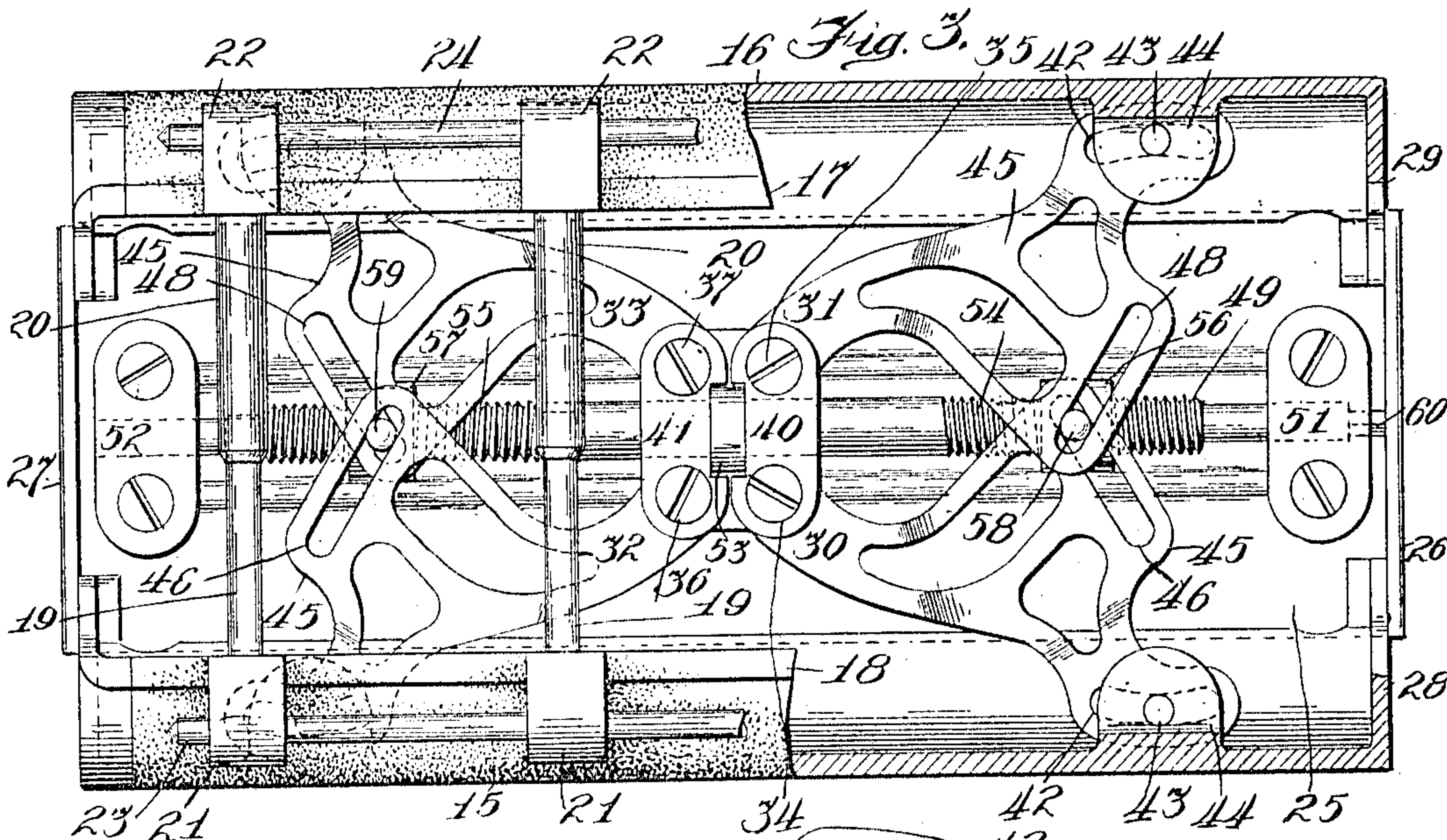
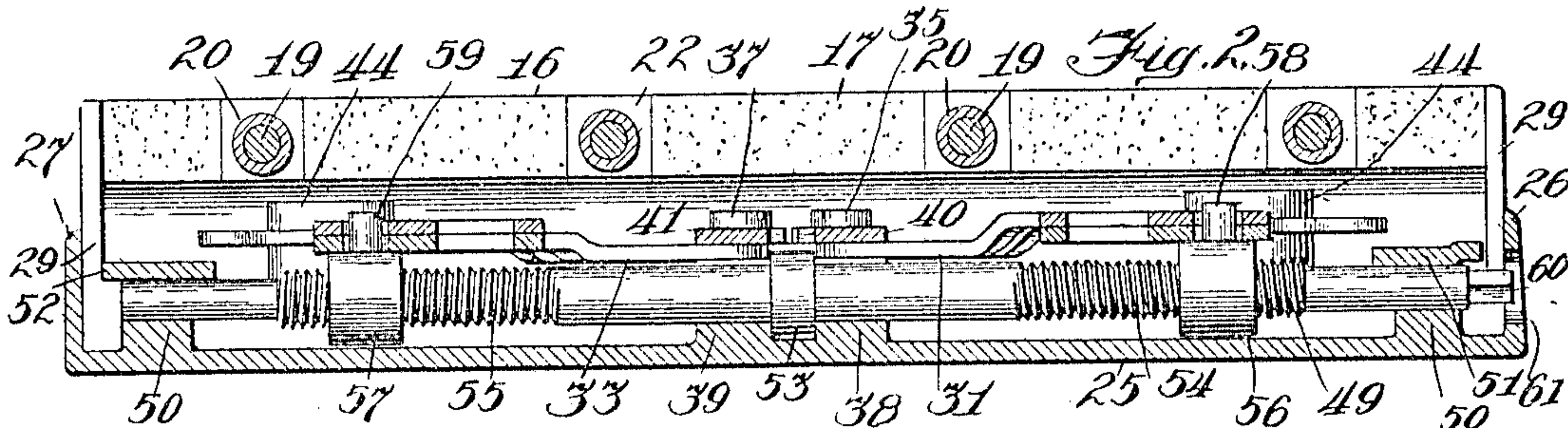
