

S. W. WATERHOUSE.

BOOKBINDER.

APPLICATION FILED OCT. 6, 1910.

985,237.

Patented Feb. 28, 1911.

2 SHEETS—SHEET 1.

Fig. 1.

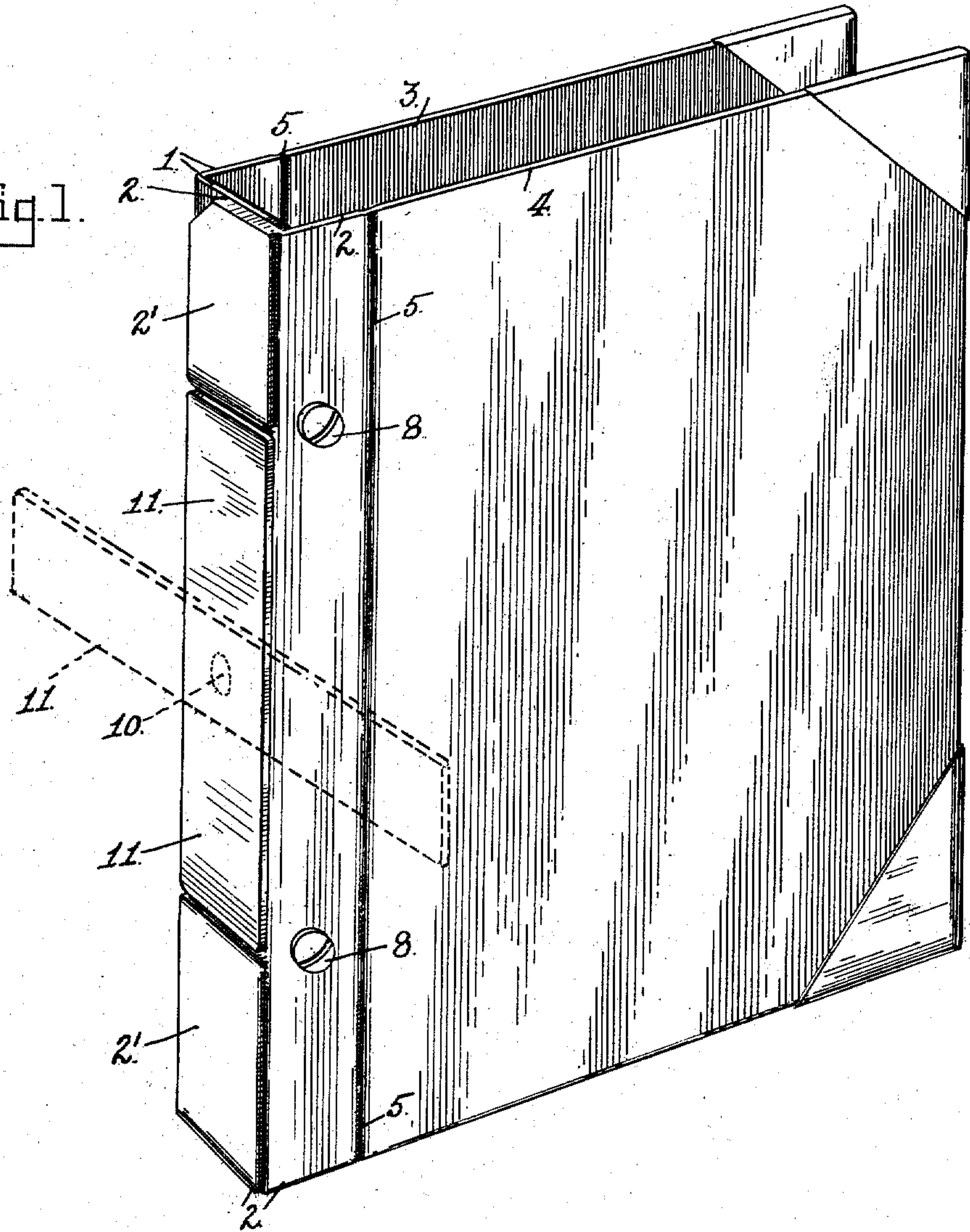
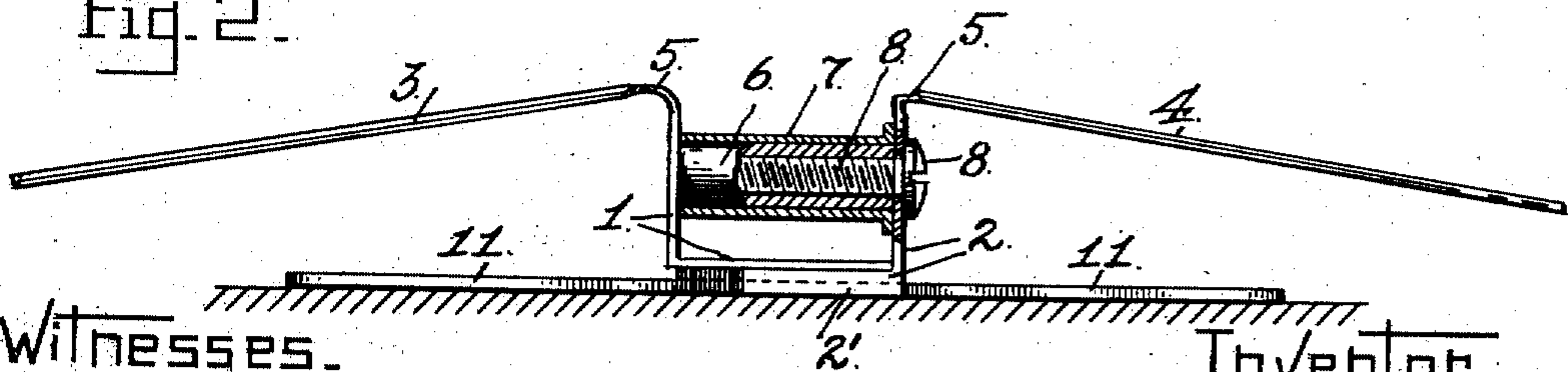


