No. 891,240. PATENTED JUNE 23, 1908.

E. FOURNIER.

LOOSE LEAF BINDER.

APPLICATION FILED JULY 8, 1907.

2 SHEETS—SHEET 1.

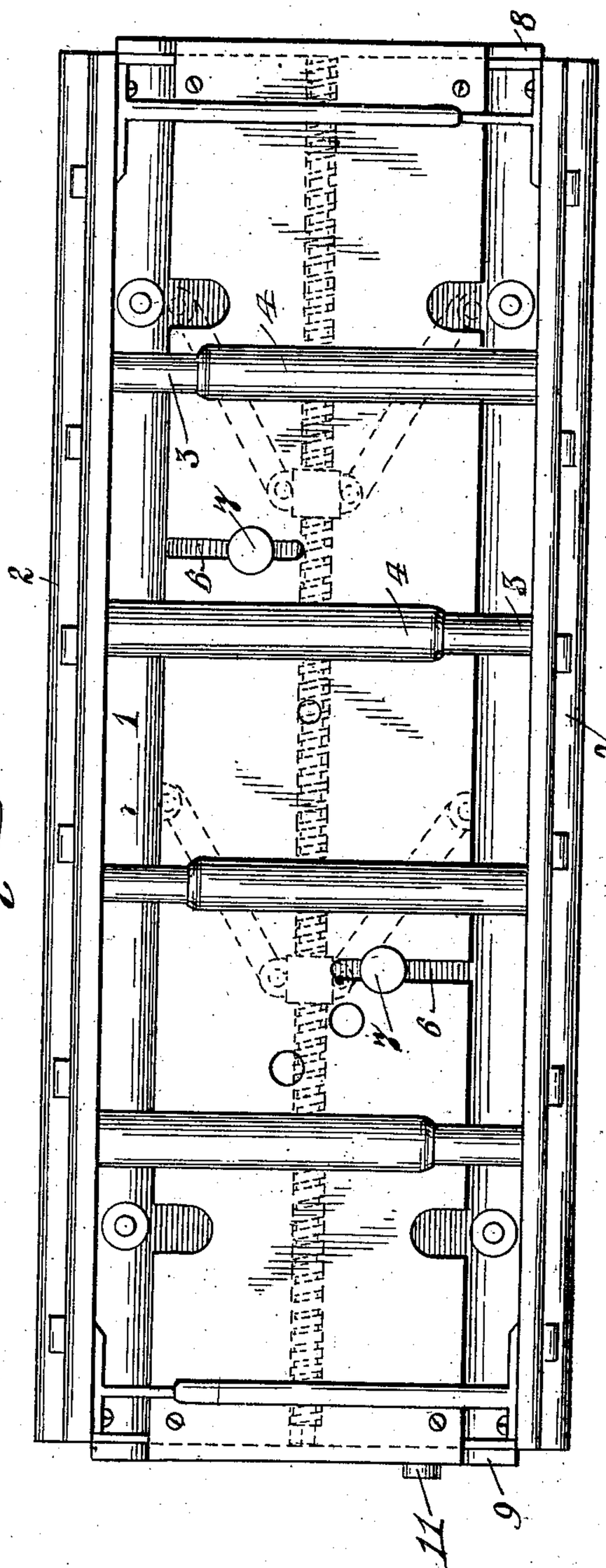


Fig. 1.

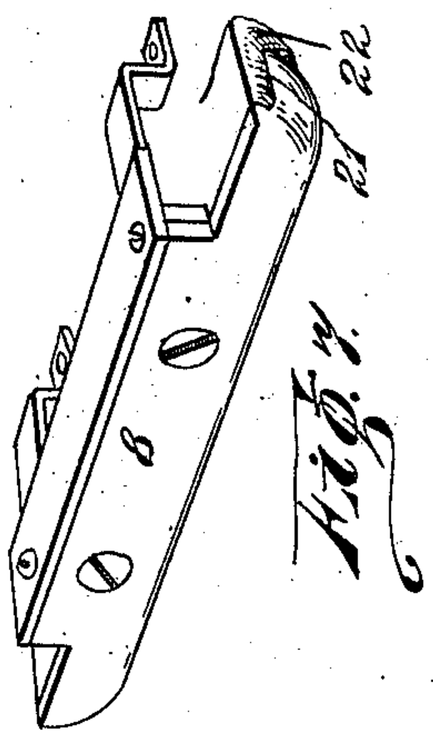


Fig. 2.

