

No. 822,654.

PATENTED JUNE 5, 1906.

J. C. DAWSON.  
LOOSE LEAF BINDER.  
APPLICATION FILED MAY 24, 1905.

2 SHEETS—SHEET 1.

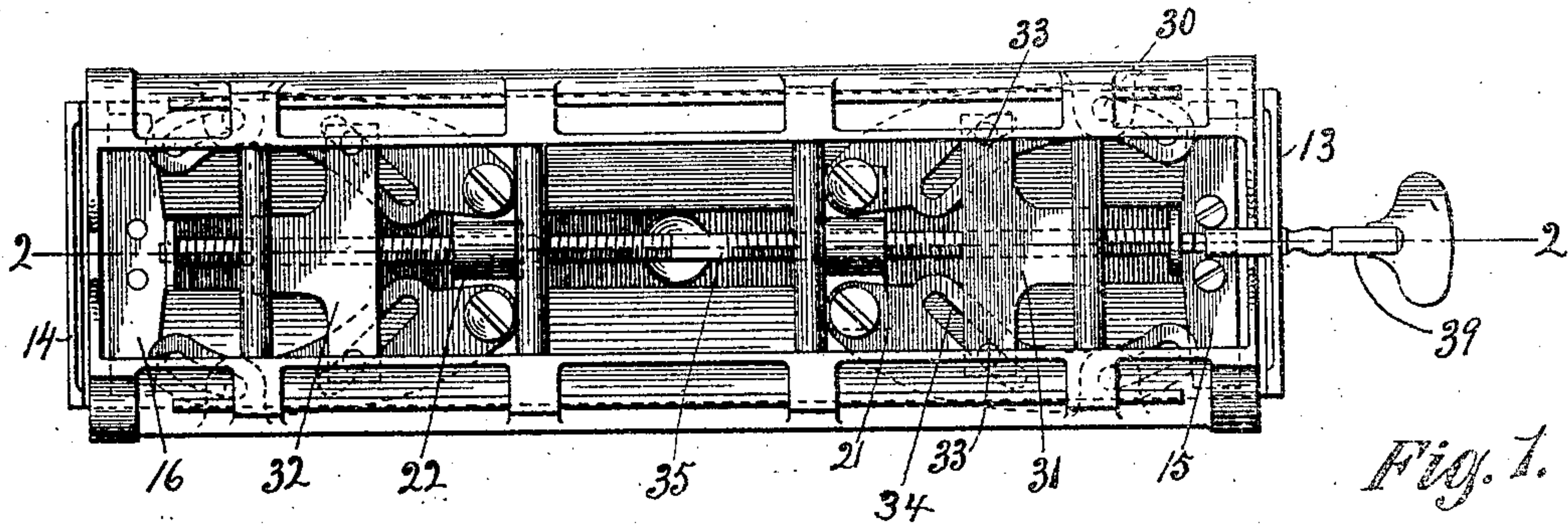


Fig. 1.

