No. 831,641. PATENTED SEPT. 25, 1906.

W. N. WEINACHT.

LOOSE LEAF BINDER.

APPLICATION FILED NOV. 8, 1905.

Fig. 1.

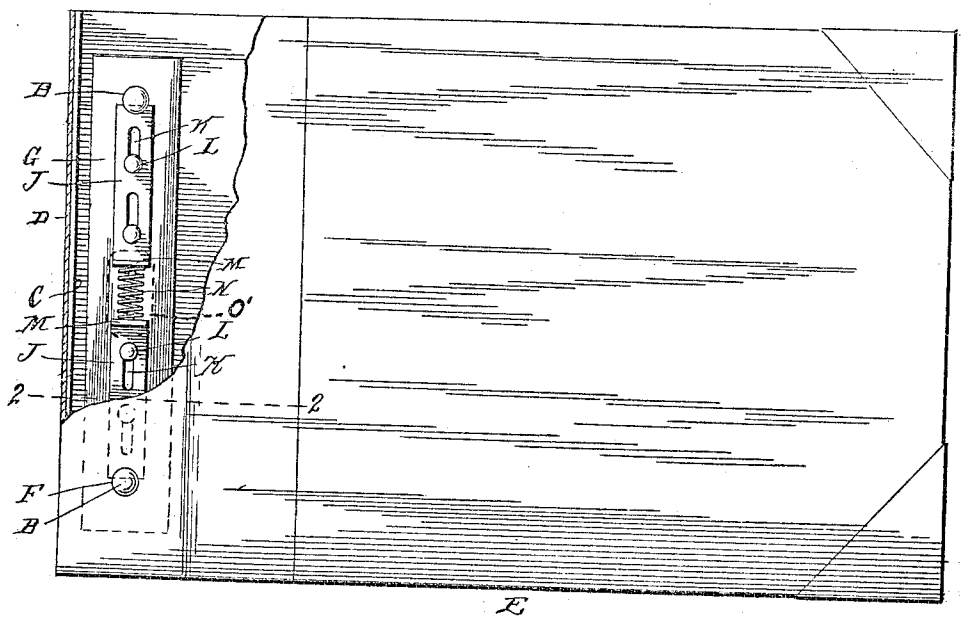


Fig. 2.

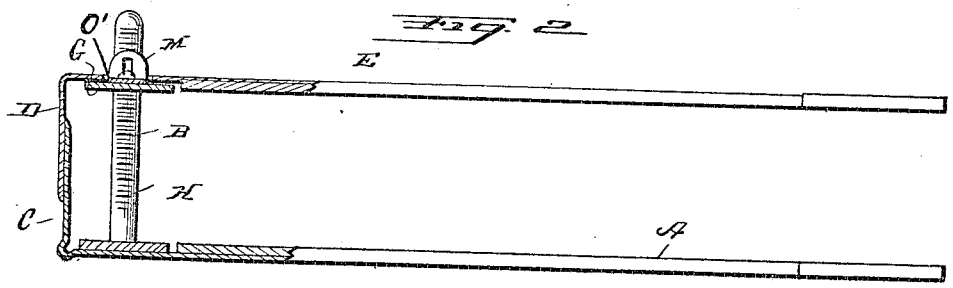
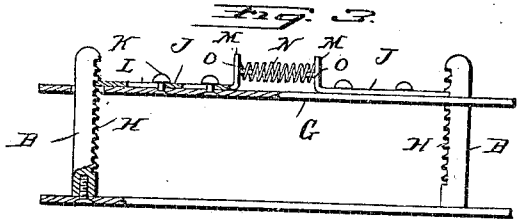


Fig. 3.



Witnesses
Chas. K. Davies.
M. E. Moore

Inventor
William N. Weinacht.
By Tom V. Moore
Attorney

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM N. WEINACHT, OF CHICAGO, ILLINOIS.

LOOSE-LEAF BINDER.

No. 831,641. Specification of Letters Patent. Patented Sept. 25, 1906.

Application filed November 8, 1905. Serial No. 286,331.

To all whom it may concern:

Be it known that I, WILLIAM N. WEINACHT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Loose-Leaf Binders, of which the following is a specification.

My invention relates to improvements in loose-leaf binders; and the main object of the invention is to provide means for temporarily binding together loose leaves or sheets in a secure and efficient manner.

Other objects of the invention are to provide a device for the purpose stated which may be operated with ease and despatch either to release or secure the leaves or sheets, which will be made of but few and simple parts, and be practical and efficient in every particular.

With these and other objects in view my invention consists of a loose-leaf binder comprising a base-board, upright stems formed with a rack secured to said base-board, the loose leaves adapted to fit over said stems, a plate adapted to fit over the stems and rest on the leaves, spring-actuated bars carried by the plate and adapted to engage the racks on the stems, and a cover adapted to fit over the plate and engage the stems.

