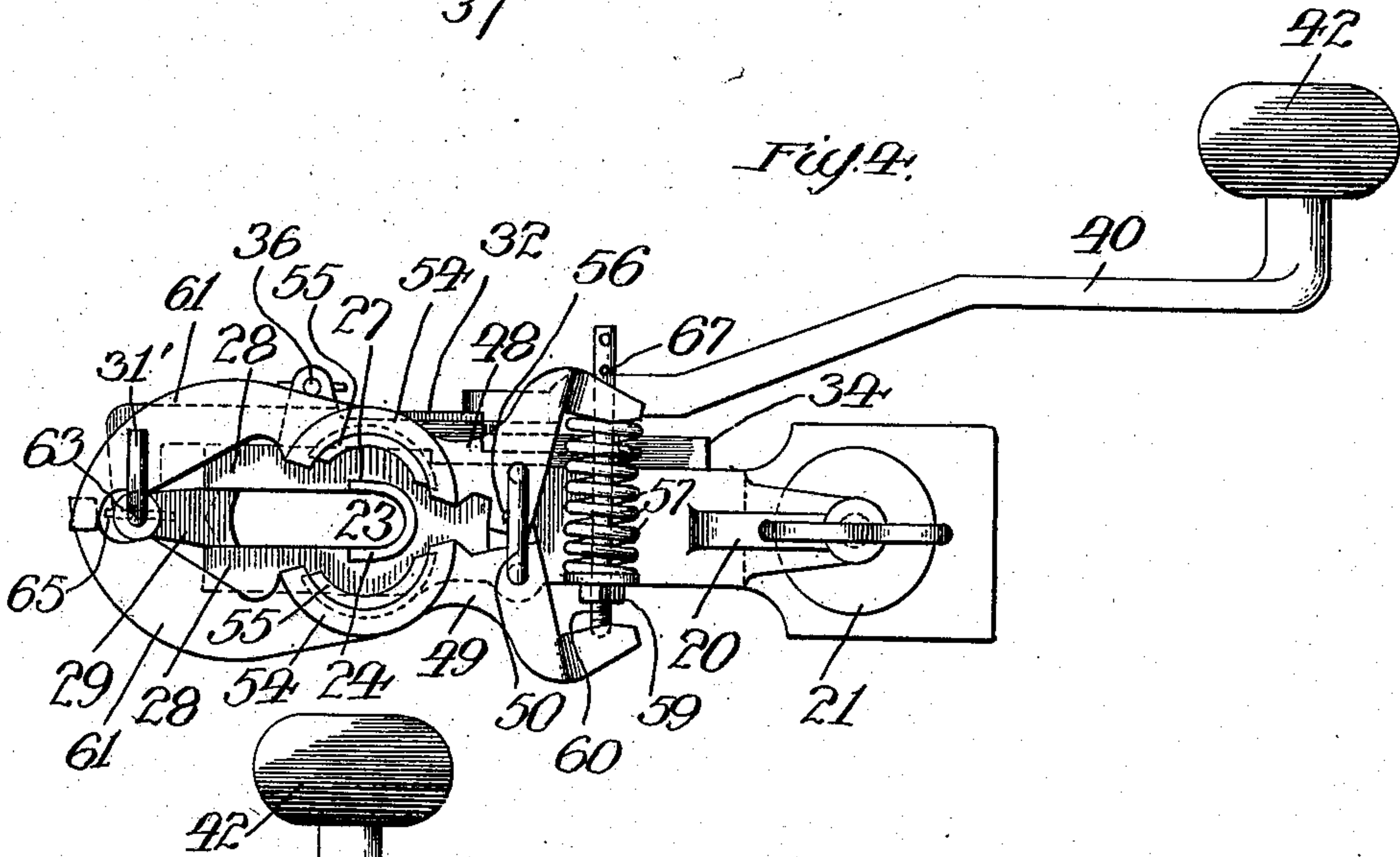
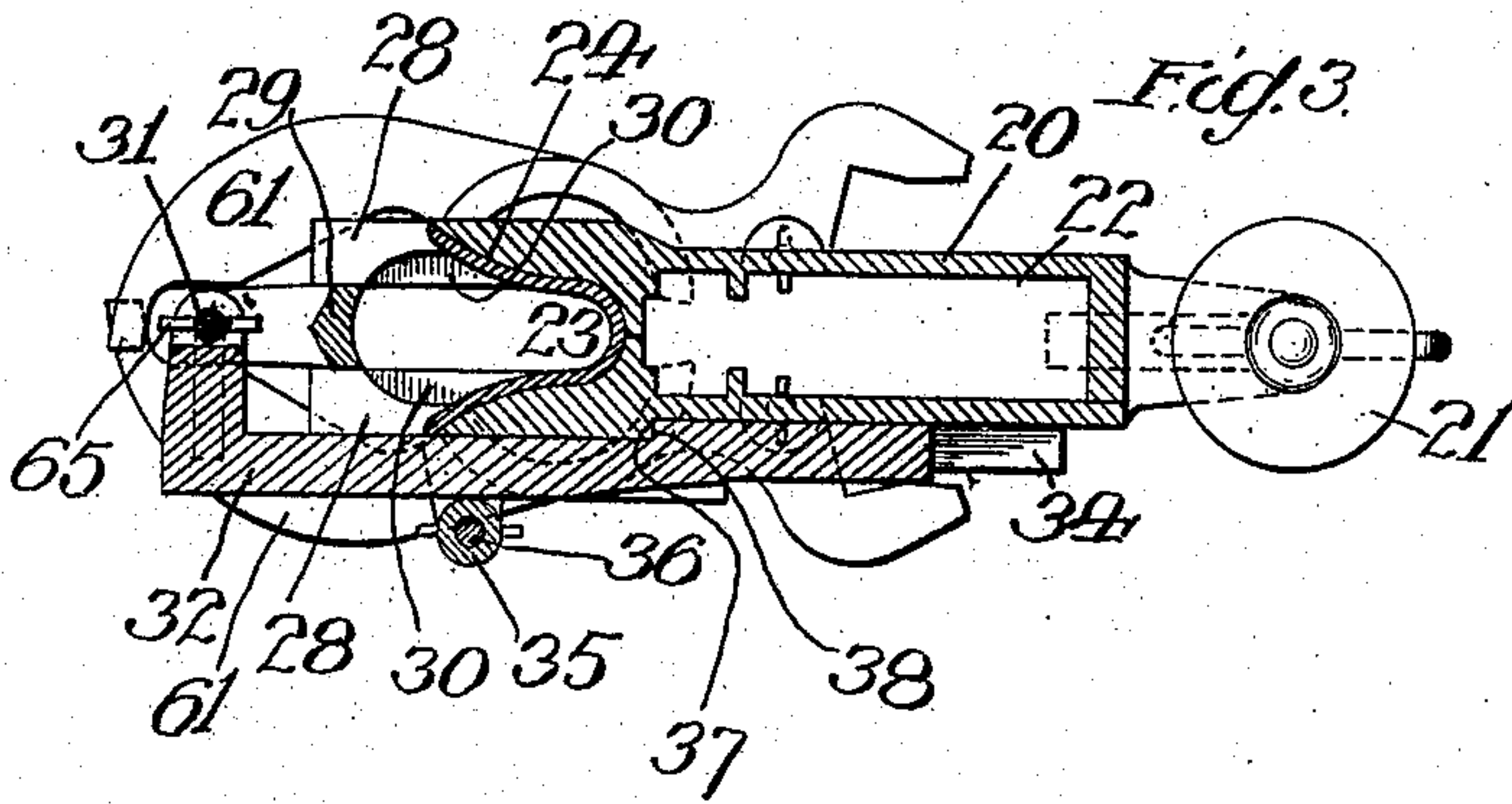
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