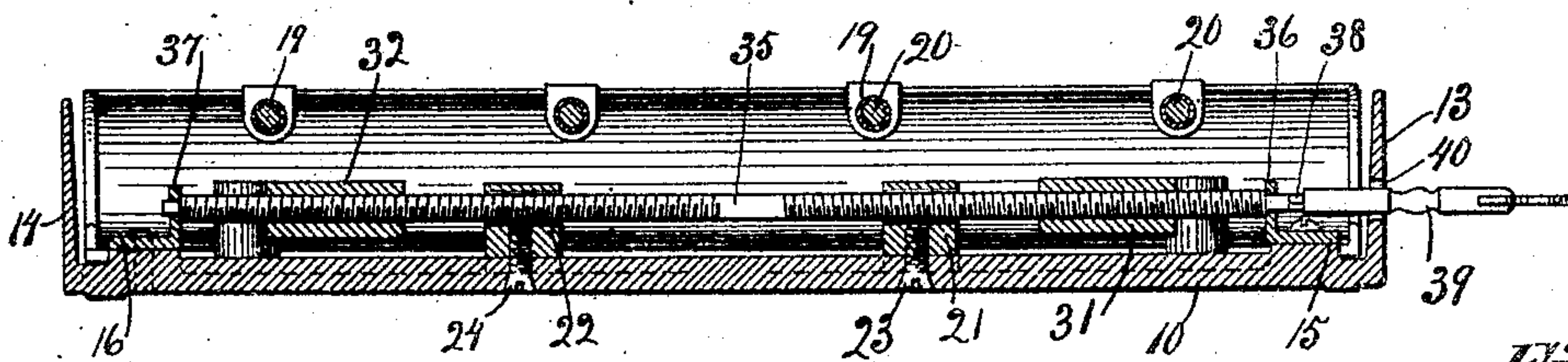


Fig. 2.