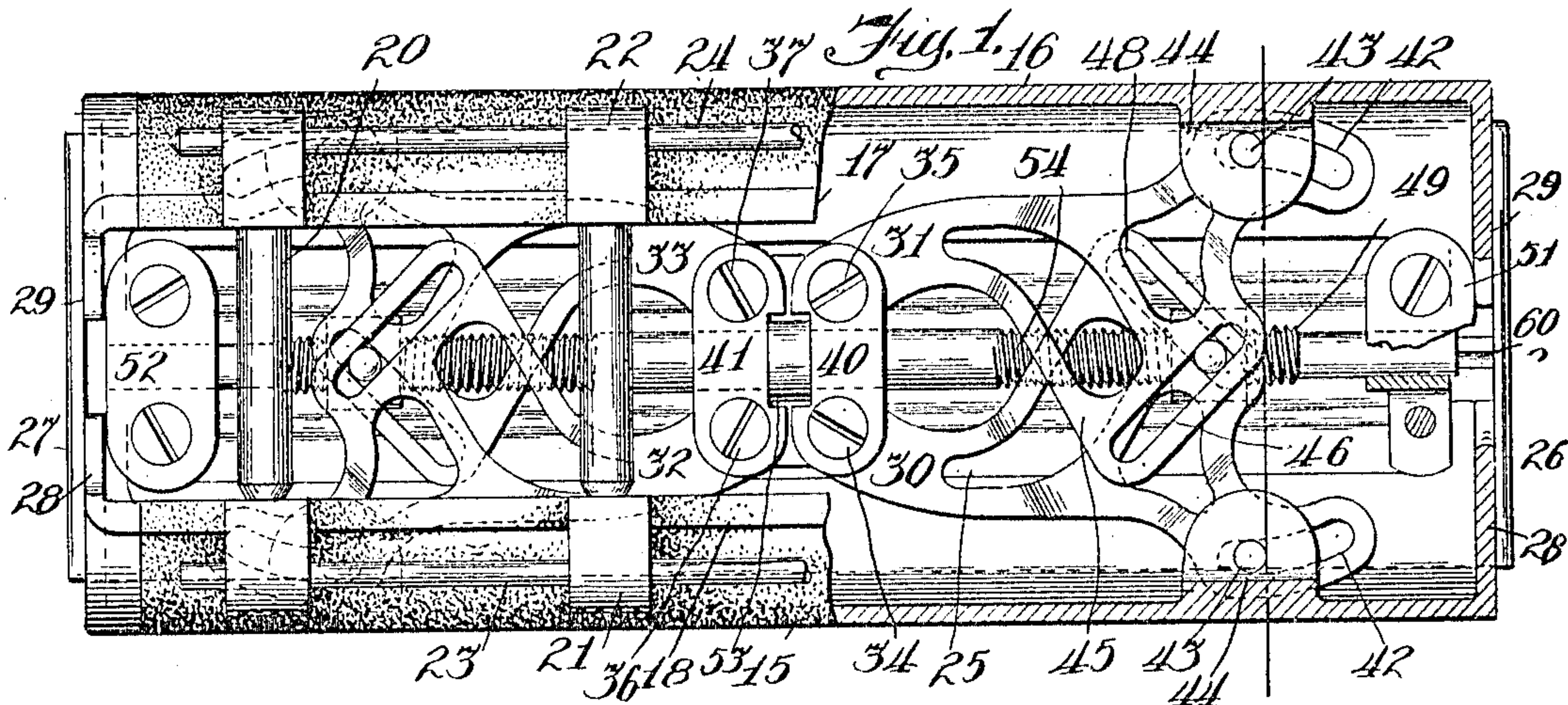