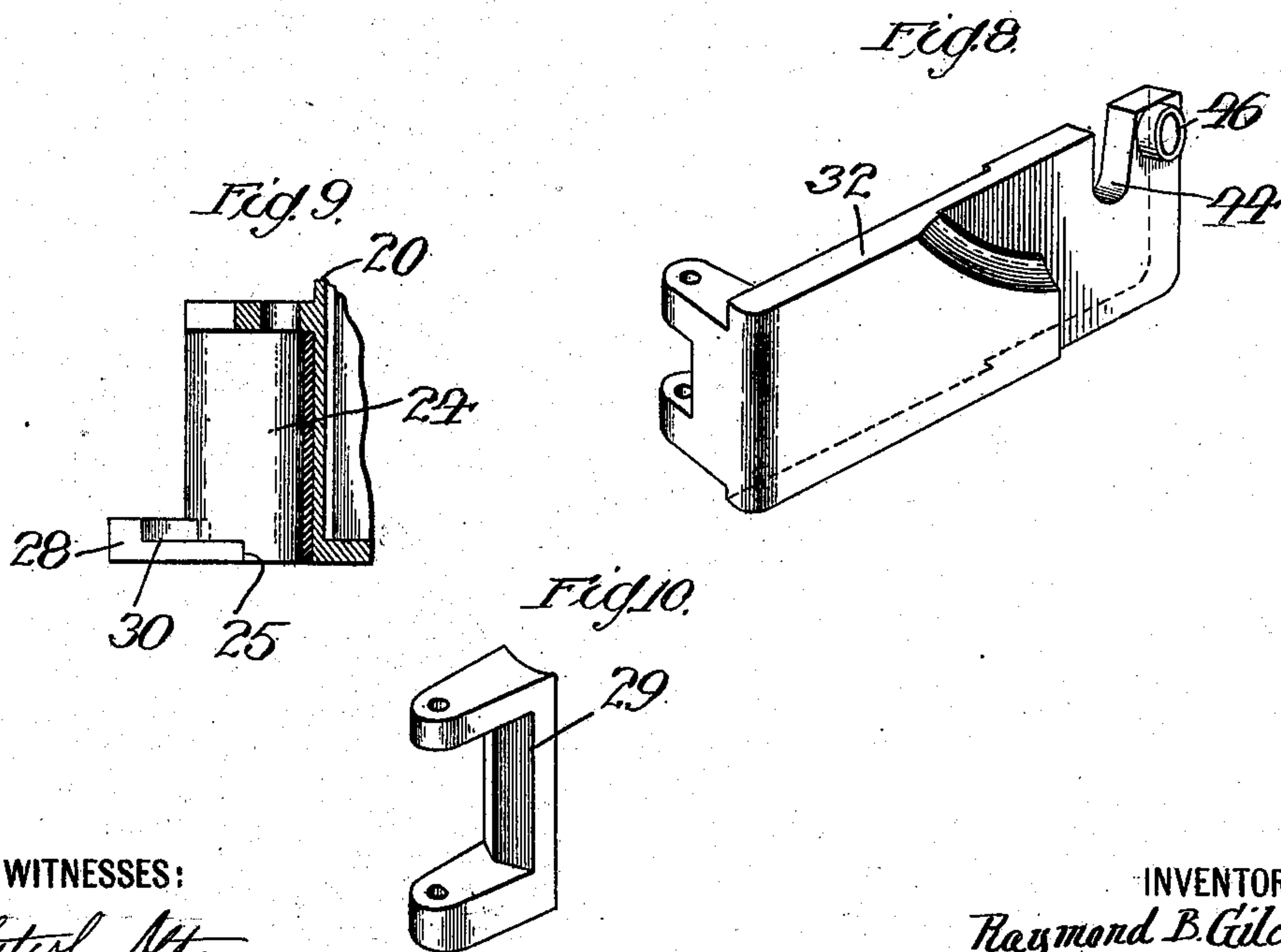
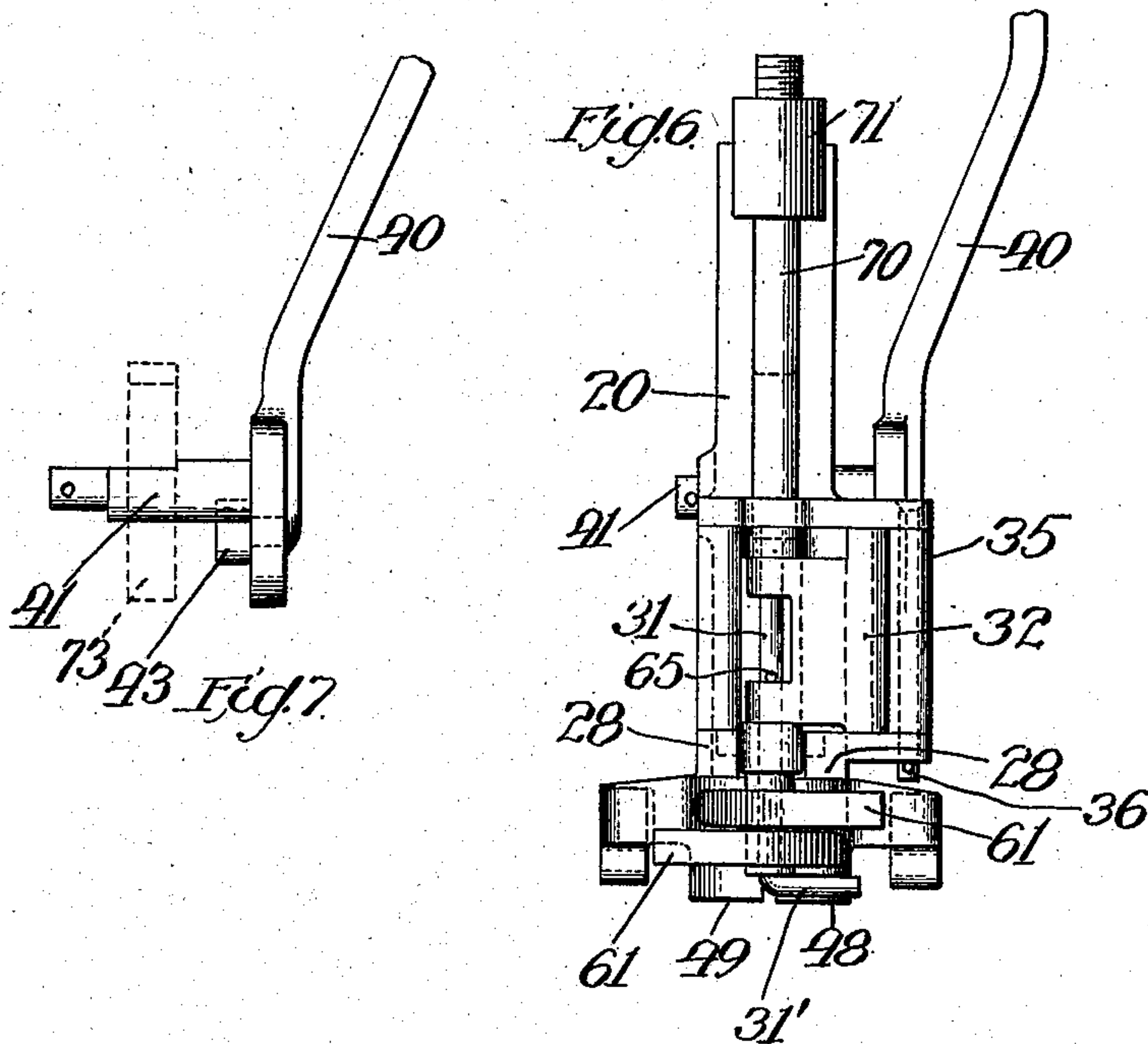
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3 SHEETS—SHEET 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

