C. FORGERSON.

LOOSE LEAF BOOK.

APPLICATION FILED APR. 22, 1911.

997,985. Patented July 18, 1911.

Fig. 5.

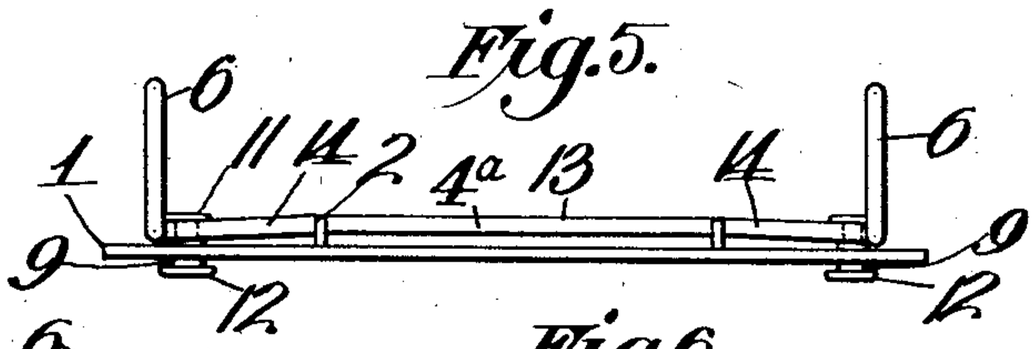


Fig. 1.

