

(No Model.)

J. R. BARRETT.
BINDER.

No. 580,361.

Patented Apr. 13, 1897.

Fig. 1.

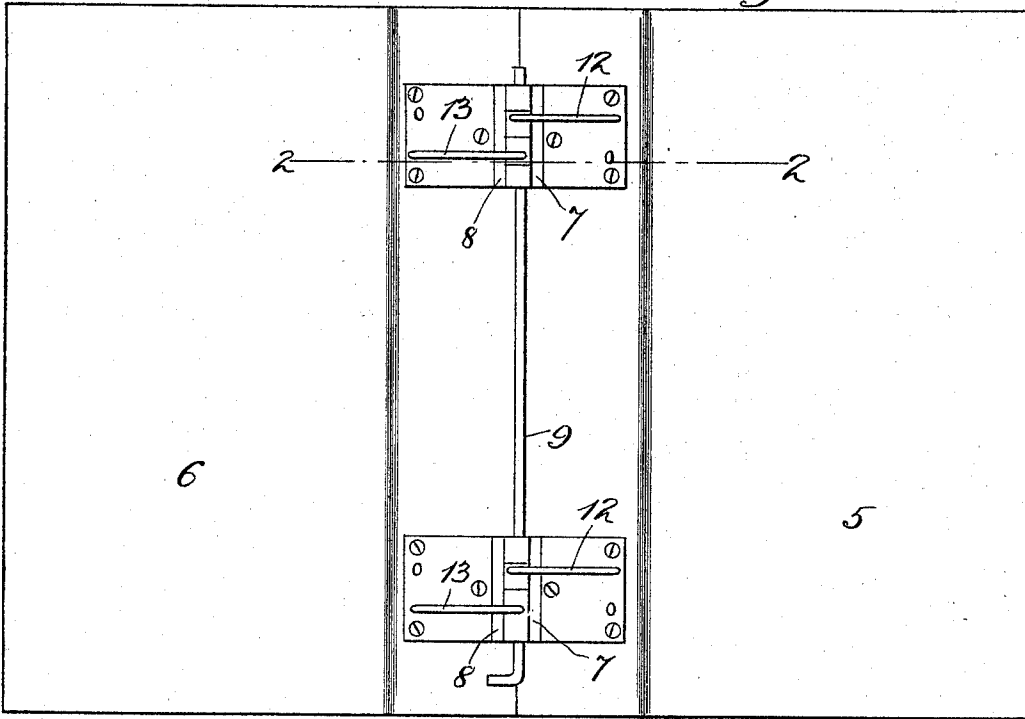


Fig. 5.

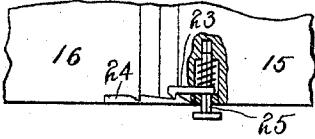


Fig. 2.

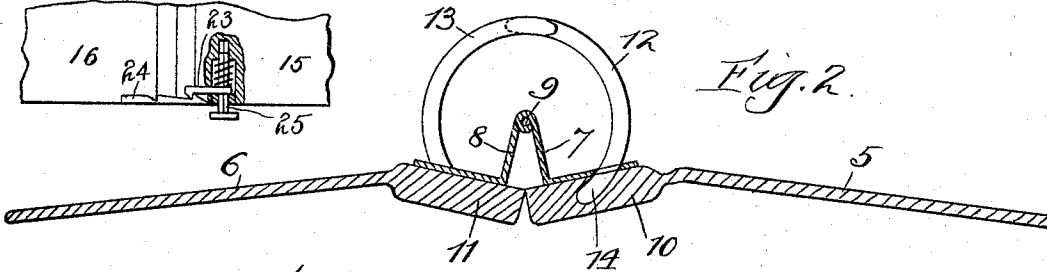


Fig. 3.

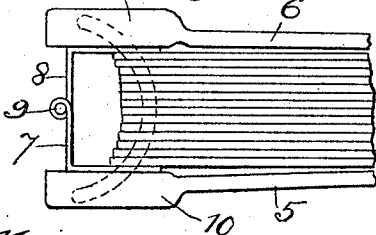
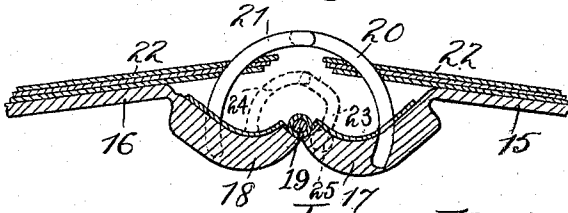


Fig. 4.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN R. BARRETT, OF CHICAGO, ILLINOIS.

BINDER.

SPECIFICATION forming part of Letters Patent No. 580,361, dated April 13, 1897.

Application filed November 21, 1895. Serial No. 569,694. (No model.)

To all whom it may concern:

Be it known that I, JOHN R. BARRETT, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Binders, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view. Fig. 2 is a cross-section on line 2 2 of Fig. 1. Fig. 3 is a partial end view showing the covers closed. Fig. 4 is a partial cross-section showing a modification. Fig. 5 is a detail of the stop.