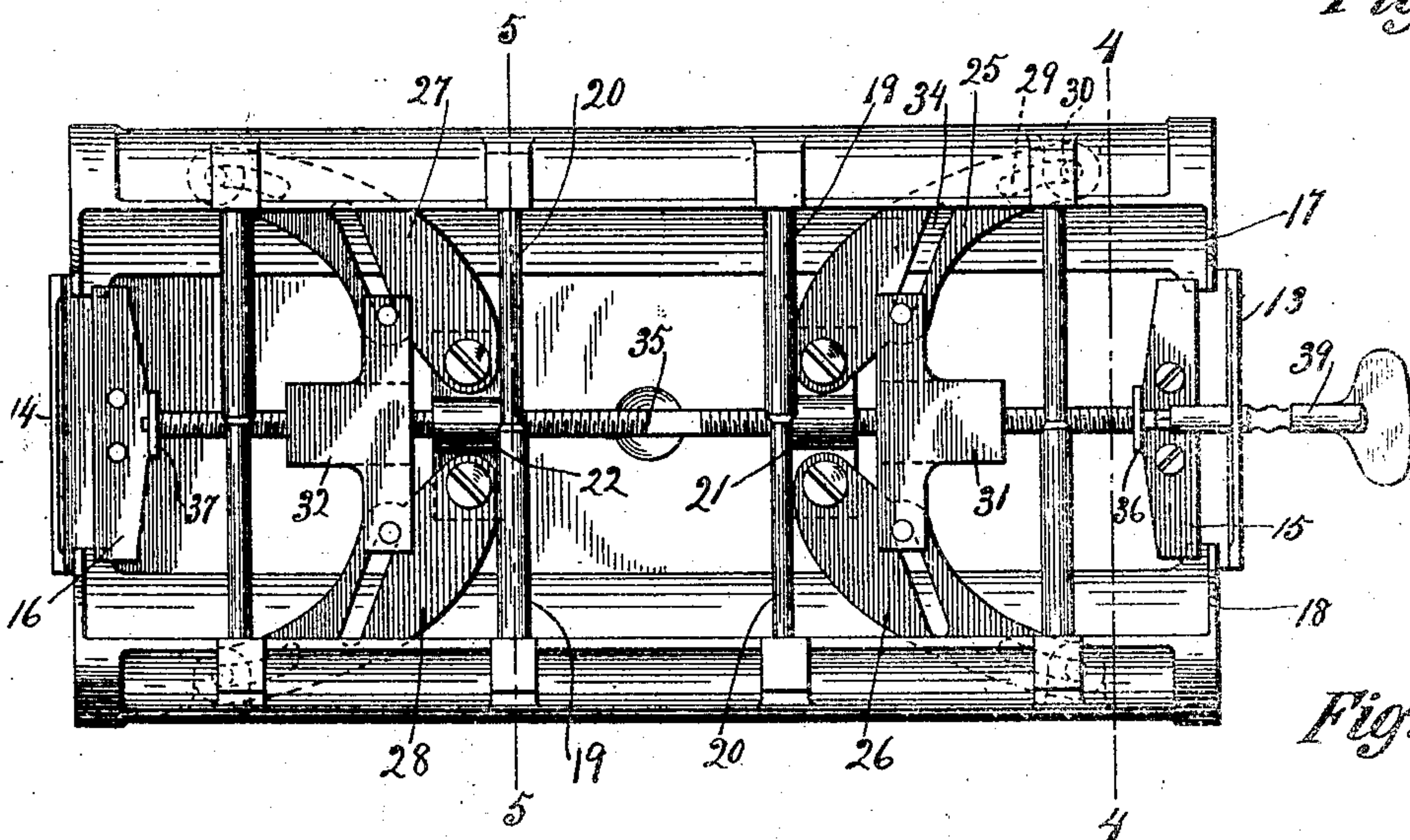


Fig. 3.

Witnesses:  
W. H. Cotton  
Charles B. Gibson.

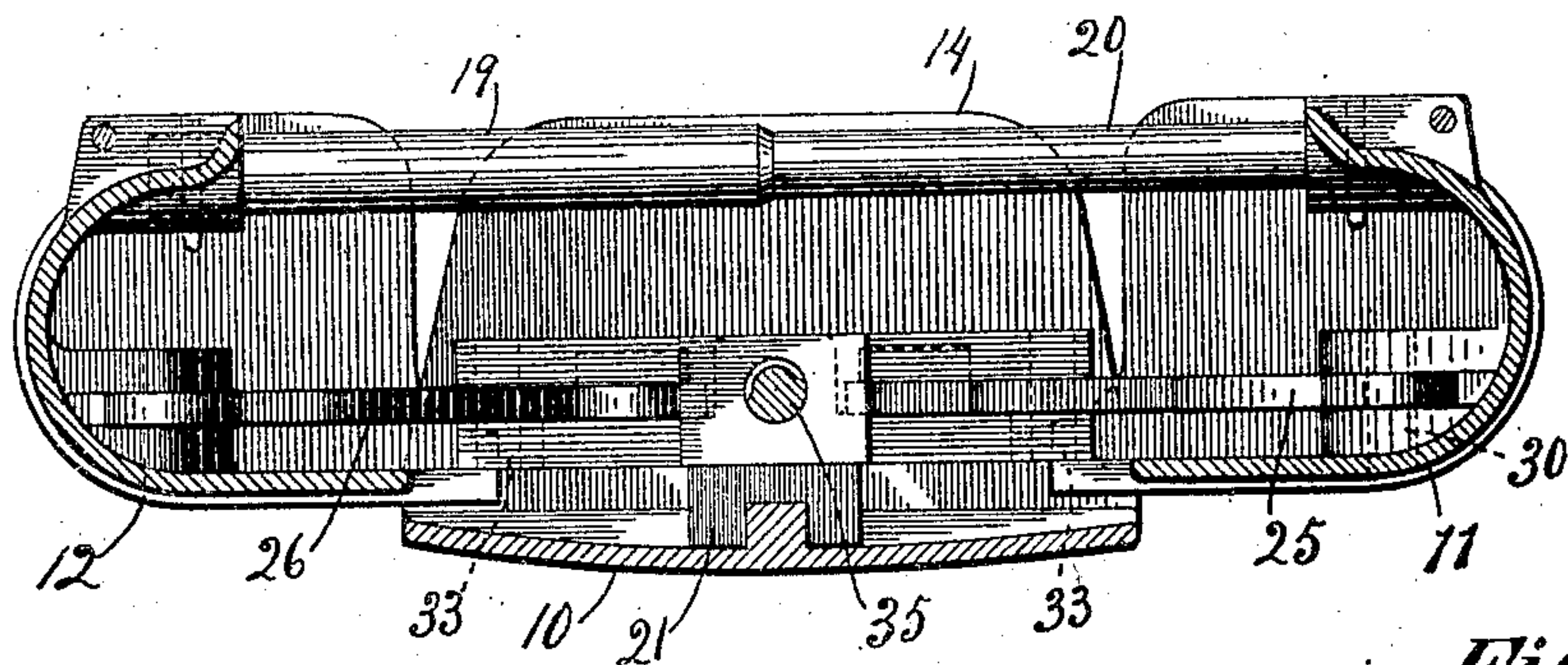
Inventor:  
James C. Dawson  
By Louis K. Gibson Atty.