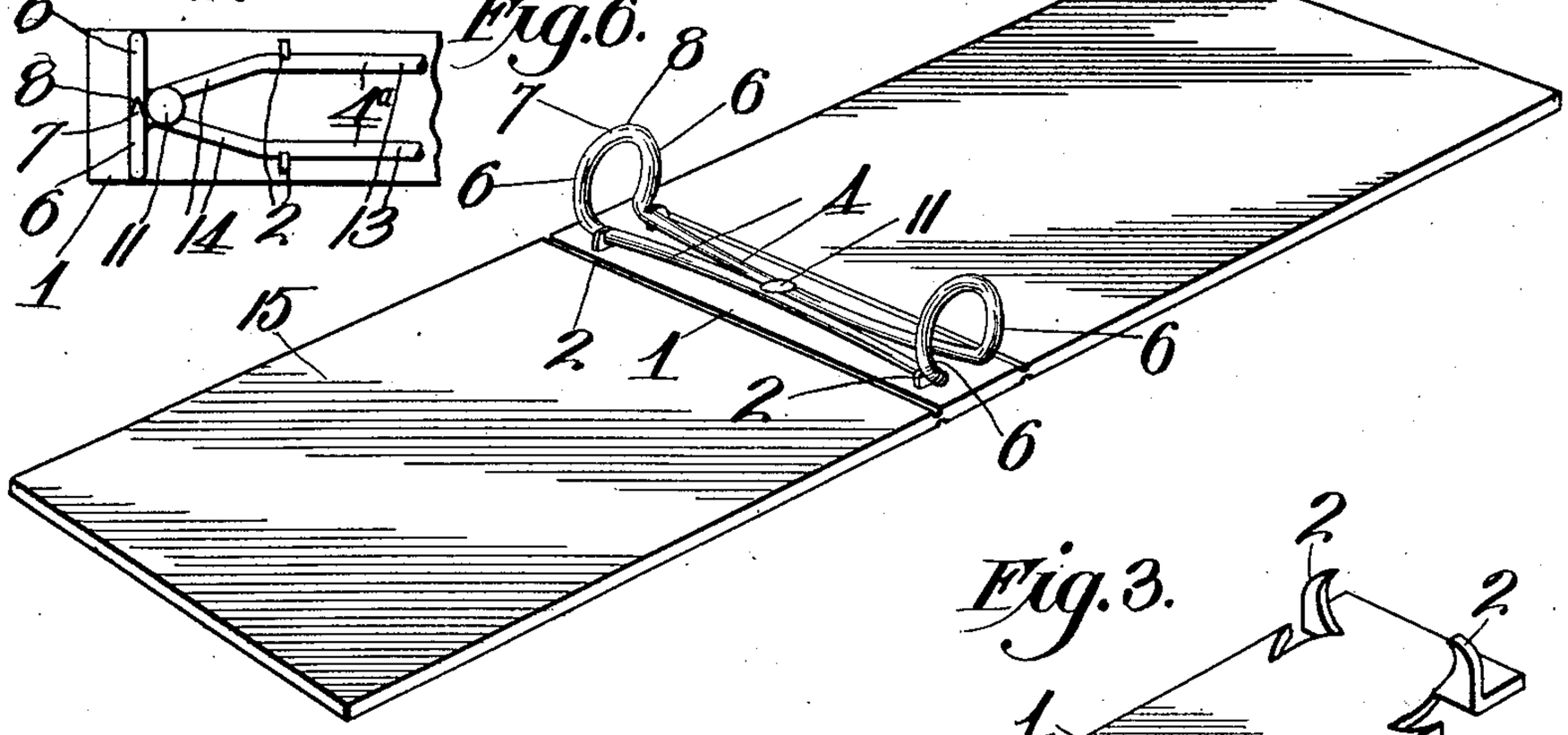


Fig. 3.

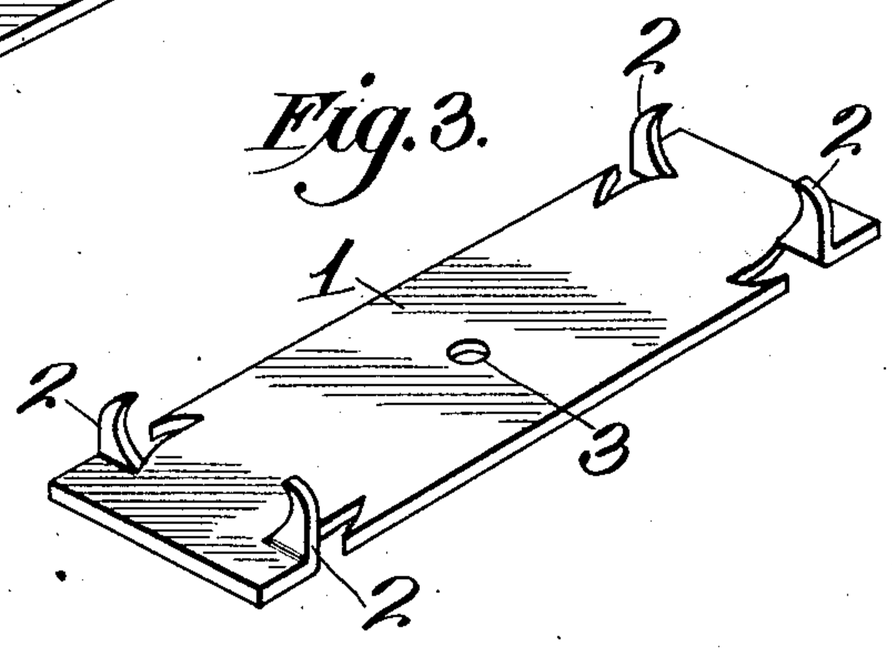


Fig. 2.