J. C. DAWSON.  
 LOOSE LEAF BINDER.  
 APPLICATION FILED AUG. 11, 1909.

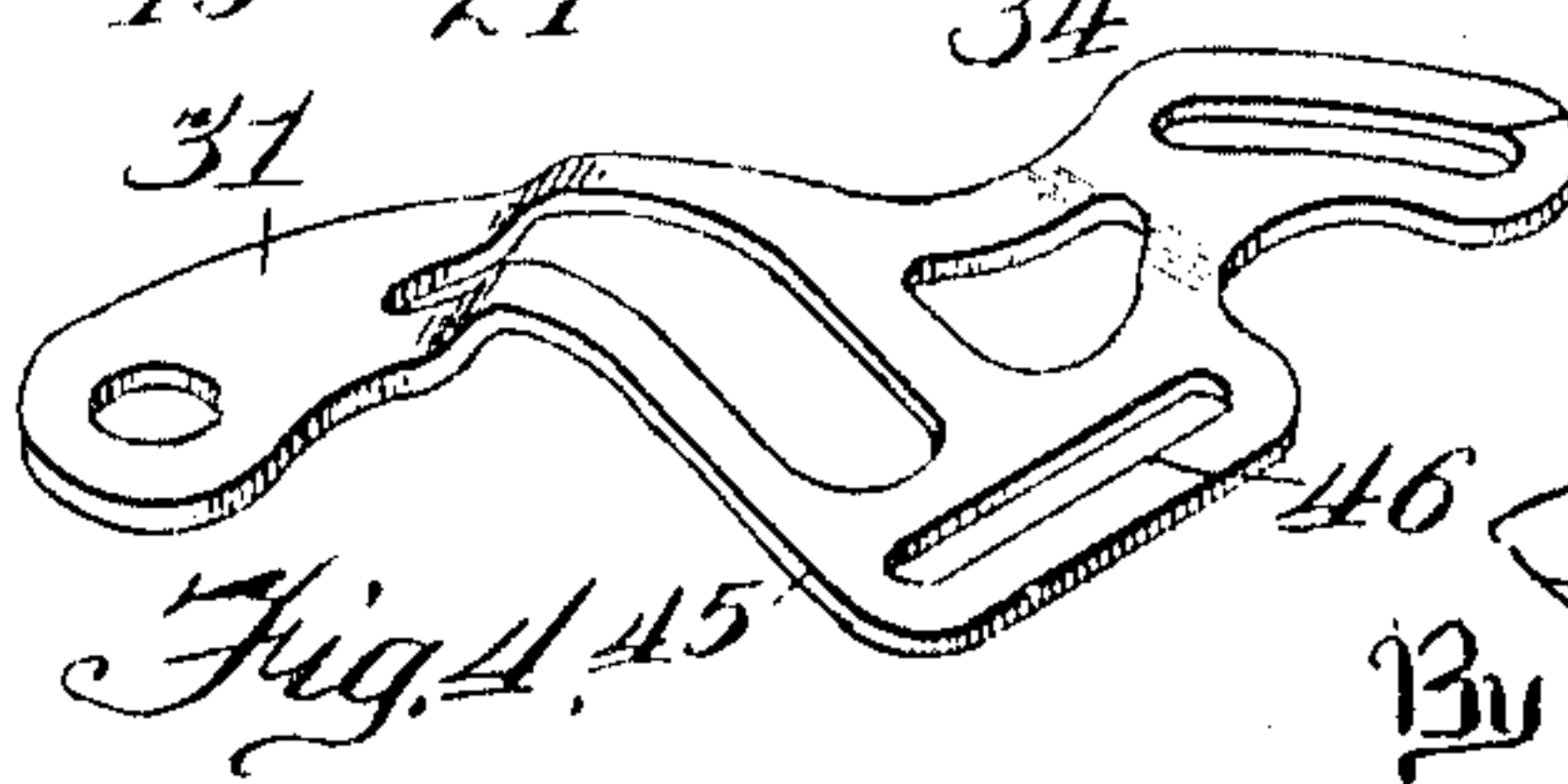
950,613.