No. 822,654.

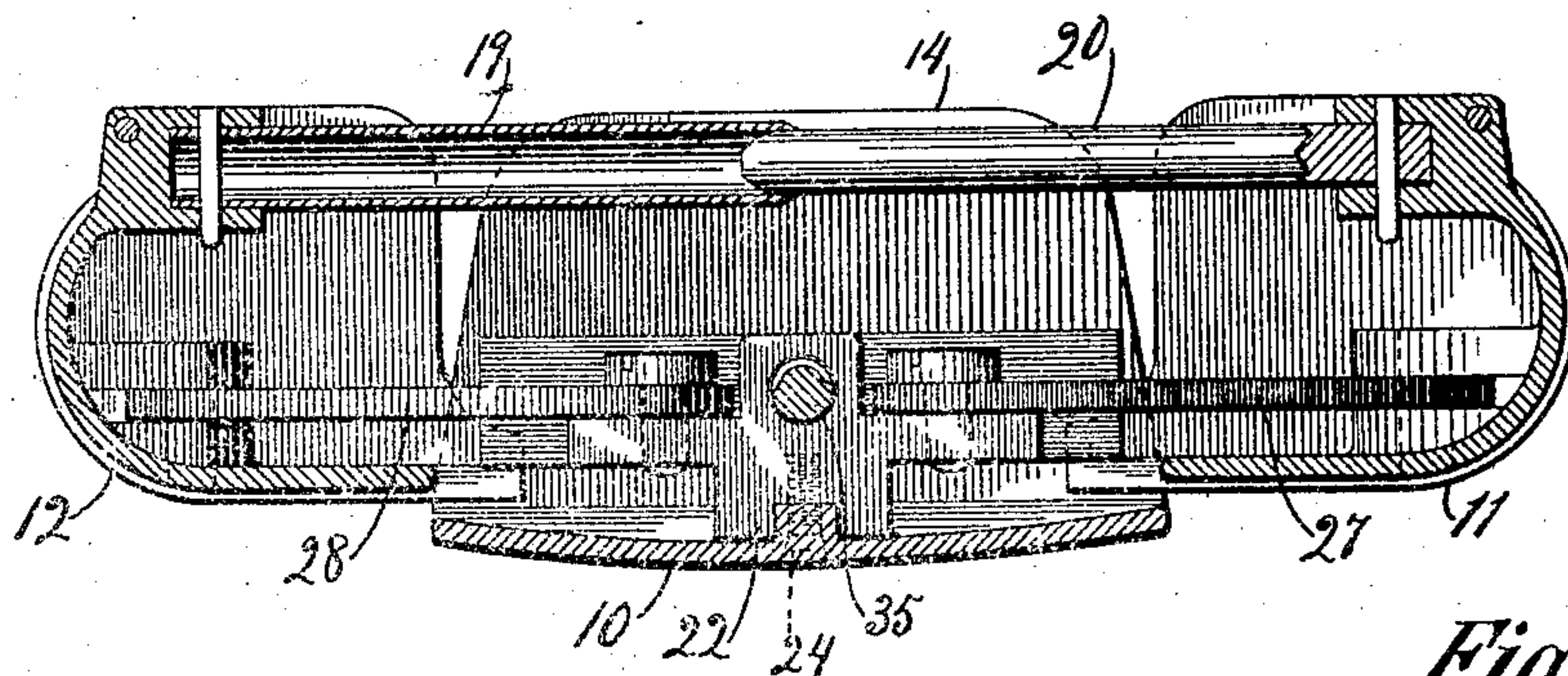
PATENTED JUNE 5, 1906.

