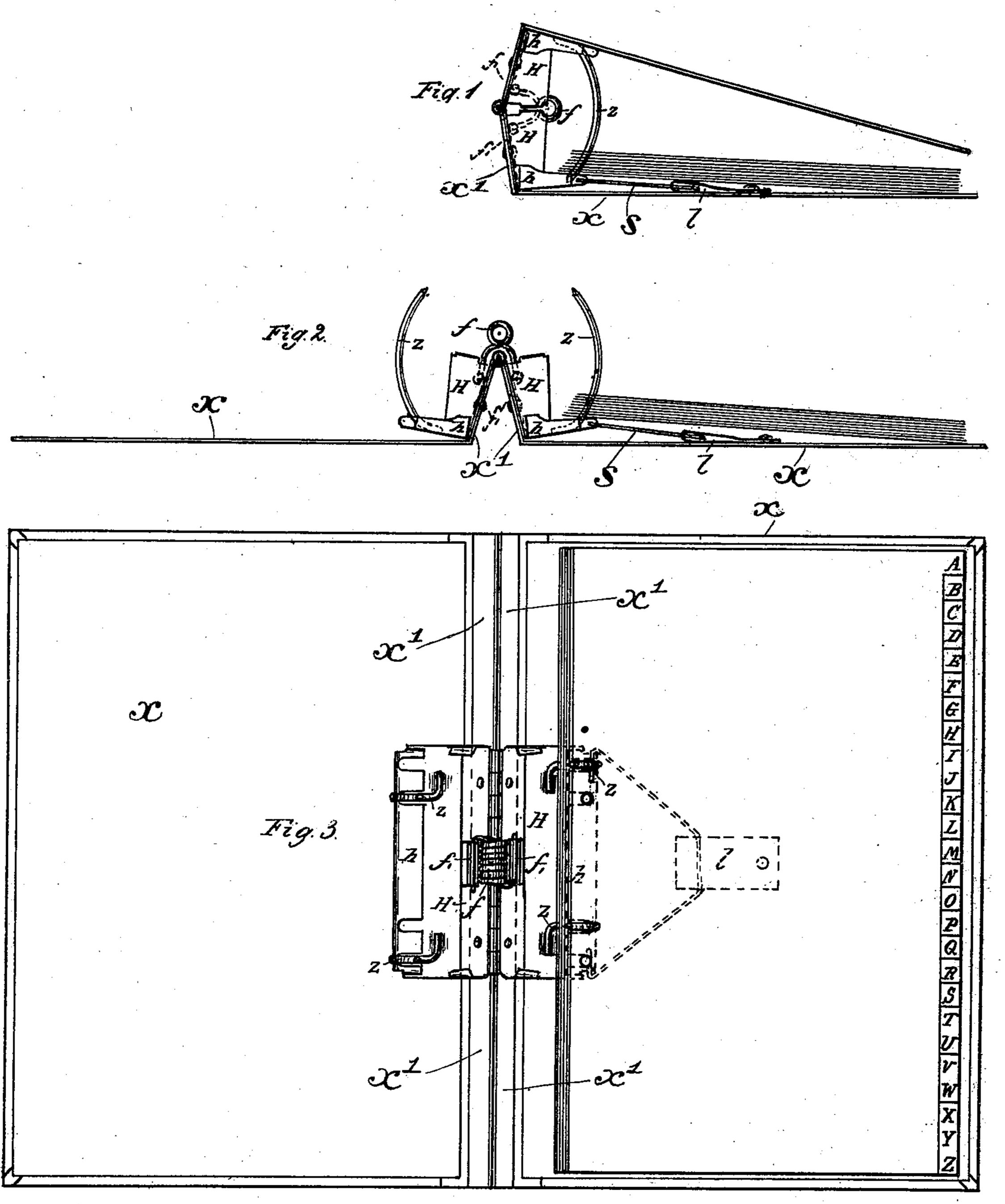
O. ASSMANN.

BINDER FOR LOOSE SHEETS OF PAPER, &c.

No. 504,317.

Patented Sept. 5, 1893.