My invention further consists in certain other novel features of construction, combination, and arrangement of parts, as herein set forth.

Figure 1 is a top plan view of my improved loose-leaf binder, a portion being broken away to show the securing-plate. Fig. 2 is a longitudinal sectional view taken on line 2 2 of Fig. 1, and Fig. 3 is an end elevation of the base-board with the securing-plate in position.

Referring to the drawings, the letter A designates the base-board of the binder, which is provided near one end with the pair of upright round stems B. At this end is formed the upward-extending guard or cover portion C, which engages a corresponding guard D, formed on the cover E. The loose leaves and the cover are formed with the holes F properly spaced, so as to fit over the stems. A binding-plate G is fitted over the stems after the loose leaves have been mounted thereon and serves to hold them in position. The binding-plate may be secured to the cover or may be used independent thereof.

The stems are formed on their inner opposing faces with a rack H, having the teeth set on a downward incline, and the binding-plate has mounted upon its upper face the flat securing-bars J, whose ends are adapted to engage the racks on the stems. These bars are formed with slots K, and the buttons L, secured in the binding-plate, pass through these slots and secure the bars to the plate and allow them to have a lateral movement with respect thereto. The inner ends of the bars are formed with the upwardly-struck grasping portions or extensions M, and a spring N is mounted between these portions and is held in place by means of the pins O, formed on the inner faces of the extensions.

From this description, taken in connection with the drawings, it will be evident that when the loose leaves or pages have been placed on the stems the binding-plate is inserted and caused to compress the leaves, and the spring-actuated securing-bars on the plate engage the racks and secure the plate and leaves upon the stem. The cover may then be placed over the stems and serves to protect the leaves from dust and the incidental wear and tear.

The cover is provided with an oval-shaped hole O′, through which the extensions on the securing-bars protrude. I have shown the stems as riveted to the base-board; but they may be secured by screws or any other suitable means.

When it is desired to remove any or all of the leaves or sheets, it is simply necessary to compress the extensions of the securing-bars, thereby releasing the binding-plate from the stems, and the binding-plate and cover may be removed together with as many leaves as desired.

From the foregoing it will be obvious that I have accomplished all the objects herein set forth and have provided a strong and durable binder for loose leaves which is greatly to be desired.

I claim—

1. In a loose-leaf binder, the combination with a base-board having upright stems mounted thereon and provided with a binding cover or guard at one end, of a binding-plate adapted to fit over the stems and carrying slotted bars adapted to engage the stems, a spiral spring supported between the adjacent ends of the bars, and a cover mounted over the binding-plate formed at one end with a complementary guard or cover adapted to form an overlapping joint with the guard on the base-plate, said spring-actuated

bars having finger extensions extending upward through an opening in the cover.

2. In a loose-leaf binder, the combination with a base-board supporting racked stems and having an extension forming a guard at one end, a binding-plate mounted on the stems, securing-bars slidably mounted on the binding-plate engaging the racks on the stems and provided with finger extensions on their inner ends, a spring supported between the extensions for forcing the bars outward, of a cover mounted over the plate and having an extension forming an overlapping joint with the guard on the base-board.

3. In a loose-leaf binder, the combination with a base-board supporting racked stems and having an extension forming a guard at one end, a binding-plate mounted on the stems, slotted securing-bars slidably mounted on the binding-plate engaging the racks, headed studs mounted on the plate engaging the slots in the bars, said bars provided with right-angled extensions or handles at their inner ends, a spring mounted between said extensions, of a cover mounted over the plate and having an extension forming an overlapping joint with the guard on the base-board, said cover provided with an opening to allow the passage of the handle extensions therethrough.

4. The combination with a base-board carrying upright racked stems, of a binding-plate mounted on the stems, slotted securing-bars on the plate adapted to engage the racks, headed studs secured to the plate engaging the slots in the bars, the inner ends of the bars having right-angled extensions forming handles, and a spiral spring secured between the extensions to force the bars in engagement with the racks and a cover mounted on the stems formed with an opening for the passage of the handle extensions.

5. In combination, a base-board carrying racked upright stems and having an extension at one end forming a guard or cover, a binding-plate on the stems having bars slidably mounted thereon adapted to engage the racks and formed at their inner ends with right-angled finger extensions, a spiral spring mounted between the finger extensions, a cover mounted above the plate having an opening to allow the passage of the finger extensions and provided with an extension adapted to make an overlapping joint with the extension on the base-board and form a complementary guard or cover therewith.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM N. WEINACHT.

Witnesses:

B. WEINACHT,

D. BERLINER.