RAYMOND B. GILCHRIST, OF NEWARK, NEW JERSEY.

CORKING-MACHINE.

No. 899,525.

Specification of Letters Patent.

Patented Sept. 29, 1908.

Application filed March 3, 1905, Serial No. 248,218. Renewed July 28, 1908. Serial No. 445,744.

To all whom it may concern:

Be it known that I, RAYMOND B. GILCHRIST, a resident of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Corking-Machines, of which the following is a full, clear, and exact description.

The invention relates to machines for corking bottles, jars and the like, and designs to provide a machine embodying an improved construction and a bottle-holder, a cork-compressor and a cork-driver operated by a single hand-lever.

The invention further designs to provide a hand-operated corking-machine which is simple in construction and efficient in operation.

With these objects in view, the invention consists in the several novel features herein-after set forth and more particularly defined by claim at the conclusion hereof.

In the drawings: Figure 1 is a side elevation of the improved corking-machine, the parts being shown in position assumed at the beginning of an operation, and certain of the parts being indicated by dotted lines in position assumed when a cork has been driven into a vessel. Fig. 2 is a central vertical section showing the cork-compressor in closed position and a cork compressed thereby, the hand-lever being shown in position to operate the cork-driver to drive a cork. Fig. 3 is a view in horizontal section taken on line 3—3 of Fig. 1. Fig. 4 is an inverted plan, the bottle-holder being shown in open position. Fig. 5 is a similar view showing the bottle-holder in closed position, the staple for connecting the bottle-holder to the frame being shown in section. Fig. 6 is a front view. Fig. 7 is a detail front view of the operating lever. Fig. 8 is a perspective of the support or slide for the compressor, and whereby the compressor is operated. Fig. 9 is a central vertical section showing the construction of the compressor-socket. Fig. 10 is a detail perspective of the movable compressor.

The frame 20, of the machine may be provided with a clamp 21, whereby the frame can be conveniently secured to a table or shelf. The frame is usually made of sections secured together by screws 19 and between the sections a chamber 22 is formed, for the mechanism for operating the cork-driver.

The machine is provided at its front with a socket 23 in which a cork can be compressed,

said socket being preferably formed in a liner 24 of brass or other suitable material. This liner has its front end open and flared so a cork forced into socket 23 will be compressed therein. The liner is adapted to fit into a recess 27 formed in the frame, so the liner will be secured against displacement. An advantage of this construction is that when the frame-sections are secured together, the liner will be firmly held in place and by separation of the frame-sections the liner can be removed. The frame is provided with forwardly extending guides 28 between which a movable compressor 29 is adapted to slide for forcing a cork into socket 23, and for compressing the cork in said socket. Each guide 28 is provided with a seat 30 adapted to receive the bottom of a cork to hold the cork in position to be forced into the compressor-socket.

Compressor 29 is connected by a pin 31 to a support 32, which is slidably mounted against one side of the frame between ribs 34, and is held in position against said frame by a roller 35 which is mounted on a pin 36 held in lugs projecting laterally from the frame. The forward movement of the compressor is limited by a shoulder 37 on the frame, which is engaged by a shoulder 38 on the compressor. Pin 31 is removably connected to compressor-slide or support 32, so the compressor can be conveniently removed and replaced. By employing a compressor-support or slide which is held against one side of the frame, the necessity of employing a support at each side of the frame is avoided.

An operating-lever 40 is provided with an integral shaft or stud 41 which is journaled in the side-walls of the frame. Said lever is adapted to operate the cork-driver, compressor and bottle-holder as hereinafter more particularly set forth, and is provided with a handle 42. Said lever is also provided with a stud or roller 43, adapted to enter an eccentric slot or guide 44 in compressor-slide 32 and a head having a concentric edge 45, adapted to engage a stud or roller 46 on said slide and thereby hold the compressor in closed position after a cork has been compressed and while the cork is being driven into a vessel. Lever-stud 43 and guide 44 constitute an operative connection between hand-lever 40 and the compressor-support, whereby the compressor will be operated. Stud 43 during pivotal movement of lever 40 passes out of guide 44

and while out of said guide, lever-head 45 will engage stud 46 and hold the compressor in closed position, and the lever will operate the cork-driver as hereinafter set forth.

5 Lever-head 45 and stud 46 constitute means whereby the compressor will be held stationary in closed position during the cork-driving operation which is effected by further movement of the hand-lever. During reverse

10 shift of the lever, stud 43 will again pass into guide 44 and open the compressor. The lever-head is arranged to travel on the outer side of slide 32 and holds the rear portion of the slide against outward movement.

15 A bottle-holder for securing a bottle or other vessel in position to receive the cork from socket 23 is provided and comprises a pair of rigid jaws 48 and 49, which are pivoted relatively eccentric with respect to each

20 other. Each jaw is pivoted to the frame by one of the vertical arms 51 of a staple 50. The upper ends of the staple terminate in a recess or pocket 52 formed in the frame, and are detachably connected to said frame by

25 pins 53, which are removable from the staple. Each jaw of the holder comprises a curved portion 54, adapted to pass around the neck of a bottle and is provided with an elastic liner 55, adapted to fit against the

30 neck of a bottle. Said jaws are connected together for simultaneous equidistant shift about their respective pivots by a connecting-pin 56 extending through overlapping lugs on the jaws respectively, and such con-

35 struction effects positive equidistant pivotal movement of the jaws so bottles of different sizes will be centralized thereby and always held in proper position to receive a cork. There is a slight looseness or play in the

40 pivotal connection between the jaws so pivotal movement of the jaws in opposite directions will not be obstructed thereby. The jaws are constantly spring-pressed into closed position by a spring 57, applied be-

45 tween said jaws and of sufficient power to cause the jaws to hold a bottle while it is being corked. Each jaw is provided with a rearwardly extending lug 58 between which the spring is arranged. One end of said

50 spring engages one of said lugs and the other end of said spring exerts pressure upon a nut 59, adjustably connected by a screw-thread to a rod 60, one end of which is held in a pocket in lug 58 of one jaw, and the other

55 end passes loosely through lug 58 of the other jaw.

The means for spreading the jaws so a bottle can be placed therebetween, comprises an arm or abutment 61 at the front end of each

60 of the jaws, and each arm is provided with an inclined surface or edge 62, adapted to be engaged by means which forces the jaws outwardly against the force of spring 57. Opening of the jaws is effected by hand-lever 40

65 which operates the compressor and is opera-

tively connected to open the bottle-holder, by compressor-support 32 and a shifter comprising rollers 63, which are mounted on pin 31, which connects the compressor and support 32. When the compressor is operated

70 to compress a cork, the operating-means for the bottle-holder will be moved backwardly to allow spring 57 to close the jaws against a bottle. An important advantage of this

75 arrangement is that the force of the spring is applied to assist the cork compressing operation until the holder jaws engage the neck of a bottle. Said connection furthermore allows the compressor to be moved its full stroke while the bottle-holder is free to engage bot-

80 tles of different sizes. When the hand-lever is being retracted, shifters 63 engage the inclined surfaces 62 of the arms and force the arms into open position against the force of spring 57 to release the bottle. Thus it will

85 be seen that the hand-lever which operates the compressor will, by means of its operative connection with the bottle-holder and compressor, operate the bottle-holder into

90 open position when the compressor is opened and control closure of the jaws when the compressor is operated to compress a cork.