Witnesses: Hapluyin

I. Dittiman

Inventor

Oswald assmann

By J. Sthmar

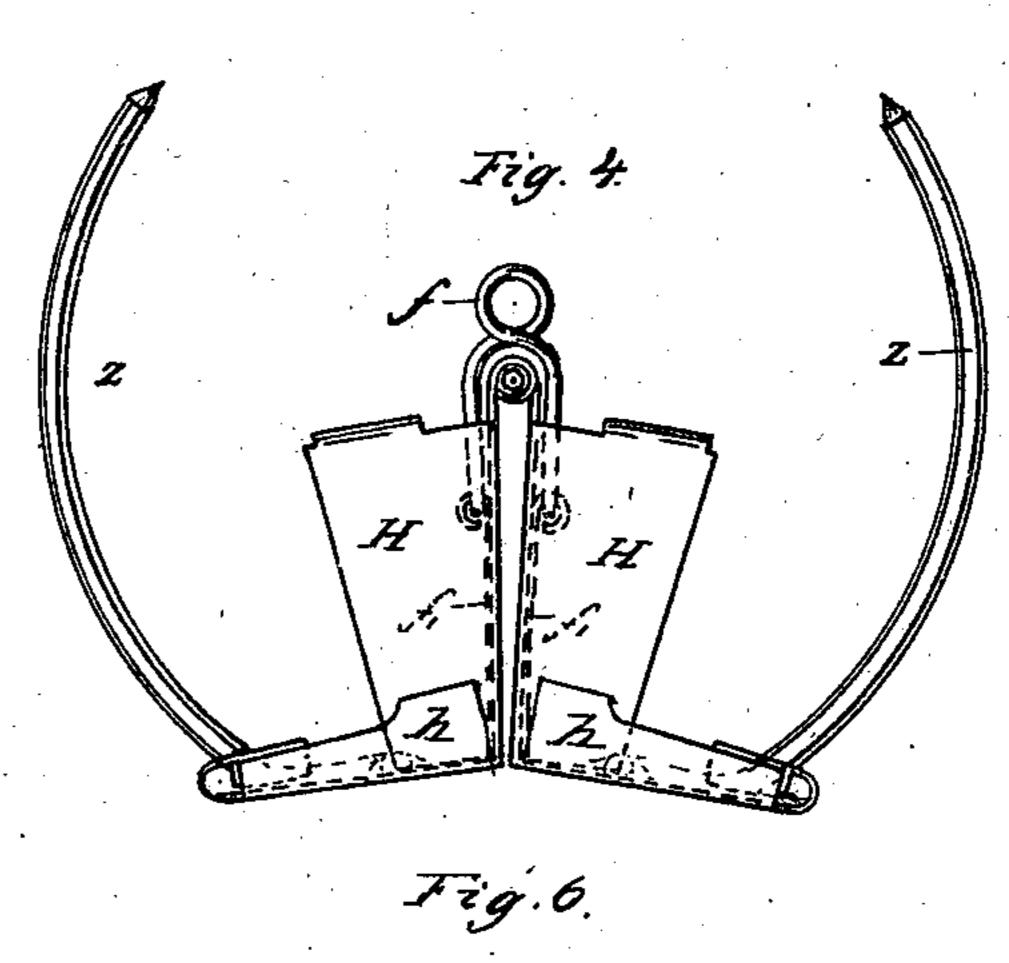
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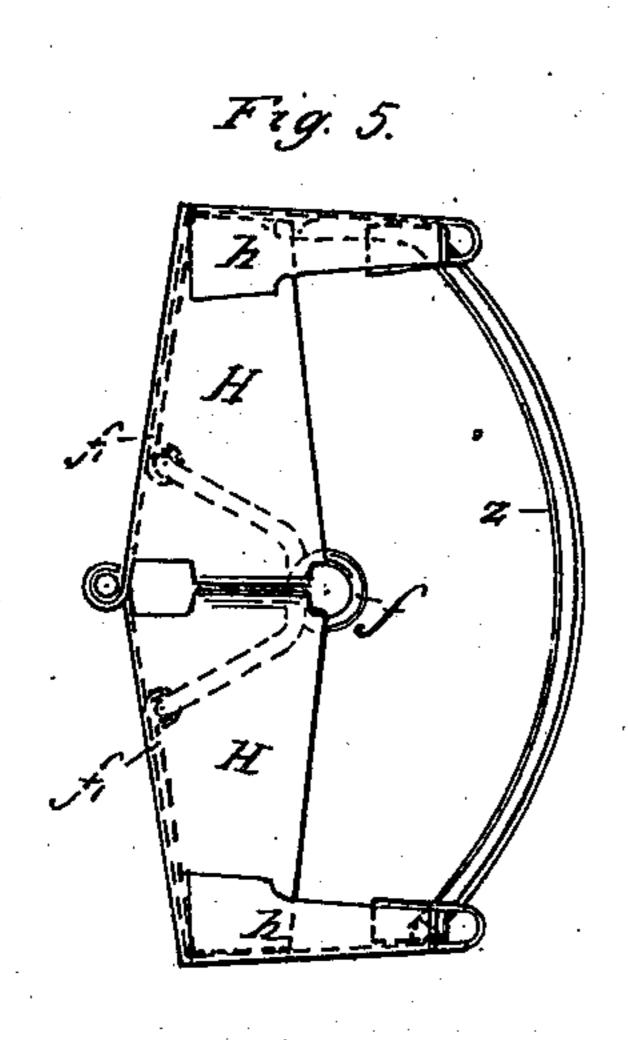