J. C. DAWSON.  
LOOSE LEAF BINDER.  
APPLICATION FILED MAY 24, 1905.

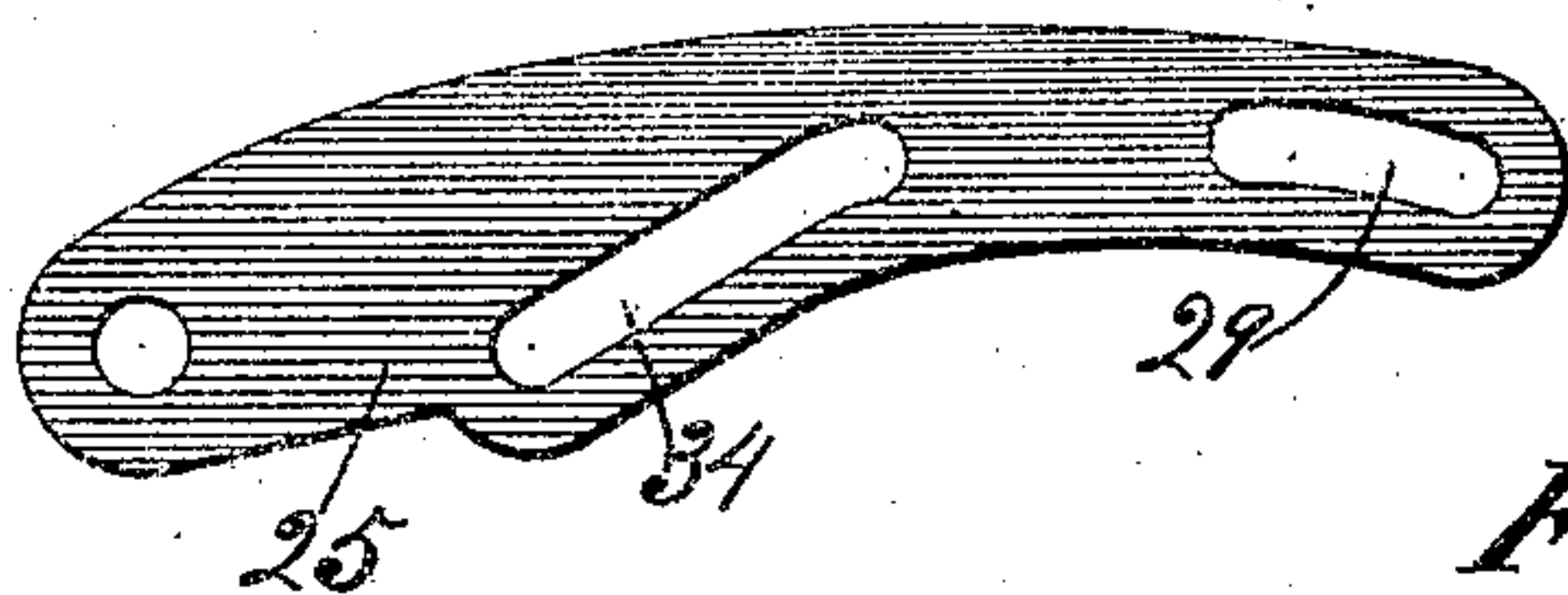
2 SHEETS—SHEET 2



*Fig. 4.*



*Fig. 5.*



*Fig. 6.*

Witnesses:

W. H. Cotton

Charles B. Gillson

Inventor:

James C. Dawson

By

Louise A. Lacey



# UNITED STATES PATENT OFFICE.

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

## LOOSE-LEAF BINDER.

No. 822,654.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed May 24, 1905. Serial No. 261,986.

*To all whom it may concern:*

Be it known that I, JAMES C. DAWSON, a citizen of the United States, and a 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.