Patented Mar. 1, 1910.



Witnesses:

Wilton Lenger  
 E. M. Klatchev



Inventor:

James C. Dawson,

By

Attorneys



# UNITED STATES PATENT OFFICE.

JAMES C. DAWSON, OF WEBSTER GROVES, MISSOURI, ASSIGNOR TO SIEBER & TRUSSELL  
MANUFACTURING CO., A CORPORATION OF MISSOURI.

## LOOSE-LEAF BINDER.

950,613.

Specification of Letters Patent.

Patented Mar. 1, 1910.

Application filed August 11, 1909. Serial No. 512,380.

*To all whom it may concern:*

Be it known that I, JAMES C. DAWSON, a citizen of the United States, and resident of Webster Groves, county of St. Louis, and State of Missouri, have invented certain new and useful Improvements in Loose-Leaf Binders, of which the following is a specification, and which are illustrated in the accompanying drawings, forming a part thereof.

This invention relates to the type of loose leaf binders which comprises a pair of compression plates, filing posts or bars on which the leaves are impaled, and means for moving the plates toward and away from each other, the invention being addressed particularly to the controlling mechanism.

The object of the invention is to generally improve devices of this type, simplifying their construction and operation; and it consists in mechanism such as is hereinafter described and illustrated in the drawings, in which—

Figure 1 is a detail plan view of the preferred form of binder showing the side plates as drawn together; Fig. 2 is a central longitudinal section of the same; Fig. 3 is a similar view to Fig. 1, the binder being expanded; and Fig. 4 is a detail perspective of one of the controlling levers illustrated in Figs. 1, 2 and 3.

The binder, as shown, comprises a pair of side plates 15, 16, having upstanding flanges 17, 18, in which the telescoping filing posts 19, 20, are set and between which the sheets to be bound are clamped when the binder is compressed. Lugs 21, 22, formed on the outer faces of the plates 15, 16, carry pivot rods 23, 24, to which the sides or cover plates (not shown) of the binder may be attached.

A back plate 25 overlaps the lower edges of the plates 15, 16, and carries the controlling mechanism. The back plate is provided with upstanding end flanges 26, 27, the ends of which overlap end flanges 28, 29, of the side plates for closing the top and bottom of the binder.

