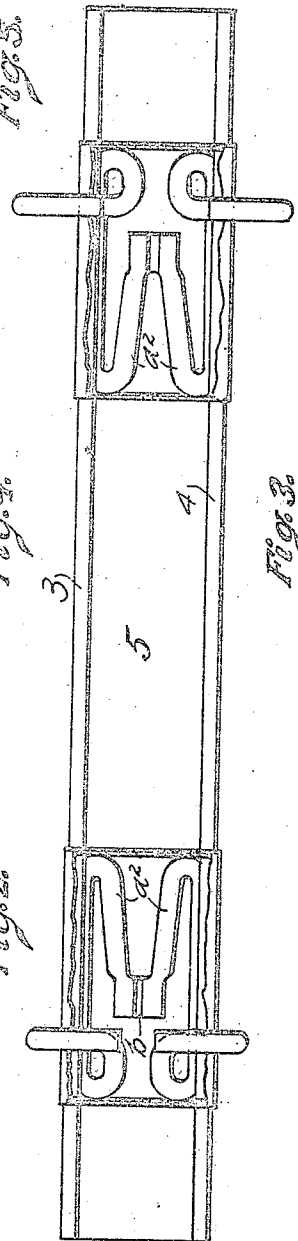
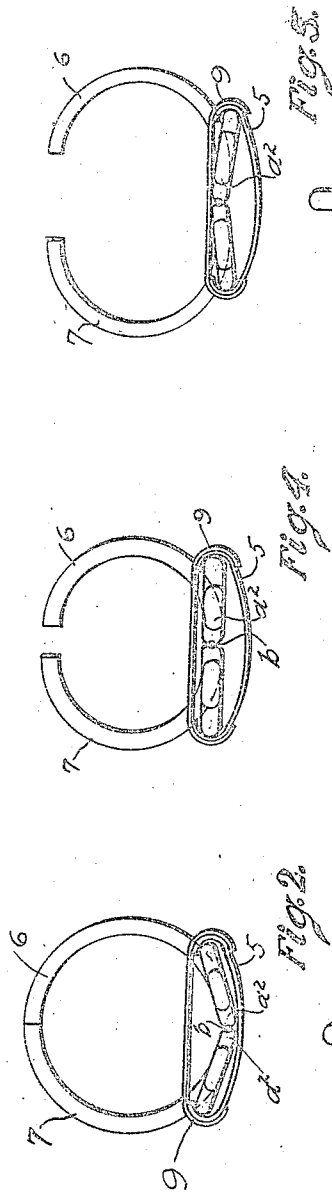
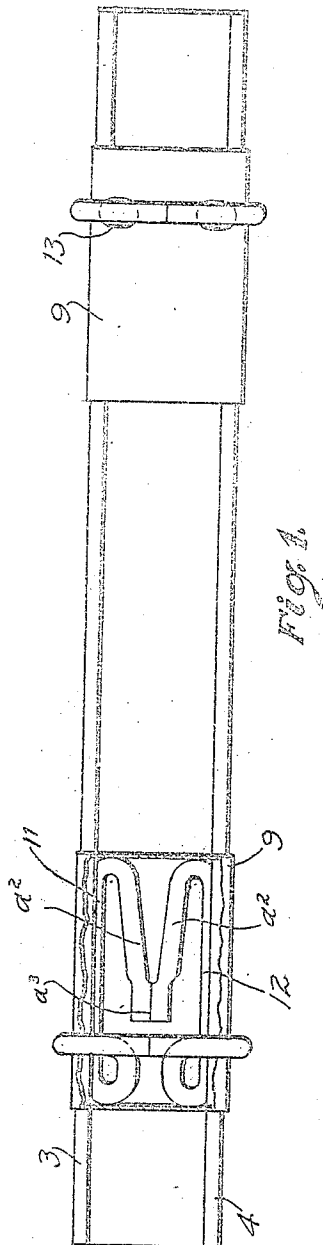


R. M. WATSON.
CLASPING DEVICE FOR LOOSE LEAF BINDERS.
APPLICATION FILED DEC. 23, 1911.

1,042,626.

Patented Oct. 29, 1912.



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CLASPING DEVICE FOR LOOSE-LEAF BINDERS.

1,042,626.

Specification of Letters Patent.

Patented Oct. 29, 1912.

Application filed December 23, 1911. Serial No. 667,459.

To all whom it may concern:

Be it known that I, RICHARD M. WATSON, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Clasping Devices for Loose-Leaf Binders, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to clasping devices for loose leaf binders and has for its object a divided ring device the portions of which are adapted to close together and lock the leaves into the binder and that can be readily opened at any time. This divided ring works upon the toggle principle and the spring action which holds the ring parts open or closed can be afforded wholly from the wires which go to make up the ring. The half-rings are held to the binder plate by being formed integral with wires that extend along the binder plate, each half ring being the up-raised terminal portion of the wire.