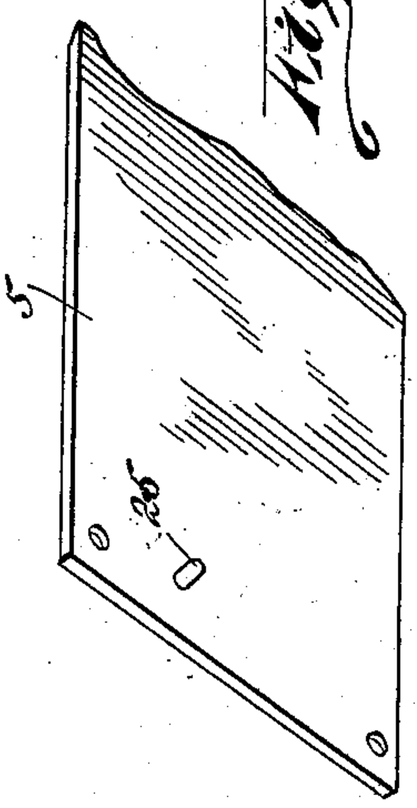


Fig. 3.

Witnesses:

Eugene M. Sliney.

W. S. Babcock

Edmond Fournier.

Inventor,

By Marion & Marion

Attorneys

No. 891,240. PATENTED JUNE 23, 1908.

E. FOURNIER.

LOOSE LEAF BINDER.

APPLICATION FILED JULY 8, 1907.

2 SHEETS—SHEET 2.

Fig. 2.

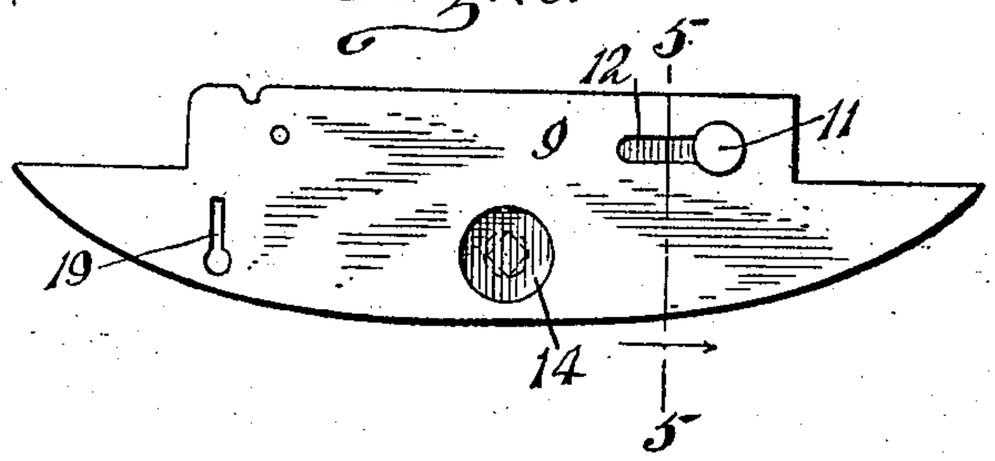


Fig. 3.

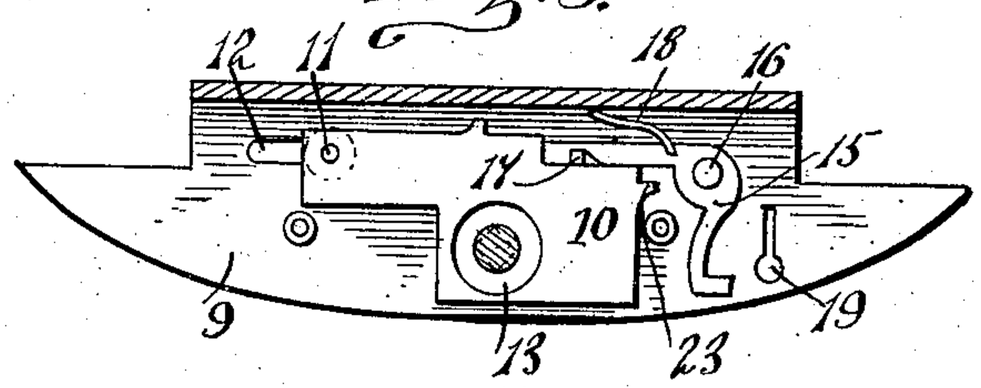


Fig. 4.