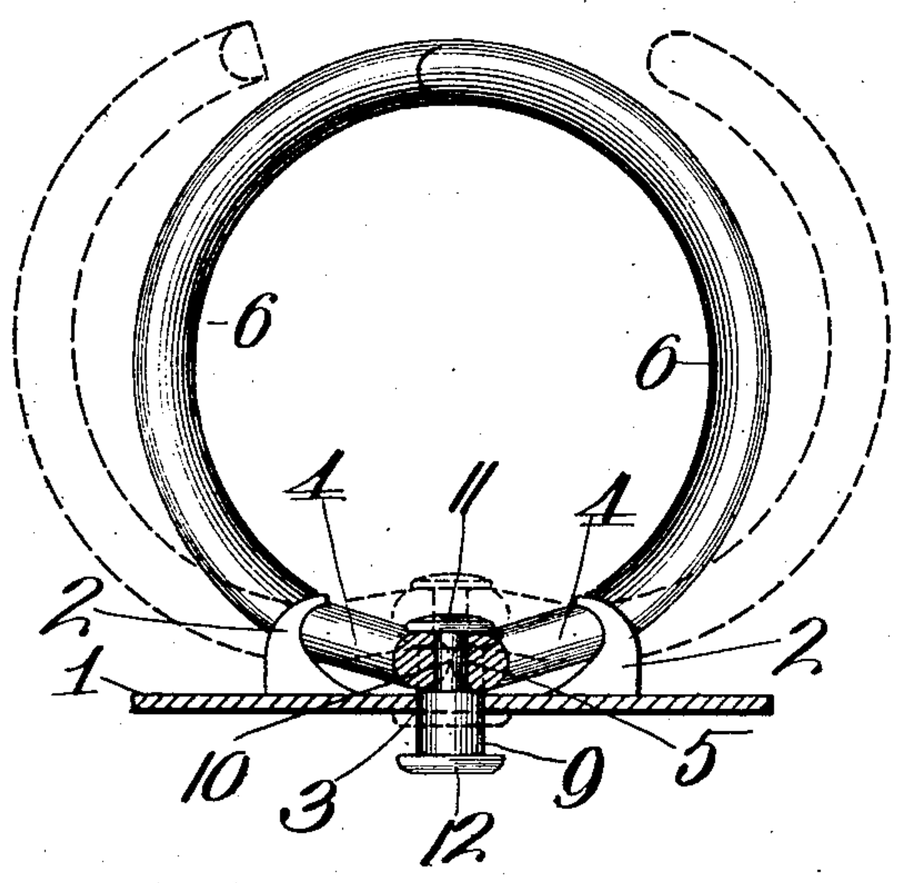
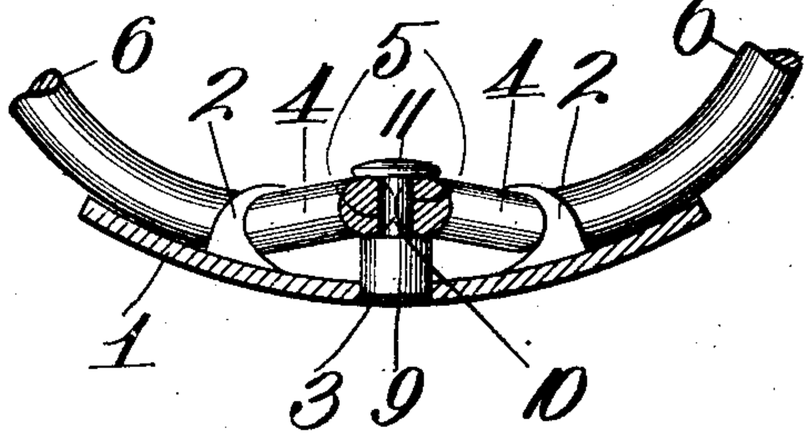


Fig. 4.



Witnesses

Frank R. Glover

H. C. Rodgers.

Inventor

Chas. Forgerson

By Gregg & Thorpe Atty.

UNITED STATES PATENT OFFICE.

CHARLES FORGERSON, OF ROSEDALE, KANSAS, ASSIGNOR OF ONE-HALF TO CLYDE S. LEAVENGOOD, OF ROSEDALE, KANSAS.

LOOSE-LEAF BOOK.

997,985. Specification of Letters Patent. Patented July 18, 1911.

Application filed April 22, 1911. Serial No. 622,808.

To all whom it may concern:

Be it known that I, CHARLES FORGERSON, a citizen of the United States, residing at Rosedale, in the county of Wyandotte and State of Kansas, have invented certain new and useful Improvements in Loose-Leaf Books, of which the following is a specification.

This invention relates to loose leaf ring books, and my object is to produce a simple and inexpensive device of this character which will operate efficiently and reliably.

To this end the invention consists in certain novel and peculiar features of construction and organization as hereinafter described and claimed, and in order that it may be fully understood reference is to be had to the accompanying drawing, in which—

Figure 1, is a perspective view of a loose leaf book embodying my invention. Fig. 2, is an enlarged central cross section of the same with the cover omitted. Fig. 3 is a detail perspective view of the mounting or base plate of the device. Fig. 4, is a fragmentary view corresponding to Fig. 2, but showing the mounting or base plate of curved or channeled form. Fig. 5, is a side view of a modified form of construction. Fig. 6, is a plan view of one end of the construction shown by Fig. 5.

