

No. 806,873.

PATENTED DEC. 12, 1905.

J. W. CROWDER.
BINDER FOR BOOKS.
APPLICATION FILED MAY 1, 1905.

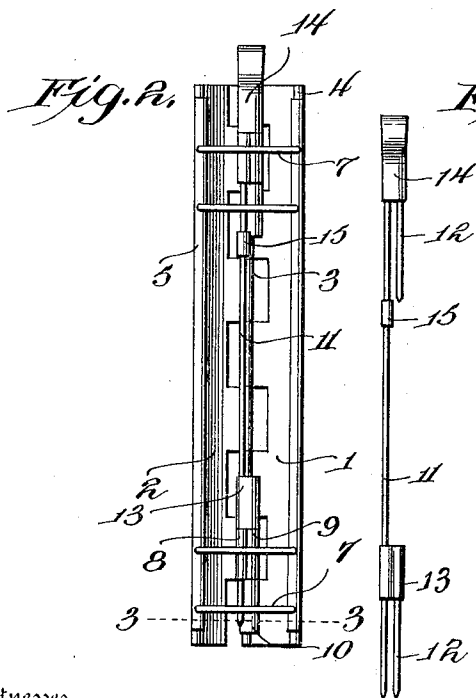
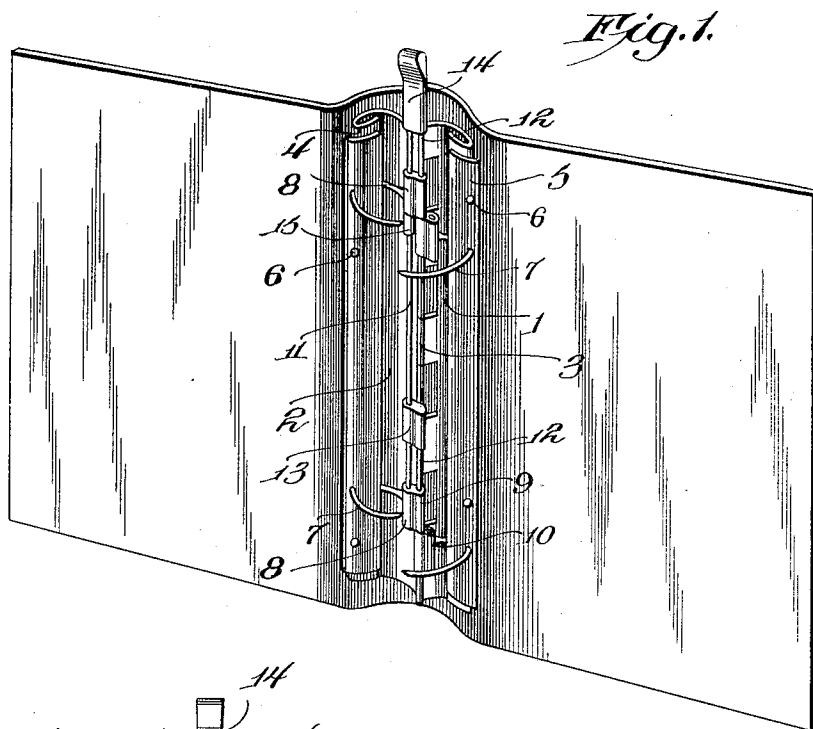


Fig. 4.

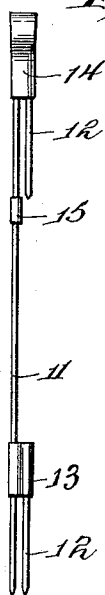
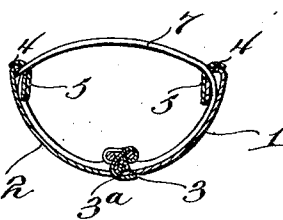


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOSEPH WADE CROWDER, OF CELINA, TEXAS, ASSIGNOR OF ONE-HALF
TO W. W. SIMMONS, OF CELINA, TEXAS.

BINDER FOR BOOKS.

No. 806,873.

Specification of Letters Patent.

Patented Dec. 12, 1905.

Application filed May 1, 1905. Serial No. 258,355.

To all whom it may concern:

Be it known that I, JOSEPH WADE CROWDER, a citizen of the United States, residing at Celina, in the county of Collin and State of Texas, have invented certain new and useful Improvements in Binders for Books; and I do hereby declare the following to be 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 binders for books; and its object is to provide a simple, durable, and attractive device of this character adapted to detachably secure the leaves of a book, so that any one or more of them can be readily removed.

Another object is to provide a binder of this character which permits the leaves engaged thereby to be opened out practically flat.

A still further object is to provide novel locking means for securing the binder in engagement with the leaves, so as to prevent their displacement.

With the above and other objects in view the invention consists of oppositely-disposed plates hinged together and having inwardly-curved prongs adapted to overlap and project into engagement with the opposite sections. A locking-rod is slidably connected to one of the members of the binders and has arms movable with it for engaging ears upon the other member. When these ears are engaged, the two members are locked against independent movement and the prongs of each member project into apertures provided for them in the other member, thereby absolutely preventing displacement of the leaves engaging them.

The invention also consists of the further novel constructions and combinations of parts hereinafter more fully described, and pointed out in the claims.

In the accompanying drawings I have shown the preferred form of my invention.

