M. P. JACKSON.
LOOSE LEAF BINDER.
APPLICATION FILED FEB. 3, 1920.

1,396,631.

Patented Nov. 8, 1921.

Fig. 1.

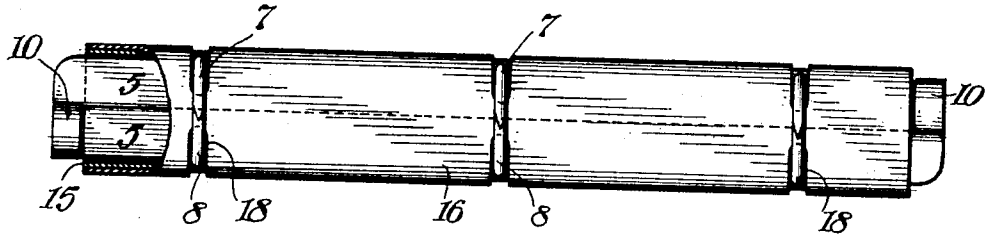



Fig. 2.

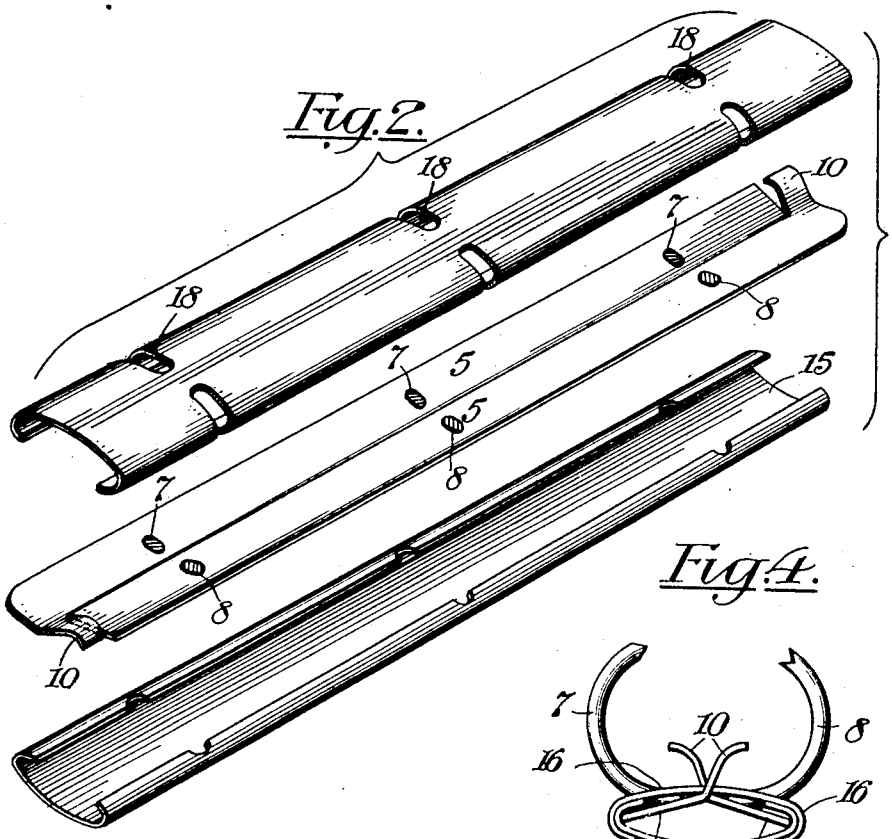
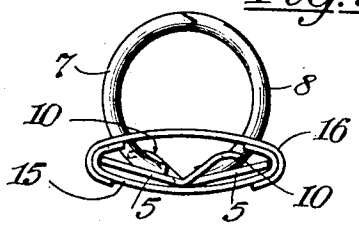



Fig. 4.




Fig. 3.




Inventor:
Mark P. Jackson
by his Attorneys,
Howson and Howson

# UNITED STATES PATENT OFFICE.

MARK P. JACKSON, OF ABBEVILLE, GEORGIA, ASSIGNOR TO BOORUM AND PEASE COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

## LOOSE-LEAF BINDER.

1,396,631. Specification of Letters Patent. Patented Nov. 8, 1921.

Application filed February 3, 1920. Serial No. 356,494.

*To all whom it may concern:*

Be it known that I, MARK P. JACKSON, a citizen of the United States of America, residing in Abbeville, in the county of Wilcox, State of Georgia, have invented certain new and useful Improvements in Loose-Leaf Binders, of which the following is a specification.

My invention relates particularly to loose leaf binders of the type set forth in the patent of W. P. Pitt, No. 778,070, dated December 20, 1904, and in which a spring plate of resilient metal curved somewhat like the back of a book has its outer longitudinal edges flanged in such a way as to form grooves to receive and act upon the outer edges of two rocking plates which carry on their faces coöperating segmental hooks and which plates interlock with each other at their adjacent edges in the fashion of a hinge, and in addition there is a retaining plate shaped like the mentioned spring plate to aid to keep the parts together. The rocking plates can be rocked to bring their cooperating hooks to the open position or the closed position, the spring plate tending to keep them in either of the two positions to which they have been moved, and the throw of the rocking plates is limited by the spring plate in one direction and by the retaining plate in the other direction.

Separate levers have heretofore been provided to aid in actuating these hook plates. The object of my invention is to provide a simpler and better means for actuating them. This object I attain by curved levers formed in one with the hook plates or fixedly attached at the ends thereof, each extending for approximately the width of the two plates.

In the accompanying drawings,

Figure 1 is a plan or face view of a loose-leaf binder metal embodying my improvement;

Fig. 2 is a perspective view showing the three principal parts of the metals separated from each other;

Fig. 3 and Fig. 4 are end views showing the rocking hook plates in the closed and open positions respectively.

The two rocking plates 5, 5, carry on the upper faces segmental hooks 7 and 8, such that when their ends are brought together as seen in Fig. 3, they form rings to retain the perforated sheets of paper which have been threaded onto the hooks when in their open position, as in Fig. 4.

The adjacent edges of these rocking plates 5, 5, are interlocked with each other as by a V-shaped hinge joint, for example, and their outer edges are embraced and pressed by the flanges at the longitudinal edges of a spring plate 15. A flanged cover plate 16 slotted at 18 for the passage of the segmental hooks may be employed to aid in retaining the parts together and to limit the upward swing of the rocking plates as seen at Fig. 4, as is well understood.

My invention consists in providing each of the hook plates 5, 5, with a curved lever 10, fixedly secured to the end of the plate, preferably by making the lever integrally out of the same piece of material as the plate. I provide one such lever on each plate, one at one end of the pair of plates and one at the other. I make each lever extend across the end of the companion rocking plate, and bend the lever upward with a line parallel to the hinge as an axis. By this means I obtain a convenient lever of the second class, namely one in which the resistance is located between the fulcrum and the force. It gives convenient access to the lever and an advantageous direction for applying pressure, as well as the mechanical advantage of a lever of this class.

I claim as my invention:

1. A loose leaf book having hook-plates hinged to each other in combination with a spring-plate to act thereon, a retaining plate and an upwardly bent lever of the second class on the end of one of the hook-plates.

2. A loose leaf book having hook-plates hinged to each other in combination with a spring-plate to act thereon, a retaining plate and a lever of the second class on the end of one of the hinged hook-plates bent upward on an axis parallel to the length of the plates.

In testimony whereof I have signed my name to this specification.

MARK P. JACKSON.