At its forward end each holder-arm is provided with a surface 64 which is formed so it will tend to hold the operating-means in its

95 foremost position. Such construction will cause the force of the spring 57 to be applied to frictionally and yieldingly hold compressor-slide 32, and hand-lever 40 in normal position (Figs. 1 and 4). This construction is of

100 material advantage because a spring of considerable power is employed and accidental shift of the hand-lever is avoided thereby. Holder-arms 61 are relatively off-set and arranged to overlap each other when the jaws

105 are in closed position. Pin 31 on which the spreader rollers 63 are mounted, is bent horizontally as at 31', and extends into position to support the lower arm 61 against vertical strain resulting from forcing the cork into a

110 bottle held by the jaws. Support 31' is arranged to underlie the lower arm which in turn supports the overlapping arm 61 of the other jaw against vertical strain. This construction provides simple and advantageous

115 means for supporting the free ends of the jaws against vertical strain. A removable pin 65 secures pin 31 in position to connect compressor-slide 32, and compressor 29. Upon withdrawal of pin 65, pin 31 and its

120 supporting end 31' can be withdrawn so the front end of the bottle-holder will be free and the holder can be detached from the frame. Thus pin 31 forms a removable support adjacent the front end of the bottle-holding por-

125 tions of the jaws.

In practice, it is sometimes desired to remove the bottle-holder from the frame, and owing to the powerful spring 57 used, means are provided for relieving one of the jaws of

130

spring pressure so the jaws can be conveniently detached from the frame. Such result is accomplished by inserting a pin into a hole 67 formed in rod 60. By operating hand-lever 40 into position to open the jaws, hole 67 (see Fig. 4) will be brought into position so a pin can be readily inserted in said hole, which will limit movement of rod 60, and when the hand-lever 40 is operated to allow the jaws to pass into closed position, the expansion of spring 57 will be limited so there will be no spring-pressure between the jaws and on the pivotal connections of the jaws. Manifestly the jaws can then be conveniently withdrawn by withdrawal of staple 50 from the frame.

The corking-machine is provided with cork-driving means which comprises a plunger or driver 70, adjustably secured by a screw-thread in a carrier 71 which is vertically slidable in the frame, and provided with gear-teeth 72. The operative connection between hand-lever 40 and the driver comprises a wheel 73 secured to revolve with lever-shaft 41, and arranged in the chamber 22. Said wheel is provided with a series of gear-teeth whereby carrier 72 will be reciprocated and a substantially concentric surface 74, adapted to engage the lower end of the carrier and to hold the carrier and driver stationary during that part of the movement of the hand-lever in which the compressor and bottle-holder are being operated by the hand-lever and until said parts have been operated, and thereafter the teeth of gear-wheel 73 will be brought into engagement with the teeth of carrier 71 to operate the driver to force a compressed cork into the vessel. This operating connection between the hand-lever and the cork-driver provides a simple mechanism which permits the hand-lever to first control closure of the bottle-holder by spring 57 and operate the compressor to compress a cork and then operate the driver and whereby the driver will be held stationary during the compressing operation and while the bottle-holder is being operated to secure a bottle.

The operation of the machine will be as follows: Assuming the parts to be in normal position (Figs. 1 and 4), the operator will first drop a cork between compressor 29 and liner 24 where it will rest in recess 30 and on guides 28. The mouth-portion or neck of a bottle is then placed between the jaws of the bottle-holder. Lever 40 is then operated in the direction of the arrow, Fig. 1, which will first, by means of eccentric connection 43, 44, shift compressor support 32 and the compressor into closed position so a cork will be compressed in socket 23, and by means of shifters 63, which are secured to move with the compressor and support 32, move said shifters away from surfaces 62 of arms 61 of the holder-jaws so spring 57 will force the

holder-jaws against the bottle, such movement being controlled by inclined surfaces 62 and rollers 63: Until the holder-jaws engage a bottle, the force of the spring will be applied to shift the compressor into closed position and sudden movement of the jaws by spring 57, which might result in breakage of a bottle, is prevented by the resistance of the cork in the compressor-socket. When lever 40 is in position indicated by dotted lines Fig. 2, the cork has been compressed; the holder has grasped the bottle, lever-stud 43 has passed out of eccentric guide 44 and concentric surface 45 will engage stud 46 and hold the compressor in closed position during the cork-driving operation. After such operation of the compressor and bottle-holder, further movement of hand-lever 40 in the same direction, will operate the cork-driver to force the compressed cork into the bottle. During operation of the compressor by the hand-lever to compress a cork, carrier 71 and driver 70 will be held stationary by reason of engagement of the lower portion thereof with concentric surface 74 of the gear-wheel and after the compressor has been operated and the bottle is securely held, the teeth of gear-wheel 73, during the continuous movement of the hand-lever in the same direction, will lower the cork-driver and carrier 71 to drive the compressed cork into the bottle. Thus it will be seen that by a single movement of the hand-lever in one direction the compressor and bottle-holder will first be operated to respectively compress a cork and to grasp a bottle while the driver remains stationary and the driver will be operated to force the cork into the bottle. Reverse movement of the lever will restore the driver by means of gear-wheel 73 and thereafter restore the compressor into open position and also operate the holder-jaws against the force of spring 57 into position to receive a bottle while the driver remains stationary.