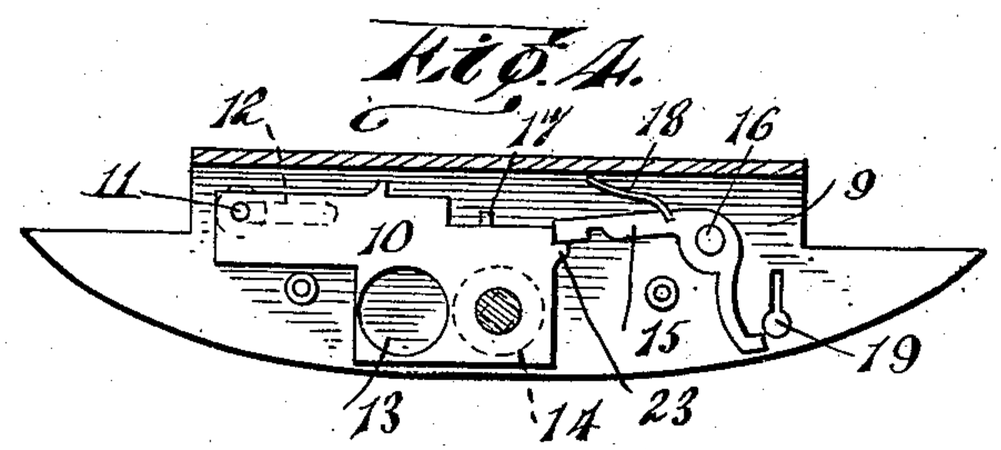
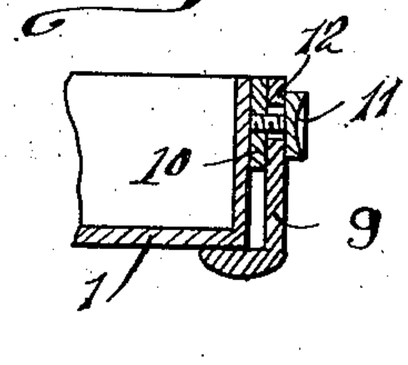


Fig. 5.



Witnesses:

Eugene M. Sluney

W. S. Babcock

Edmond Fournier.

Inventor,

By Marion & Marion

Attorneys

UNITED STATES PATENT OFFICE.

EDMOND FOURNIER, OF ST. HYACINTHE, QUEBEC, CANADA.

LOOSE-LEAF BINDER.

No. 891,240. Specification of Letters Patent. Patented June 23, 1908.

Application filed July 8, 1907. Serial No. 382,791.

To all whom it may concern:

Be it known that I, EDMOND FOURNIER, a subject of the King of Great Britain, residing at St. Hyacinthe, county of St. Hyacinthe, in the Province of Quebec, Canada, have invented certain new and useful Improvements in Loose-Leaf Binders; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to loose-leaf binders of the general type comprising two covers adapted to contain between them a plurality of record sheets, papers or the like, means for moving these covers bodily toward or from each other in order to securely clamp the papers held therebetween regardless of their number and devices for guiding the covers in their movements.

The present invention is designed to construct a binder of the general type above in which all tendency toward binding of the guiding parts is completely overcome and to produce an article of this class in which the parts may be locked in their adjusted positions and to securely guard the lock against persons who may wish to tamper with the same to gain access to papers in the binder.

Broadly speaking my invention comprises in combination with the covers common to devices of this class and guide rods and their coöperating guide tubes connected to the covers, a back plate and connections between the back plate and covers for guiding the covers as they are moved and a guard plate adapted to be moved over the key-hole through which the key is inserted to operate the rods whereby the covers are moved in one or the other direction.

As heretofore constructed binders of this general type have afforded no substantial protection against persons wrongfully opening the same. This was due to the fact that the slot or key-hole in the end of the operating shaft was easily accessible and any key or piece of metal inserted therein would operate the actuating rod and so release the covers.

One of the prime objects of the present invention is to completely overcome this serious objection.

Another object is to prevent binding between the guide rods and their tubes.

In order to more clearly understand the construction and operation of the device reference should be had to the accompanying drawings forming part of this present application in which similar reference characters designate like parts in all of the several views.