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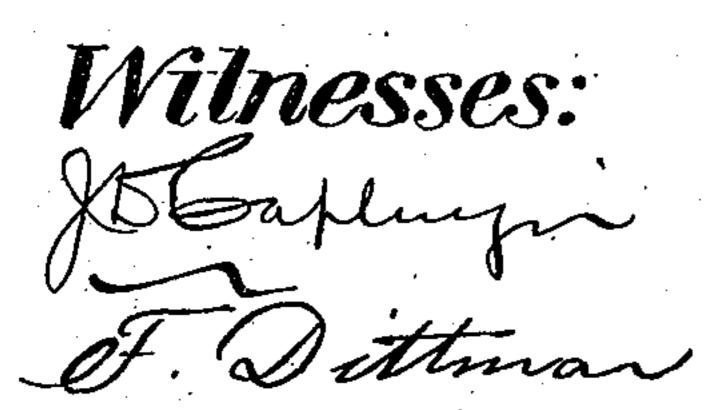
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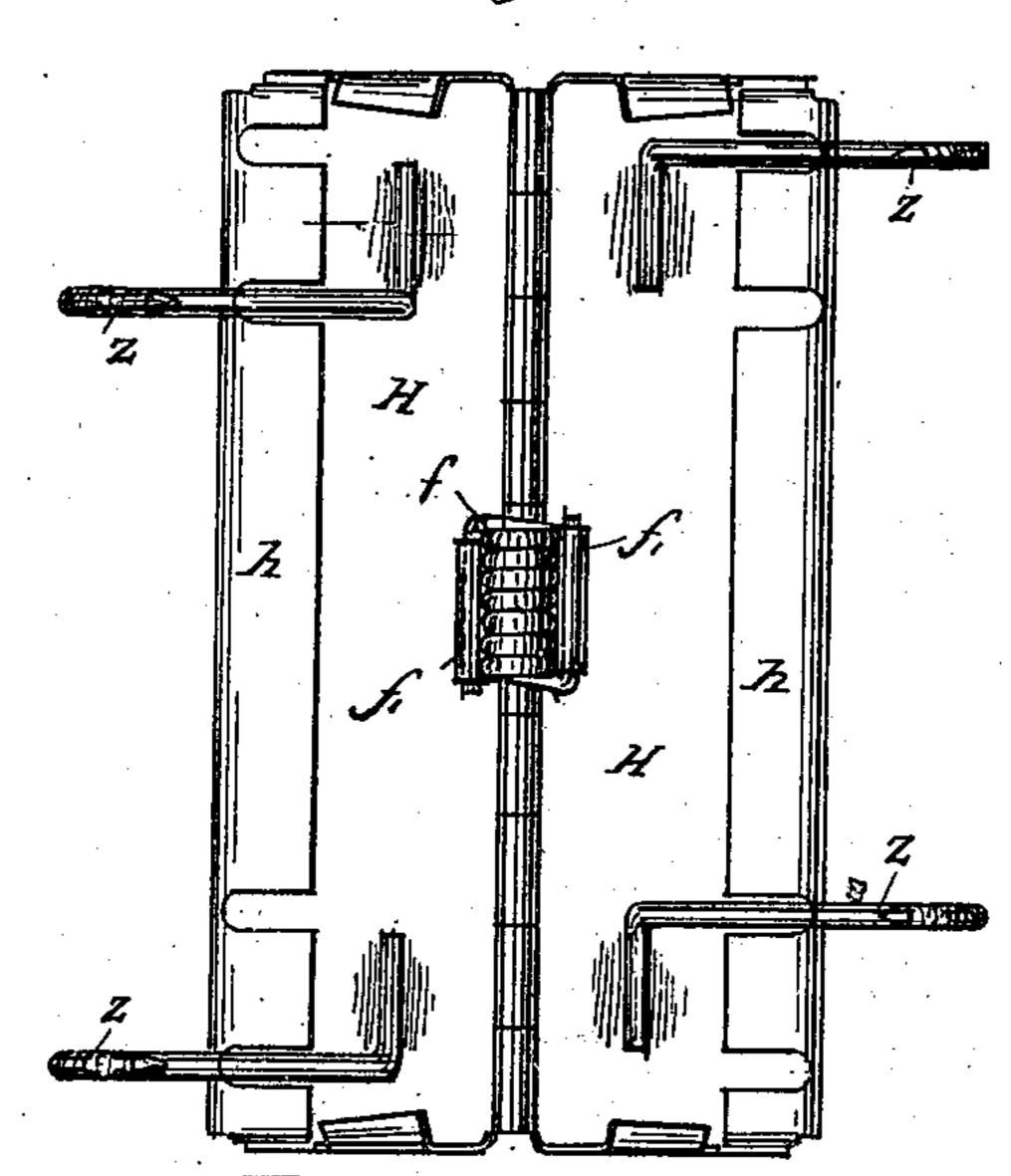
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Dewald Asemann By G. Sittman Atty