Manifestly the invention is not to be understood as restricted to the details of construction described and illustrated but may be modified by the skilled mechanic without departing from the spirit and scope of the invention, and furthermore the novel features may be severally employed without adoption in entirety.

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

1. In a corking machine, the combination of a frame, cork-driving means, a movable compressor, a bottle-holder supported by the frame comprising a pair of laterally movable jaws for engaging the neck of a bottle, means applied to constantly press said jaws together and adapted to hold the jaws in position to secure the bottle during the cork-driving operation, a hand lever pivotally supported by the frame, connected to and for operating

the compressor, and means operated by the lever for spreading the jaws.

2. In a corking machine, the combination of a frame, cork-driving means, a movable
5 cork-compressor, a bottle-holder supported by the frame and comprising a pair of laterally movable jaws adapted to grasp the neck of a bottle, means for holding said jaws against the bottle to secure it during the
10 cork-driving operation, a pivoted hand lever, and operating means between said lever, the driving means, the compressor and the bottle-holder whereby all of said parts will be operated.

3. In a corking-machine, the combination of a frame, cork-driving means, a movable
15 cork-compressor, a bottle-holder mounted on the frame comprising a pair of laterally movable jaws adapted to grasp the neck of a bottle, a spring applied to constantly force said
20 jaws and whereby said jaws will be held to hold the bottle in position to secure it during the cork-driving operation, a pivoted hand-lever, connections between the lever and the
25 cork-driving means and the compressor whereby said parts will be operated, and means operated by said lever whereby said jaws will be spread to force the bottle-holder into open position.

4. In a corking-machine, the combination of a frame, cork-driving means, a movable
30 cork-compressor, a bottle-holder supported by the frame and comprising a pair of laterally movable jaws for grasping the neck of a bottle, a spring applied to said jaws so it will
35 constantly force them in position to secure a bottle during the cork-driving operation and for operating said jaws from open to closed position, a hand-lever operatively connected
40 to the compressor, and a spreader for controlling closure of the jaws by said spring and secured to move positively with the compressor.

5. In a corking-machine, the combination
45 of cork-driving means, a movable compressor, an operating lever, a bottle-holder, having jaws constantly spring-pressed in one direction, and means whereby the bottle-holder will be shifted when the compressor is shifted,
50 said bottle-holder being provided with means which will cause the holder to force the compressor in one direction and will also yieldingly hold the compressor in one of its positions.

6. In a corking-machine, the combination of a cork-driver, a movable compressor, a
55 bottle-holder having jaws constantly spring-pressed in one direction, means whereby said jaws will be shifted against the force of the spring when the compressor is operated in
60 one direction and means whereby said spring-pressed jaws will yieldingly hold the compressor in one of its alternative positions, and an operating-lever whereby the compressor
65 will be operated.

7. In a corking-machine, the combination of a cork-driver, a movable compressor, a
bottle-holder comprising a plurality of jaws constantly spring-pressed into closed position, a hand-lever operatively connected to
70 the compressor, means for spreading the jaws operated by the lever, and means whereby the pressure of the said jaws will be applied to hold the compressor in open position.

8. In a corking-machine, the combination
75 of a cork-driver, a movable cork-compressor, a bottle-holder comprising jaws constantly spring-pressed in one direction, an operating lever connected to operate said driver, compressor and holder and means whereby the
80 pressure of said jaws will be applied to hold the compressor in open position.

9. In a corking-machine, the combination of a cork-driver, a movable cork-compressor,
85 a bottle-holder comprising a pair of jaws, a spring applied to constantly force said jaws into closed position, spreading-means for the jaws secured to be moved with the compressor, means whereby the pressure of the jaws will
90 be applied to hold the compressor in open position and an operating lever whereby the compressor will be shifted.

10. In a corking-machine, the combination of a cork-driver, a movable cork-compressor, a bottle-holder comprising a pair of
95 jaws, a spring applied to constantly force said jaws into closed position, spreading-means for the jaws secured to be moved with the compressor, means whereby the pressure of the jaws will be applied to hold the compressor in open position, an operating lever
100 and connections whereby the compressor and the cork-driver will be operated by said lever.

11. In a corking-machine, the combination of a cork-driver, a movable cork-compressor, a bottle-holder comprising pivotally
105 sustained rigid jaws, a spring applied to force said jaws into closed position, spreading means for the jaws, comprising a sliding shifter and an arm having an inclined surface engaged by the shifter and a hand-lever for
110 operating the shifter.

12. In a corking-machine, the combination of a cork-driver, a movable cork-compressor, a bottle-holder comprising pivotally
115 sustained rigid jaws, a spring applied to force said jaws into closed position, spreading means for the jaws comprising a sliding shifter, and an arm having an inclined surface engaged by the shifter, and a surface
120 whereby the pressure of the jaw will tend to hold the compressor in one of its positions and a hand-lever whereby the compressor will be operated.

13. In a corking-machine, the combination of a cork-driver, a movable cork-compressor, a bottle-holder comprising pivotally
125 sustained rigid jaws, a spring applied to constantly force said jaws into closed position, spreading-means for the jaws comprising a

sliding shifter operated by the compressor, and an arm having an inclined surface engaged by the shifter, a surface whereby the pressure of the jaws will be applied to hold the compressor in open position, a hand-lever, and means whereby said lever will operate the compressor and the driver.