Figure 1 is a front plan view of the device showing the back plate in elevation. Fig. 2 is a plan view of the end plate or cap containing the guard plate and its actuating means. Fig. 3 is a longitudinal section through Fig. 2 looking from the opposite side to that shown in Fig. 2 and showing the guard plate in inoperative position. Fig. 4 is a view similar to Fig. 3 with the guard plate in operative position. Fig. 5 is a section on line 5—5 of Fig. 2. Fig. 6 is a perspective in detail showing the connecting pin in plate 1. Fig. 7 is a perspective of the end or cap plate opposite to the one containing the guard plate mechanism.

Referring to the drawings in detail, 1 represents suitable covers of a form common to all devices of this general type. Connected to the covers 1 in any suitable manner are bars 2 or equivalent structures of any well known form carrying the usual guide rods or pins 3 and their respective coöperating guide tubes 4.

In order to prevent twisting of the covers and consequent binding between the members 3 and 4 I have provided a back plate 5 provided with a fastening pin or stud 25 by which it is held to one end of the binder back. This plate as clearly shown in Fig. 1 is placed between the rod and tube connections and the back of the binder, the pin 25 engaging a suitable recess in the binder back.

In order that plate 5 may act as a guide I have provided the same with suitable guide slots 6 adapted to receive pins 7 attached to the lower flaps or inturned edges of the covers 1 all as clearly shown in Fig. 1. It follows that as the covers are moved in either direction, the plate 5-being stationary pins 7 will ride in slots 6 and the covers will be maintained in perfect perpendicularity and consequent binding between the guide rods and guide tubes will be obviated.

To opposite ends of the back of the binder are attached respectively end caps 8 and 9 respectively provided with recessed flanges 21 adapted to receive and hold a suitable binding 22, see Fig. 7.

The end cap 9 has slidably mounted there-

in a guard plate 10 provided with an opening 13 adapted to register with a similar opening 14 through the outer face of the cap 9 through which latter opening a key or other device may be passed to operate the well known form of key operated actuating rod whereby the covers are moved. Guide plate 10 has attached thereto a pin 11 which projects through a slot 12 in the end cap 9 and is provided with a suitable head by which it may be grasped and moved toward the right, Fig. 2, to thereby register openings 13 and 14 and allow insertion of a key for operating the actuating rod.

The plate 9 is held in its inoperative position with the openings 13 and 14 in register as above by a dog 15 pivoted at 16 adjacent said plate and provided with a notched arm lying in the path of movement of the plate. This dog is normally held elevated by the spring 18 as clearly shown in Figs. 3 and 4. The notched arm of dog 15 engages stud 17 on plate 10 and so holds the plate inoperative when it has been moved to this position by the pin 11.

In order to free the guard plate and allow it to be moved into operative position a key is inserted in the opening 19 and the dog 15 turned to disengage its notched arm from stud 17, the knob on the end of pin 11 is then grasped and the plate 10 moved to operative position as shown in Figs. 2 and 4 and so held by the arm of dog 15 which has now been forced upward into engagement with the shoulder 23 of plate 10, see Fig. 4.

Having now fully described the construction and operation of my device, what I claim and desire to secure by Letters Patent is:—

1. In a loose leaf binder, a key operated actuating rod, a sliding guard plate lying in the path of insertion of a key for operating said actuating rod, means for sliding said guard plate, a stud on said guard plate, and a shoulder on said guard plate and a spring-actuated pawl provided with a notched arm, the notch of which is adapted to receive the aforesaid stud to hold the guard plate in inoperative position, whereas the end of the arm of said pawl is adapted to engage the guard plate beneath the shoulder thereon and to hold it in operative position.

2. In a loose leaf binder, a key operated actuating rod, a sliding guard plate lying in the path of insertion of a key for operating said actuating rod, means for sliding said guard plate, a stud on said guard plate, and a shoulder on said guard plate, a spring-actuated pawl provided with a notched arm, the notch of which is adapted to receive the aforesaid stud to hold the guard plate in inoperative position, whereas the end of the arm of said pawl is adapted to engage the guard plate beneath the shoulder thereon and to hold it in operative position, and a second arm on said pawl adapted to be engaged by a key by which said pawl may be actuated.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

EDMOND FOURNIER.

Witnesses:

A. LUSSIER,

J. B. PAULER.