My invention relates to temporary binders, and particularly to such binders arranged in the form of a book with covers, the leaves being removable. In binders of this class as heretofore constructed the leaves have been secured in place by means of hooks or prongs carried by the covers, such hooks passing through perforations in the leaves. In order to provide for the removal of the leaves, the hooks were made comparatively short, so that when the covers were open the points of the hooks would not overlap, leaving a space through which the leaves could be removed. While many of such binders have been placed upon the market, they have not been entirely successful, owing to the fact that, the points of the hooks being exposed when the book was open, the leaves were apt to become disengaged accidentally, and consequently the ready turning of the leaves was interfered with.

It is the object of my invention to avoid the objection above pointed out and to otherwise improve the construction of binders of this class, which object I accomplish as illustrated in the drawings and as hereinafter specified.

That which I regard as new will be set forth in the claims.

In the drawings, 5 6 indicate the covers of the binder, which, in the form shown in Figs. 1 to 3, are pivotally secured together by hinges consisting of two angular plates 7 8, secured to the covers and connected by a removable pintle 9. As shown in Fig. 2, the covers 5 6 are provided with thickened inner portions 10 11, to which the plates 7 8 are secured. Such thickened portions of the covers are flexibly connected to the covers proper, as

shown in Fig. 2. When the covers are open, the thickened portions abut, forming stops to limit the extent of their movement, the object of which is to prevent the points of the retaining-hooks (hereinafter referred to) from separating, which would permit the accidental displacement of the leaves. The extent to which the covers may be opened before the thickened portions abut is determined by the distance which the hinge-plates are set in from the edges of such covers, and may be varied as desired.

The hinge-plates 7 each carry hooks 12, which are curved in the arc of a circle of which the pintle 9 is the center. The hinge-plates 8 also carry hooks 13, similarly curved. The length of the hooks is such that when the binder is open they will overlap slightly, so as to form at each hinge in effect a continuous guide or holder for the leaves, thus permitting them to be freely turned, as in an ordinary book, without danger of becoming displaced.

In order to provide for the proper closure of the binder, the inner portions 10 11 of the covers are provided with recesses 14 to receive the ends of the hooks, as indicated by the dotted lines in Fig. 3. In the form of binder shown in Figs. 1, 2, and 3 in order to readily remove the leaves it is necessary to withdraw the pintle 9, thus separating the covers. Inasmuch, however, as it would usually be more or less inconvenient to remove the pintle, I have provided a more improved form of binder which will combine all the advantages of the construction above set forth, but in which it will not be necessary to remove the pintle in order to permit the removal of the leaves, which form is illustrated in Fig. 4. In the binder illustrated in Fig. 4 the covers 15 16 of the binder are provided with curved inner portions 17 18, which are hinged directly together by a curved hinge 19, as shown. The retaining-hooks 20 21 overlap when the book is open, forming a continuous guide for the leaves 22, as in the construction first described. In order to limit the extent to which the book is normally opened, a stop is provided, consisting of catches 23 24, which engage each other to form a stop, such catches being adjusted to prevent excessive opening of the binder and consequent separation of the points of the retaining-

hooks. By this means there is no danger of the leaves becoming accidentally displaced. To provide for further opening the binder for the removal of the leaves, a pin 25 is provided, which is connected to the catch 23, by pressing which pin the operator may disengage the catches 23 24, thereby permitting such further opening of the binder. The form of binder illustrated in Fig. 4 is further advantageous in that it provides for a solid back when the binder is closed, thereby securing a more ornamental appearance and inclosing the back, so that dust and dirt do not have ready access to the back of the leaves. It will be understood that the construction illustrated may be modified without departing from the spirit of my invention.

That which I claim as my invention, and desire to secure by Letters Patent, is—

1. In a binder, the combination with covers pivotally connected together, of retaining-hooks carried by and moving with each of said covers when said covers open and close, the hooks of the two covers being arranged to normally overlap both when the covers are open and when they are closed, substantially as described.
2. In a binder, the combination with covers pivotally connected together, of retaining-hooks carried by and moving with each of said covers when said covers open and close, the hooks of the two covers being arranged to normally overlap both when the covers are open and when they are closed, and sockets in said covers for receiving the ends of said hooks, substantially as described.
3. In a binder, the combination with covers

pivotally connected together, said covers having thickened inner portions, and sockets in the thickened portions of said covers, of retaining-hooks carried by each of said covers, the hooks of the two covers being arranged to normally overlap both when the covers are open and when they are closed, substantially as described.

4. In a binder, the combination with covers pivotally connected together, of retaining-hooks carried by each of said covers, the hooks of the two covers being arranged to normally overlap both when the covers are open and when they are closed, and a stop for limiting the extent to which the covers are normally opened, substantially as described.

5. In a binder, the combination with covers pivotally connected together, of retaining-hooks carried by each of said covers, the hooks of the two covers being arranged to normally overlap both when the covers are open and when they are closed, a stop for limiting the extent to which the covers are normally opened, and means for throwing said stop out of operation, substantially as described.

6. In a binder, the combination with covers having curved inner portions hinged together, of retaining-hooks carried by said covers, the hooks of the two covers being arranged to normally overlap both when the inner portions of the covers are open and when they are closed, substantially as described.

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Witnesses:

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A. H. ADAMS.