In said drawings, Figure 1 is a perspective view of my improved binder, the same being shown connected to a cover and opened to receive leaves therebetween. Fig. 2 is a plan view of the binder closed. Fig. 3 is a section on line 3 3, Fig. 2; and Fig. 4 is a detail view of the locking-rod detached.

Referring to the figures by numerals of reference, 1 and 2 are oppositely-arranged channeled strips constituting the two members of

the binders, and these strips are hinged together along their adjoining edges by means of a rod 3^a extending through ears 3, formed integral with said members. The opposite free edges of members 1 and 2 are bent inwardly, as shown at 4, and are covered with strips 5 of chamois or other soft material provided with apertures 6, which register with similar openings formed in the inwardly-curved portions 4. Curved prongs 7 extend from the opposite edges of members 1 and 2 and are parallel. When the two members are open, the ends of these prongs lie on parallel lines, which enables a leaf to be readily placed in or taken from position thereon, but when the members are swung together said ends assume positions within the apertures 6 and serve to positively prevent the displacement of any leaves which may be engaged by them. The prongs 7 are rigidly connected to their respective members and preferably extend through the curved portions 4 thereof and are soldered or otherwise permanently connected to the inner faces of the members, as shown particularly in Figs. 1 and 3.

Rigidly connected to the inner edges of member 2 are a series of parallel sleeves 8 and 9, and sleeves or ears 10 are rigidly connected to the adjoining edge of member 1 and are adapted when the two members are swung toward each other to register with sleeves 9. Slidably mounted in the sleeves 8 is a rod 11, and connected to this rod at proper intervals are locking-arms 12, which are parallel with rod 11. These arms 12 are secured to the rod in any preferred manner, preferably by means of heads 13 and 14, which are rigidly connected to both the rod and the arms. One of the heads 14 is located at one end of the rod 11 and constitutes a handle whereby said rod can be slid longitudinally within its sleeves 8.

A stop-shoulder 15 is formed on rod 11 and is adapted to limit the movement of said rod in one direction by contacting with one of the sleeves 8.

When it is desired to bind together some pages by means of the device herein described, said pages are placed upon the prongs of either member 1 and 2, and said members are then swung together, so that the prongs thereof will move into their respective apertures 6. When the limit of the inward movement of these members is reached, the sleeves 9 will register with sleeves or ears 10. Rod 11 is

then pressed inward by means of its handle 14 and will cause the locking-arms 12 to enter sleeves 9, and the two members will therefore be securely locked against independent movement. The pages engaged by the prongs cannot, therefore, be accidentally displaced and can only be removed by first sliding the arms 12 out of engagement with ears 10 and swinging members 1 and 2 apart, so that a page can be removed from between the ends of the prongs 7. The soft covering 5 upon the edges of members 1 and 2 prevents said members from cutting or otherwise injuring the leaves and also serves to bite upon or firmly hold the leaves where a large number of them are bound within the device. The locking device employed does not necessitate the use of springs or other like devices and is of such small proportions that it can be located at all times out of contact with the bound leaves, which do not, therefore, interfere with its operation. By providing curved prongs which extend above the plane of the edges 4 when the binder is closed the leaves can be spread out practically flat. Moreover, the metallic binder constitutes an excellent grip for enabling the bound leaves to be readily held in the hand. Any suitable form of cover may be connected to the binder, as shown in Fig. 1. The cover can be secured to the binder by rivets or can be detachably connected thereto by ball-and-socket fasteners of the ordinary glove-fastener type.

In the foregoing description I have shown the preferred form of my invention; but I do not wish to limit myself to the precise construction shown, as I am aware that modifications may be made therein without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes as may fairly fall within the scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a binder of the character described the combination with oppositely-disposed members hinged together and leaf-engaging means upon the members; of parallel sleeves rigidly connected to one of the members, a rod slidably mounted in one of said sleeves, a locking-arm rigidly connected to the rod and slidably mounted in the other sleeve, and means rigidly connected to the other member and

adapted to register with and be engaged by the locking-arm.

2. In a binder of the character described the combination with oppositely-disposed members hinged together and curved prongs rigidly connected to said members; of parallel sleeves rigidly secured to one of the members adjacent its hinge, a rod slidably mounted in one of the sleeves, a locking-arm rigidly connected thereto and slidably mounted in the other sleeve, means for manipulating the rod and its arm, and an arm-receiving device rigidly connected to the other member and adapted to register with the sleeve of the locking-arm.

3. In a binder of the character described the combination with oppositely-disposed members hinged together and having inwardly-extending curved prongs rigidly connected thereto, of parallel sleeves rigidly connected to one of the members adjacent its hinge, a rod slidably mounted in one of the sleeves, means for limiting the movement of the rod in either direction, a locking-arm rigidly connected to the rod and slidably mounted in the other sleeve, and an arm-receiving portion rigidly connected to the other member and adapted to register with the sleeve of the locking-arm.

4. In a binder of the character described the combination with oppositely-disposed members movably connected; of non-rotatable locking devices slidably mounted upon one of the members adjacent opposite edges of the members, means upon the other member adapted to be engaged by the locking devices, and a rigid connection between the locking devices for actuating the same in unison.

5. In a binder the combination with oppositely-disposed pronged members movably connected; of sleeves upon one of the members adjacent opposite edges of the members, a locking device slidably mounted within each sleeve, means upon the other member adapted to register with the respective sleeves, and means for simultaneously moving the locking device into, or out of, engagement with the registering means.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH WADE CROWDER.

Witnesses:

W. A. MIXON,
ED JACKSON.