

(Model.)

H. H. HOFFMANN.

BOOK BINDING.

No. 264,878.

Patented Sept. 26, 1882.

Fig. 1.

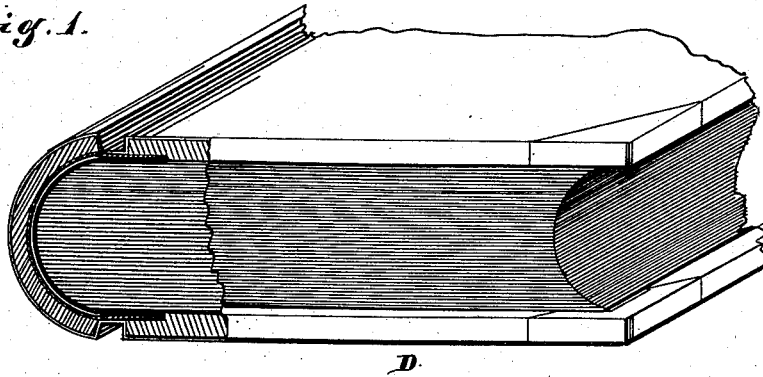


Fig. 4.

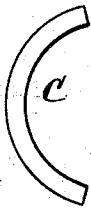


Fig. 3.

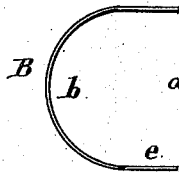


Fig. 2.

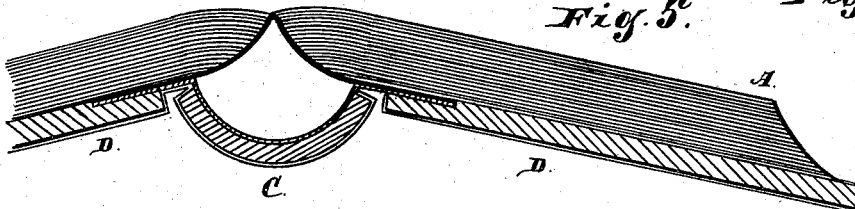
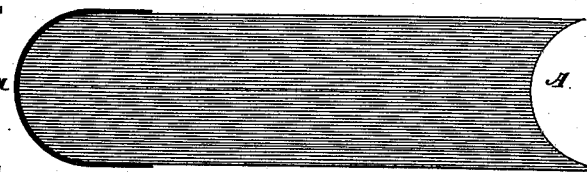


Fig. 5.

Fig. 7.

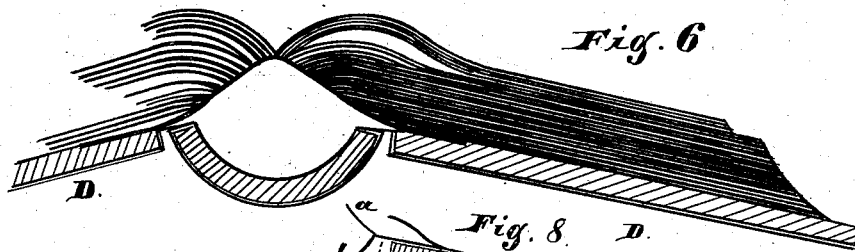
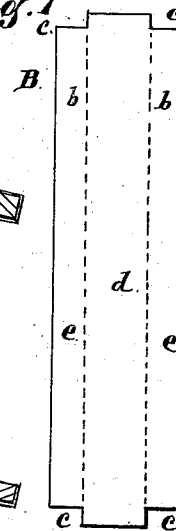


Fig. 6.



Fig. 8.

Witnesses:

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UNITED STATES PATENT OFFICE.

HERMAN H. HOFFMANN, OF CHICAGO, ILLINOIS.

BOOK-BINDING.

SPECIFICATION forming part of Letters Patent No. 264,878, dated September 26, 1882.

Application filed March 27, 1882. (Model.)

To all whom it may concern:

Be it known that I, HERMAN H. HOFFMANN, residing at Chicago, in the county of Cook and State of Illinois, and a citizen of the United States, have invented a new and useful Improvement in Book-Binding, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective, some parts being shown in section. Fig. 2 is an end elevation, showing a book proper which is to be bound, to the back of which a leather strap has been applied. Fig. 3 represents an end view of a piece of press-board or other strong suitable material, which I apply and use as hereinafter set forth. Fig. 4 is an end view of the back of the cover. Fig. 5 is an end view of an open book embodying my invention, some parts being shown in section. Fig. 6 is an end view of an open book bound in the old style. Fig. 7 is a plan view of the piece of board or other material from which the piece shown in Fig. 3 is formed. This figure is reduced in size. Fig. 8 is a detail.