The invention relates to that class of expansible loose-leaf binders which comprise a back section and a pair of laterally-movable side or clamping sections in sliding engagement with the back section, telescoping leaf-carrying posts, and means for expanding and contracting the binder. Its object is to increase the efficiency of devices of this type; and it consists of the structure hereinafter described and which is illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the binder. Fig. 2 is a longitudinal section thereof on the line 2 2 of Fig. 1. Fig. 3 is a similar view to Fig. 1, the binder being open. Figs. 4 and 5 are cross-sections on the lines 4 4 and 5 5, respectively, of Fig. 3; and Fig. 6 is a detail of one of the parts.

The back plate 10 and the side members 11 12 are of common construction. The former is provided with upturned end flanges 13 14, and each of the latter consists of two leaves, one constituting the clamping or side plate and the other a portion of the back of the binder. A cross-plate 15 16 is attached to the inner face of the back plate 10 adjacent each of its ends, the ends of such plates being spaced apart from the back plate to provide therewith guideways for the back leaves of the side plates 11 and 12, and such plates are also spaced apart from the upturned ends 13 14 of the back plate to accommodate the upturned and instanding ends 17 18 of the side members.

The leaf-holding rods comprise the telescoping members 19 and 20, one set in each of the side members. A pair of anchor-blocks 21 22 is secured to the inner face of the back member 10 in any desired manner, as shown by means of screws 23 24, and to each of these anchor-blocks is pivoted a pair of levers 25 26 27 28, each of which is longitudinally slotted near its outer end, as shown at

29, to receive a pin 30, set in the side member, as 17.

Each pair of levers is controlled by means of a cross-head 31 32, the ends of which are slotted parallel with the back plate 10 to receive the levers and are connected therewith by means of pins 33, set through oblique slots 34 in the levers. The body of each of the cross-heads 31 32 forms a nut which is in threaded engagement with a right and left threaded rod 35, journaled in brackets 36 37, rising from the plates 15 16, respectively, and in the present instance passing loosely through the anchor-blocks 21 22. One end of the rod 35 is squared, as shown at 38, for the engagement of a key 39, inserted through an aperture 40 in one of the upturned ends, as 13, of the back plate.

When the cross-heads 31 32 are in the position shown in Fig. 1, with the pins 33 at the outer ends of the slots 34 of the levers, the binder is in its contracted form. The rotation of the rod 35 to move the cross-heads toward the anchor-blocks 21 22 throws the levers outwardly as the pins 33 move along the slots 34, and the binder is thereby expanded to the position shown in Fig. 3, the action being accelerated by the oblique-position of the lever-slots 34. Inasmuch as in contracting the binder, power is applied to the levers at the point nearest to their pivots, while as the sides move inwardly the point of application of power gradually recedes from such pivots, the closing action becomes gradually slower, while the compressive power of the sides gradually increases. This arrangement provides for a quick action at the commencement of the closing of the binder, with a constant acceleration of power.

I claim as my invention—

1. In a loose-leaf binder, in combination, a back member; a pair of laterally-movable side members; a pair of levers independently pivoted to the back member and each slidably engaging one of the side members; and a movable cross-head slidably engaging the levers.

2. In a loose-leaf binder, in combination, a back member; a pair of laterally-movable side members; a pair of obliquely-slotted levers independently pivoted to the back member and each slidably engaging one of the



side members; and a movable cross-head in engagement with the lever-slots.

3. In a loose-leaf binder, in combination, a back member; a pair of laterally-movable  
5 side members; a pair of levers independently pivoted to the back member and each slidingly engaging one of the side members; a cross-head slidingly engaging the levers; and a rod journaled in the back member and in  
10 threaded engagement with the cross-head.

4. In a loose-leaf binder, in combination, a back member; a pair of laterally-movable

side members; a pair of obliquely-slotted levers independently pivoted to the back member and each slidingly engaging one of the  
15 side members; a cross-head in engagement with the lever-slots; and a rod journaled in the back member and in threaded engagement with the cross-head.

JAMES C. DAWSON.

Witnesses:

EDWIN W. MILLS,  
F. W. RISQUE.