14. In a corking-machine, the combination of a cork-driver, a movable cork-compressor, a bottle-holder comprising a pair of jaws, a spring applied to constantly force the jaws into closed position, a lever, means for opening said jaws operated by the lever, and means whereby the pressure of the jaws will be applied to hold the lever stationary when the bottle-holder is open, said lever serving also to operate the compressor.

15. In a corking-machine, the combination of a cork-driver, a movable cork-compressor, a bottle-holder comprising a pair of jaws, a spring applied to constantly force the jaws into closed position, a lever, means operated by the lever for opening said jaws, means whereby the pressure of the jaws will be applied to hold the lever stationary when the bottle-holder is open and means whereby said lever will operate the compressor and the driver.

16. In a corking-machine, the combination of a cork-driver, a cork-compressor, a bottle-holder comprising a pair of spring-pressed jaws pivotally sustained and laterally movable; means for opening the jaws comprising an abutment at the outer end of one of said jaws and a spreader for engaging said abutment and an operating lever connected to shift said spreader.

17. In a corking-machine, the combination of a cork-driver, a cork-compressor, a bottle-holder comprising a pair of spring-pressed jaws pivotally sustained and laterally movable, means for opening the jaws comprising abutments at the outer ends of said jaws and a spreader adapted to engage with said abutments and an operating lever operatively connected to said spreader.

18. In a corking-machine, the combination of a cork-driver, a cork-compressor, a bottle-holder comprising a pair of jaws pivotally sustained and laterally movable, one of said jaws being provided with an arm at its outer end, a spring applied to force said jaws into closed position and means for shifting said arm to open said jaw and a lever for operating said means.

19. In a corking-machine, the combination of a cork-driver a cork-compressor, a bottle-holder comprising a pair of pivotally sustained jaws, means for exerting equalized pressure on the jaws so a bottle will be centralized thereby, a sliding spreader for equidistantly shifting the jaws to open them, and an operating lever whereby the spreader can be shifted.

20. In a corking-machine, the combination

of a cork-driver, a cork-compressor, a bottle-holder comprising a pair of pivotally sustained jaws, means for exerting equalized pressure on the jaws so a bottle will be centralized thereby, a sliding spreader for controlling the shift of the jaws towards the bottle which will effect equidistant movement of the jaws until a bottle is held thereby, said spreader being movable with the compressor and an operating lever whereby said compressor is shifted.

21. In a corking-machine, the combination of a cork-driver, a cork-compressor, a bottle-holder comprising a pair of pivotally sustained jaws, means for exerting equalized pressure on the jaws so a bottle will be centralized thereby, means controlling the shift of the jaws towards the bottle and which will cause equi-distant movement of the jaws until a bottle is held thereby and a hand-lever connected with the controlling means, the compressor and the driver and whereby all of said parts will be operated by said lever.

22. In a corking-machine, the combination of a frame, cork-driving means, a movable cork-compressor, a bottle-holder comprising a pair of laterally movable jaws supported by the frame and for engaging the neck of a bottle, means applied to constantly press said jaws into closed position and whereby the jaws will be held to secure a bottle during the cork-driving operation, a hand-lever pivotally supported by the frame, and means operated by the lever for operating the cork-driving means, and means operated by the lever for spreading the jaws.

23. In a corking-machine, the combination of a cork-driver, a movable cork-compressor, a bottle-holder comprising a pair of members each being pivotally sustained and provided with an extension at one side of its pivot, a spring between the said extensions, each member being also provided with an extension at the other side of its pivot to form a bottle holding portion, means for spreading the jaws into open position and a hand-lever connected to operate said means.

24. In a corking machine, the combination of a cork-driver, a movable compressor, a bottle-holder comprising a pair of pivotally sustained members each of which is provided with an extension at one side of its pivot to form a bottle-holding portion, a spring for pressing said members in one direction, said members being also provided with extensions at the other side of the pivot, against which the spring operates, abutments at the outer ends of said bottle-holding portions, means for engaging said abutments to control equidistant shift thereof until a bottle is held by the jaws and an operating lever connected to said means.

25. In a corking-machine, the combination of a cork-driver, a cork-compressor, a bottle-holder comprising a pair of laterally movable

pivoted jaws respectively provided with relatively offset arms, so they can overlap each other, an operating lever and a connection whereby said arms can be shifted by said lever to operate the bottle-holder.

26. In a corking-machine, the combination of a cork-driver a cork-compressor, a bottle-holder comprising a pair of laterally movable and pivoted jaws and overlapping arms on said jaws one of which is arranged below the other, means for holding the lower arm against vertical movement when the jaws are in closed position, an operating lever and means operated by said lever for shifting said arms.

27. In a corking-machine, the combination of a cork-driver, a movable cork-compressor, a bottle-holder comprising a pair of spring-pressed laterally movable pivoted jaws, a sliding shifter for said jaws and means for securing the free ends of said jaws against vertical movement said means being carried by the shifter, and an operating lever for operating said shifter.

28. In a corking-machine, the combination of a cork-driver, a movable cork-compressor, a bottle-holder comprising a pair of spring-pressed laterally movable pivoted jaws, a sliding shifter for said jaws secured to move with the compressor, means for securing the free ends of said jaws against vertical movement, said means being secured to the compressor and an operating lever for shifting said compressor.

29. In a corking-machine, the combination of a cork-driver, a movable cork-compressor, a bottle-holder comprising a pair of spring-pressed laterally movable pivoted jaws, a sliding shifter for said jaws secured to move with the compressor, means for securing the free ends of said jaws against vertical movement, said means being secured to move with the compressor and a lever operatively connected to said driver and said compressor.