My invention is primarily designed to be used in binding heavy blank books. As such books have heretofore been bound when the book is open the leaves assume a position similar to that represented in Fig. 6, and it is difficult to write at or near the center of the book. The covers of such heavy books, when bound in the old way, are liable to become loose and to break at the points nearest the back, the back and covers being held together mainly by the leather strapping, and when the book is open the outer sections are not held down to the back, but spring away therefrom, as represented in Fig. 6.

The objects of my invention are to so bind heavy blank books that when they are open at any place the leaves upon the two sides will lie down nearly flat at the center, thus rendering it much more easy to write at or near the center of the book, and also to make the binding more durable. These objects I accomplish in the manner and by the means which I will now proceed to describe in detail.

In the drawings, in Fig. 2, A represents such a book with a leather strap, *a*, permanently applied thereto in the usual manner. I then measure the distance around the curve of the

back of the book A, from one outside section to the other, and then take a piece of tough press-board, B, or other suitable strong material wide enough to cover the back proper of the book A and also extend about three inches upon each side thereof, and long enough to extend the whole length of the back, and then fold over the press-board B along the dotted lines *b*, Fig. 7, the distance between such lines and folds being equal to the distance from one extreme outer section of the back to the other. I also cut out notches *c* at the ends of the press-board, as shown in Fig. 7, to allow for turning in the covering of the book. For convenience I letter the central portion of this piece of press-board, which passes over the back proper of the book A, *d*, and the two parts outside of the dotted lines *b*, I designate by the letter *e*.

Having prepared the piece of press-board B, as described, I firmly glue the parts *c* to the ends of the strapping *a*—that is, to those parts of the strapping which extend over the sides of the book A; but the center portion, *d*, of the press-board I do not glue to the strapping *a*. When this has been done the ends *e* of the press-board back, the corresponding ends of the leather strapping *a*, and the ends of the parchment to which the book A was sewed will all be glued together, forming one solid piece. I then glue these parts—that is to say, the parts *e* of the press-board back, the corresponding parts of the strapping *a*, and the ends of the parchment to which the book was sewed—between the boards which are to form the sides of the covers D of the book, as indicated in Fig. 8. I next take a back, C, formed, as usual, from tar-board, and glue it firmly to the outside of the press-board back B and complete the binding in the usual way, except that I do not put the head-bands upon the book proper, but attach them to the back, giving to the book the usual finished appearance when closed, the head-bands being only ornamental.

The press-board back or strip B is a new feature in book-binding, so far as I know, and this piece performs an important and useful office. Observe that its ends are first glued firmly to the book proper, A, while the central portion is not glued to the back of the book, and this strong back B is also firmly glued to the cover D and to the back proper, C. Now, when the

book is opened it must open as shown in Fig. 5, and the outer section upon each side will be held by the strong back B close to the back C, and cannot spring away therefrom, as in the old style, as indicated in Fig. 6. This necessarily throws up the point at which the book is opened, bringing the leaves nearly flat; and this will be the case when the book is opened at or near the center or at or near the beginning or the end, or at any other point. This press-board back B also adds very greatly to the strength of the binding and the durability of the book, as there is no loose and pliable material between the edges of the back C and the inner edges of the covers D.

I do not limit myself to the use of press-board for the purpose of forming the part B; but parchment or any other suitable strong material may be used for this purpose.

My improvement may be used in binding either large or small blank books having spring-backs. I have actually applied the same to both heavy and light books, and find that the invention is useful in both cases, the results being such as I have described.

After covering the book with leather or canvas, it is customary to use a rounded joint-rod to press the covering down into the joint be-

tween the back and side boards. A square-cornered joint-rod may be used instead of such rounded rod.

I am aware that in binding books the book proper has been provided with an inner flexible cover composed of an outer stiffening-board of nearly equal size to the book, and an inner finishing-sheet, the edges of which project beyond the stiffening-board, so that it can be secured to the finishing covers or lids of the book. Such, however, does not constitute my invention, and is not claimed by me.

What I claim as new, and desire to secure by Letters Patent, is as follows:

As an improvement in binding books, the press-board B, firmly secured to the inner side of the tar-board back C, and having ends *e e*, secured to the inner sides of the book-covers D D, the central portion, *d*, of the press-board being unattached to the back edge of the book and having its ends cut away, to provide for turning in the leather or finishing cover of the binding, substantially as described.

HERMAN H. HOFFMANN.

Witnesses:

E. A. WEST,
ALBERT H. ADAMS.