In the said drawing, 1 indicates a base plate of flat or channeled form as shown and 2 are bearing lugs projecting upward from the base plate, there being an opposing pair of lugs near each end of the plate. The lugs are of hook form and face inwardly. At the center of the plate in the preferred construction, an opening 3 is provided, and arranged longitudinally upon the plate is a pair of spring rods 4. In the preferred construction these rods bow toward each other and are provided midway their length with notches 5 in their opposing sides. Near their extremities they bear or are journaled in the inner sides of the bearing lugs at opposite sides of the longitudinal center of the plate and outward of said lugs the rods terminate in outwardly bowed hooks 6, one pair of said hooks terminating in V-shaped ends 7 and the other in correspondingly shaped notches 8, for the reception of said V-shaped ends so that the hooks shall form a pair of smooth rings when interlocked by the engagement of ends 7 with notches 8.

9 indicates a pin fitting slidingly in opening 3 and provided with a reduced upper end 10 engaging the notches 5 in rods 4, and the reduced portion of the pin is provided with a head or enlargement 11, which in conjunction with the body of the pin maintains the rods in operative connection with the reduced portion or neck of the pin and thus compels the rods to move in unison.

By reference to Figs. 2 and 4 it will be seen that when the hooks are interlocked together, as shown in Fig. 1, and in full lines Fig. 2, the central portions of the rods 4 occupy a position below the plane of the extremities of said rods and hence being under tension hold the hooks interlocked under a yielding pressure. When the hooks are grasped and swung apart, the tension on the rods 4 is increased until their central portions attain the same horizontal plane as their extremities and as such plane is passed the tension on the rods causes them to continue their upward movement and complete the separation of the hooks as indicated, in dotted lines Fig. 2, and full lines Fig. 4, and in this connection it will be noticed that such opening movement in Fig. 4, is arrested by the contact of the lower portion of the hooks with the base plate. In Fig. 2, the opening movement is arrested by the contact of the head 12 at the lower end of the pin, with the base plate. If desired the hooks 6 may be separated by exerting upward pressure on the pin instead of by grasping the hooks and pulling them apart.

In Fig. 5, the principle of construction involved is the same as in Figs. 1 to 4 inclusive. In said figures the rods 4^a corresponding in function to rods 4 are reversely bowed and at each extremity of their bowed portions a pin 9 is employed, the pins being disposed outward of the bearing lugs. In action the portions 13 extending from bearing lug to bearing lug constitute the axes of movement and the converging portions 14, outward thereof, rock upwardly and downwardly to effect the opening or closing movement of the hooks, moving to a plane above the points of engagement with the bearing lugs in the opening movement

and below such plane in the closing movement.

The book is provided with a cover 15 secured in any suitable manner to the mounting or base plate.

From the above description it will be apparent that I have produced a loose leaf ring book possessing the features of advantage enumerated as desirable and while I have illustrated and described the preferred embodiment of the invention I wish it to be understood that I do not desire to be restricted to the exact details of construction shown and described as obvious modifications will suggest themselves to one skilled in the art.

I claim:—

1. A loose leaf book comprising a mounting or base plate provided at each side of its longitudinal center with a pair of upwardly projecting bearing lugs, reversely bowed rods arranged longitudinally of the base plate and journaled on said lugs and provided with oppositely bowed hooks, and means movable with the portions of the rods which rise above and fall below the bearing points thereof, to compel the rods to move in unison.

2. A loose leaf book comprising a mounting or base plate provided at each side of its longitudinal center with a pair of upwardly projecting bearing lugs, reversely bowed rods arranged longitudinally of the base plate and journaled on said lugs and provided with oppositely bowed hooks, and a pin fitting slidingly in the base plate and arranged between and engaging said rods to insure upward and downward movement thereof in unison as the hooks are moved apart or toward each other, the terminals of the hooks in the latter movement being adapted to come together endwise to constitute rings.

3. A loose leaf book, comprising a mounting or base plate, provided at each side of its longitudinal center with a pair of upwardly projecting bearing lugs, reversely bowed rods arranged longitudinally of the base plate and journaled on said lugs and provided with oppositely bowed hooks, and a pin fitting slidingly in the base plate and arranged between and engaging said rods to insure upward and downward movement thereof in unison as the hooks are moved apart or toward each other, and provided with a head at its lower end to engage the underside of the base plate and limit the opening movement of the hooks, the terminals of the hooks in the downward movement of the rods being adapted to come together endwise to constitute rings.

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

CHARLES FORGERSON.

Witnesses:
HELEN C. RODGERS,
G. Y. THORPE.