30. In a corking-machine, the combination of a cork-driver, a cork-compressor, a bottle-holder, a hand-lever, means whereby the bottle-holder will be shifted from one of its alternative positions to the other by said lever and mechanism operated by said lever for shifting said driver, said mechanism holding the driver stationary until the bottle-holder has been operated to hold a bottle.

31. In a corking-machine, the combination of a cork-driver, a cork-compressor, a bottle-holder, a hand-lever, means whereby the bottle-holder will be shifted from one of its alternative positions to the other by said lever and mechanism operated by said lever for shifting said driver, said mechanism holding the driver stationary until the bottle-holder has been operated to hold a bottle and thereafter shifting the driver longitudinally independently of the bottle-holder.

32. In a corking-machine, the combination of a cork-driver, a movable cork-compressor, a bottle-holder, an operating lever, means whereby said cork-compressor and said bottle-holder will be respectively shifted into closed position when the lever is operated and an operative connection between the lever and the driver whereby the driver will be held stationary during that movement of the lever in which the cork-compressor and bottle-holder are being closed.

33. In a corking-machine, the combination of a cork-driver, a movable cork-compressor, a bottle-holder, an operating lever, means whereby said cork-compressor and said bottle-holder will be respectively shifted into closed position when the lever is operated, and an operative connection between the lever and the driver whereby the driver will be held stationary during that movement of the lever in which the cork-compressor and bottle-holder are being closed, and whereby the driver will be held stationary when the compressor and bottle-holder are being respectively shifted into open position.

34. In a corking-machine, the combination of a cork-driver, a cork-compressor, an operating lever, a segmental gear rotated by said lever and for shifting the driver, and an abutment rotated by the lever and having a surface whereby the driver will be held stationary during a part of the movement of said gear.

35. In a corking-machine, the combination of a cork-driver, a cork-compressor, an operating lever, a wheel rotated by said lever and having a segmental gear for shifting the driver, and being provided with a surface whereby the driver will be held stationary during a part of the movement of said wheel and means whereby said lever will also operate the cork-compressor.

36. In a corking-machine, the combination of a cork-driver, a cork-compressor, an operating lever, a wheel rotated by said lever and having a segmental gear for shifting the driver, and being provided with a surface whereby the driver will be held stationary during a part of the movement of said wheel, a bottle-holder and means whereby said bottle-holder and said compressor will also be operated by said lever.

37. In a corking-machine, the combination of a cork-driver, a movable compressor, a bottle-holder comprising a pair of separately pivoted jaws, means connecting said jaws for effecting positive equi-distant movement of each jaw with respect to a fixed central point so bottles will be centralized by the jaws, an operating lever and mechanism whereby said lever will operate said driver, compressor and bottle-holder.

38. In a corking-machine, the combination of a frame, a cork-driver, a compressor, a bottle-holder comprising a pair of pivotally

sustained jaws, a spring for pressing said jaws into one of its positions, said jaws being removably connected to the frame, means whereby the spring can be secured so as to relieve one of the jaws of spring-pressure and the jaws can be removed from the frame and a lever for operating said jaws and whereby said spring can be compressed.

39. In a corking-machine, the combination of a frame, a cork-driver, a compressor, a bottle-holder comprising a pair of pivotally sustained laterally movable jaws, a spring for pressing said jaws into one of its positions, a removable guide at the outer ends of the jaws for holding them against vertical movement and an operating lever whereby said jaws will be shifted into the other position.

40. In a corking-machine, the combination of a frame, a cork-driver, a compressor, a bottle-holder comprising a pair of laterally movable spring-pressed jaws, a removable pivotal connection between the jaws and the frame, a detachable connection between the front end of the jaws for securing the jaws against vertical movement, an operating lever and means whereby said lever will operate said jaws.

41. In a corking-machine, the combination of a frame, a cork-driver, a slidable compressor, a support for said compressor slidably mounted in said frame and at one side of the frame, and an operating lever having a rotatable head for shifting said support, said head being arranged to hold said support against outward movement.

42. In a corking-machine, the combination of a frame, cork-driving means, a movable compressor, an operating lever pivotally sustained by the frame, and an operative connection between the compressor and the lever comprising a stud shifted by the lever and an eccentric guide into and out of which said stud will pass to alternately shift the compressor and to disconnect the stud so the compressor will remain stationary.

43. In a corking-machine, the combination of a frame, cork driving means, a movable compressor, an operating lever pivotally sustained by the frame, and an operative connection between the compressor and the lever comprising a stud shifted by the lever and an eccentric guide into and out of which said stud will pass to alternately shift the compressor and to disconnect the stud so the compressor will remain stationary, said lever being provided with a rotatable head secured to the lever for holding the compressor in closed position.

44. In a corking-machine, the combination of a frame, cork driving means, a movable compressor, an operating lever pivotally sustained by the frame, an operative connection between the compressor and the lever comprising a stud shifted by the lever and an eccentric guide into and out of which said stud will pass to alternately shift the compressor and to disconnect the stud so the compressor will remain stationary, and mechanism for operating the driver comprising a gear wheel secured to rotate with said lever.

45. In a corking-machine, the combination of a frame, cork driving means, a movable compressor, an operating lever pivotally sustained by the frame, an operative connection between the compressor and the lever comprising a stud shifted by the lever and an eccentric guide into and out of which said stud will pass to alternately shift the compressor and to disconnect the stud, so the compressor will remain stationary, said lever being provided with a rotatable head secured to the lever for holding the compressor in closed position, and mechanism for operating the driver comprising a gear wheel secured to rotate with said lever.

RAYMOND B. GILCHRIST.

Witnesses:

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MAE OSBORN.