United States Patent Office.

OSWALD ASSMANN, OF TEGELEN, NETHERLANDS.

BINDER FOR LOOSE SHEETS OF PAPER, &c.

SPECIFICATION forming part of Letters Patent No. 504,317, dated September 5, 1893.

Application filed March 1, 1893. Serial No. 464,163. (No model.)

To all whom it may concern:

Be it known that I, OSWALD ASSMANN, a subject of the Queen of the Netherlands, residing at Tegelen, Netherlands, have invented 5 certain Improvements in Binders for Loose Sheets of Paper, Letters, &c., of which the following is a specification.

My invention relates to certain improvements in binders for loose papers, letters, &c., ro and the object of my invention is to provide a device of this character, of a simple and convenient construction, and one whereby

the papers may after binding be readily separated for reference, all as will be hereinafter 15 fully described.

The novel features of my invention will be

carefully defined in the claims.

In the accompanying drawings Figure 1 is an end view of the binder closed and Fig. 2 20 is a similar view showing the binder open. Fig. 3 is a plan view of the binder as seen in Fig. 2, and Fig. 4 is an enlarged end view of the binding device proper with the cover omitted, the parts being represented as seen 25 in Fig. 2. Fig. 5 is a similar view showing the parts in the position seen in Fig. 1 and Fig. 6 is an enlarged plan similar to Fig. 3.

x, x are the two covers of the binder connected at one edge to a back x', composed of

30 two hinged sections, as clearly seen.

H, H, are two blocks, hinged together at their edges, said blocks being secured at the center of the back, x', one to each section thereof. Each block is provided with pro-35 jecting arms h, h, to the outer edge of each of which is secured two curved and pointed blades z, z, lying in parallel planes concentric with the hinge-pin of the sections. A coil spring f, is secured at its opposite ends 40 to the respective sections H, said spring being mounted in a central opening in the sections, and having its ends inclosed in loops f' formed at the edges of said opening. Thus it will be seen said spring tends, when dis-45 tended in closing the binder, to keep the same closed, and when the strain is removed from it by opening the binder as seen in Figs. 2 and 5, said spring holds it open. The holes having been punched, the sheet is applied 50 over two of the blades z on one cover, and the blades z on the other cover will pass through the remaining holes when the binder is closed.

In order to provide a space under the sheets for the fingers to enter in turning the sheets, 55 a wire s is provided bent to an angular form, its ends engaging openings in the plate h, and its center engaging a suitable clip l, mounted on the inside of the cover x at a proper point. By this means it will be seen 60 that when the binder is closed the wire s will lie flat along the cover of the same as seen in Fig. 1 and when open will raise the several sheets up from the cover as seen in Fig. 2. This device also acts as a brace or stay to 65 prevent the cover being wrenched from the back for which purpose one may be placed on each cover.

My invention is susceptible of various modifications in the construction and arrange- 70 ment of the parts and for this reason I do not wish to be understood as limiting myself to the precise form herein shown and described.

Having thus described my invention, I claim—

1. In a binder, the combination with the hinged covers, of a pair of blocks hinged together and secured to the respective covers, each of said blocks being provided with two curved blades said blades being parallel with 80 one another and concentric with the hinge pivot of the cover and a spring secured at one end to each block substantially as set forth.

2. The combination with the covers, of the hinged blocks each secured to one of said 85 covers, said blocks having a central opening extending through the hinge pivot, curved blades mounted on the respective blocks, and a spring arranged in the opening in and secured at each end to one of said plates, sub- 90

stantially as set forth.

3. The combination with the covers, of the hinged blocks secured thereto, curved blades mounted on said blocks, and a brace, secured at one end to one of said blocks and at its 95 other end to one of said covers, substantially as set forth.

In witness whereof I have signed this specification in presence of two witnesses.

OSWALD ASSMANN.

Witnesses:

P. HOLTHINPEN,

C. U. NILLEBRANDT.