The controlling mechanism comprises a plurality of levers pivoted upon the back plate and slidably engaging pins carried by the side plates, and a screw-rod journaled in suitable bearings disposed along the median line of the back plate and carry-

ing one or more nuts having a cam engaged with the levers.

In the preferred form of construction there are present two pairs of levers, designated, respectively, 30, 31, 32 and 33, and pivoted, as shown, respectively, at 34, 35, 36 and 37, to bosses 38, 39, rising from the back plate 25 adjacent its longitudinal center, and plates 40, 41, secured to the bosses by the screws which form the pivots of the levers. The controlling levers of each pair project toward the ends of the binder, and each is provided with a curved slot 42 adjacent its end for receiving a pin 43 setting through a slotted boss 44 formed in the inner wall of the side plate, the lever being housed within the slot of the boss. The connection of the several levers to the side plates being alike, but one of them is described.

Each of the levers, as more plainly shown in Fig. 4, is provided with a lateral extension 45, which projects across the longitudinal median line of the binder and is provided with a cam slot 46, which is oblique thereto. The lateral extensions 45 of the two levers forming a pair overlap, their cam slots 46, 48, intersecting, as more plainly shown in Figs. 1 and 3.

The actuating screw-rod 49 is journaled in bosses, as 50, rising from the back plate 25 adjacent its ends and carrying cap plates 51, 52, secured thereto by screws. A collar 53, fixed upon the rod 49, lies between the bosses 38, 39, whereby the rod is held against longitudinal movement. This rod is provided with right and left screw-threads 54, 55, located, respectively, at opposite sides of the bosses 38, 39, and upon these threaded portions there run a pair of nuts 56, 57, each of which carries an upstanding stud 58, 59, engaging the cam slots 46, 48, of the two pairs of controlling levers. As each of these studs passes through the cam slots at the points at which they intersect, they are thereby held against rotative movement relatively as to the rod 49, and hence as the rod is turned by means of a key (not shown) applied to its squared end 60, the nuts 56, 57, travel longitudinally as to the rod and in opposite directions, the studs necessarily traveling along the cam slots of the levers, the latter are thus caused to swing about their pivots, thereby moving the side plates of the binder toward or away from each



other. The end plate 26 is apertured, as indicated at 61, to provide access to the squared end of the screw-rod.

I claim as my invention—

5 1. In a loose leaf binder, in combination, a back plate, a side plate movable laterally, an actuating rod mounted longitudinally on the back plate, a lever pivoted to one of such members and engaging the other and having  
10 a cam slot extending obliquely across the actuating rod, and a stud engaging the slot and mounted in line with and movable by the rod.

2. In a loose leaf binder, in combination,  
15 a back plate, a pair of side plates movable laterally, a pair of levers pivoted to the back plate and each engaging one of the side plates, the two levers having overlapping lateral extensions with intersecting cam  
20 slots, a controlling rod mounted on the back plate, a stud engaging the cam slots of the two levers and movable longitudinally of the back plate by means of the rod.

3. In a loose leaf binder, in combination,  
25 a back plate, a threaded rod journaled thereon, a laterally-movable side plate, a lever pivoted to the back plate and engaging the side plate and having a cam slot extending obliquely across the rod, a nut running on

the rod and carrying a stud engaging the 30 cam slot.

4. In a loose leaf binder, in combination, a back plate, a threaded rod journaled thereon, a pair of laterally movable side plates, a pair of levers pivoted to the back plate and 35 each engaging one of the side plates, such levers having overlapping portions with intersecting cam slots, a nut running on the rod, and a stud carried by the nut and engaging the two cam slots. 40

5. In a loose leaf binder, in combination, a back plate, a rod journaled thereon and having oppositely inclined threads adjacent its ends, a pair of laterally movable side 45 plates, two pairs of levers pivoted to the back plate and extending, respectively, toward the ends of the side plates and being engaged therewith, the members of each pair having overlapping portions provided with intersecting cam slots, and nuts running on 50 the threaded portion of the rod and each carrying a stud engaging the cam slots of the contiguous levers.

JAMES C. DAWSON.

Witnesses:

F. W. RISQUE,  
W. S. OLIVER.