A further object of my invention is to provide means by which the divided rings can be held at any point along the binder plate. This is accomplished by friction afforded from the wires.

Another object is provision for use of the divided rings nearer together at the center and closer to the ends of the binder plate. This is accomplished by the use of reversible members.

In the drawings:—Figure 1, is a plan view of my invention with the sheathing plate broken away to show the arrangement of the wires at the base. They are shown in this figure in the position assumed when the half rings are closed. Fig. 2, is an end elevation of the binder plate and a side elevation of the clasping unit showing the half rings closed. Fig. 3, is a plan view of the clasping unit showing the ring at the left end of the binder plate in partly open position and the ring at the right end of the binder plate in extreme open position. Fig. 4, is an end elevation of the binder plate and a side elevation of the half rings partially open as shown at the left end of Fig. 3. Fig. 5, is an end elevation of the binder plate and

a side elevation of the half rings at the extreme open position, as shown at the right in Fig. 3.

The binder plate 5 is turned over at the edges 3 and 4 forming side channels in which the base portions 11 and 12 of the half rings 7 and 8 are journaled. The toggle is formed by the legs a^2 that are bent back and meet in a toggle at a^3 . The meeting surfaces may be flat or there may be a projection and a recess as at b in Fig. 4. I employ a sheathing plate 9 to more securely hold the portions a^2 in their proper relation of stress. This stress keeps the half rings in open, closed, or partially open position, such as shown in Figs. 2, 4, and 5. The wire portions a^2 press the wire portions 11 and 12, so firmly against the up-turned edges 3 and 4 of the binder plate, that there is considerable friction. This friction is sufficient to hold the half rings and the sheathing plate at any position upon the binder plate, so that it can be slid along by applying the required force to any desired position. The sheathing plate not only holds the legs a^2 more securely from separating, but also conceals the device s , a very valuable feature in this kind of a device.

In Fig. 1, it will be noticed that the slots 13 of the sheathing plate 9, through which the half rings protrude, are located near the ends of the unit. This allows the spacing of the two units to a distance almost equal to the length of the binder plate, or if the units be slid off the binder plate and the ends reversed and slid back on, the units can approach very near together. This adjustability and the increased scope of use due to the reversibility of the units is very useful for the reason that different stationers punch their paper at different points.

Simplicity and cheapness are the salient points in this invention and it is evident from the foregoing description that the same results are accomplished as with the more complex devices of the prior art.

What I claim is:—

1. A clasping device for loose leaf binders, having in combination, a binder plate and a clasping unit slidable therealong, the clasping parts being located near the end of the unit, and the unit being reversible to give greater scope of spacing and approach of a number of units on the binder plate, substantially as described.

2. A clasp device for loose leaf binders, having in combination, a binder plate, and a reversible clasp device comprising a pair of wires having half ring portions and portions placed under tension, and a slidable sheathing slidable along the binder plate and housing the portions under tension, the half ring portions protruding from the sheathing eccentrically and the ends of the sheathing being reversible, substantially as described.

3. A clasp device for loose leaf binders, having in combination, a binder plate having turned over edges forming channels at each side, a pair of half rings having base portions rotatably journaled in said channels, each base portion doubling back upon itself, the doubling portions of the two half rings being adapted to engage each other and adapted, when the half rings close, to compress together forcing the other parts of the base portions into frictional engagement with the turned over edges of the binder plate and also affording spring action to keep the half rings in closed relation, substantially as described.

4. A clasp device for loose leaf binders, having in combination, a binder plate and a clasp device slidable therealong and comprising a pair of wires forming half rings

and having base portions that are compressed together and against the binder plate, when the half rings are closed, and thereby afford both spring action to keep the half rings closed and friction with the binder plate to keep the unit in any given position of adjustment along the binder plate, substantially as described.

5. A clasp device for loose leaf binders, having in combination, a binder plate with turned over edges to form channels at each side and a clasp device comprising a sheathing engaging over and slidably on said turned over portions of the binder plate as guides, and a pair of wires inclosed in said sheathing forming half rings and having base portions that are compressed together and against the said turned over edges of the binder plate, when the half rings are closed, thereby, affording both spring action to keep the half rings closed and friction with the binder plate to keep the unit in any given position of adjustment along the binder plate, substantially as described.

In testimony whereof, I sign this specification in the presence of two witnesses.

RICHARD M. WATSON.

Witnesses:

LOTTA LEE BRAY,
VIRGINIA C. SPRATT.