Fig. 2.



Witnesses.

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2 SHEETS-SHEET 2.

Fig. 3.

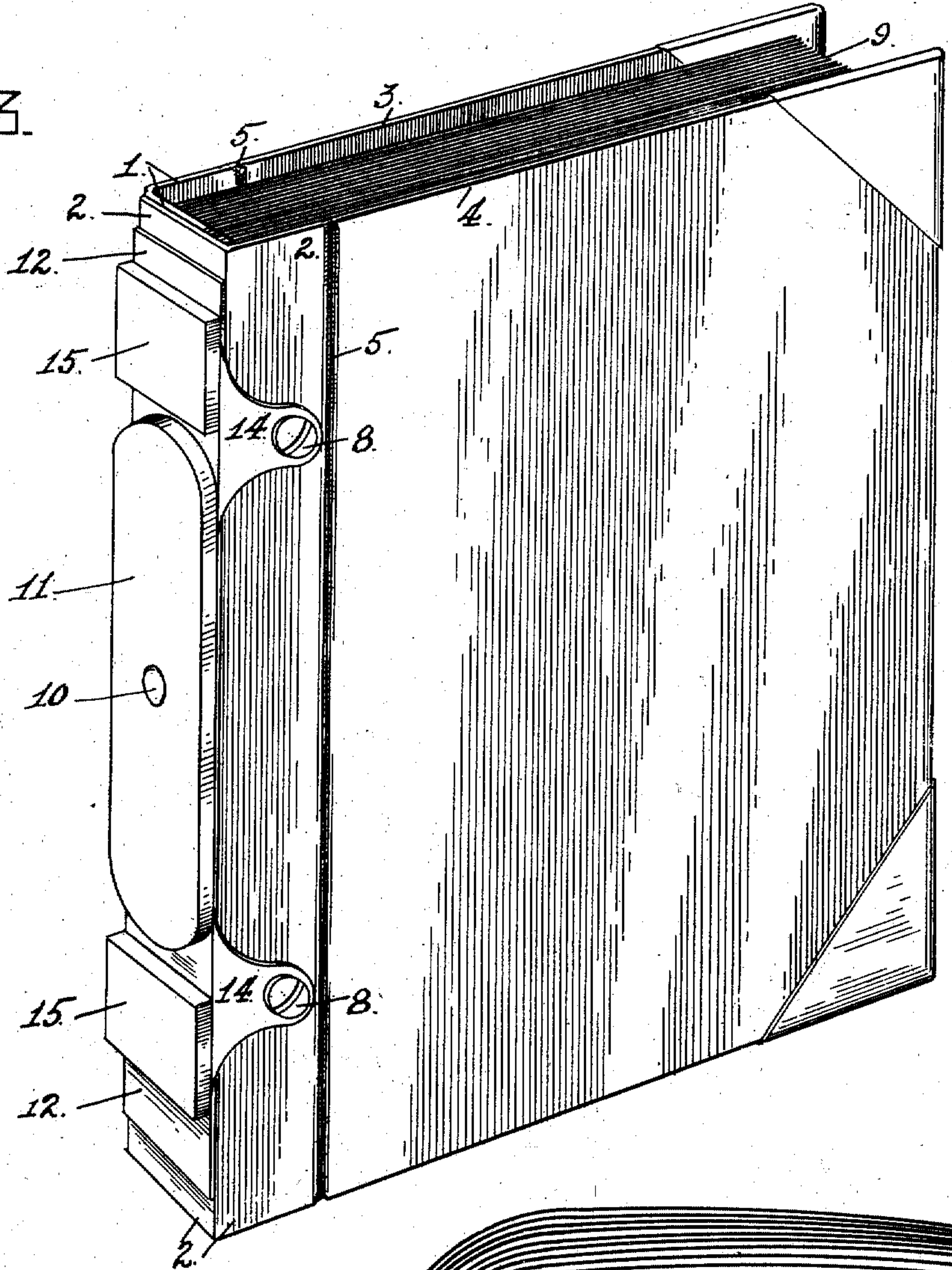
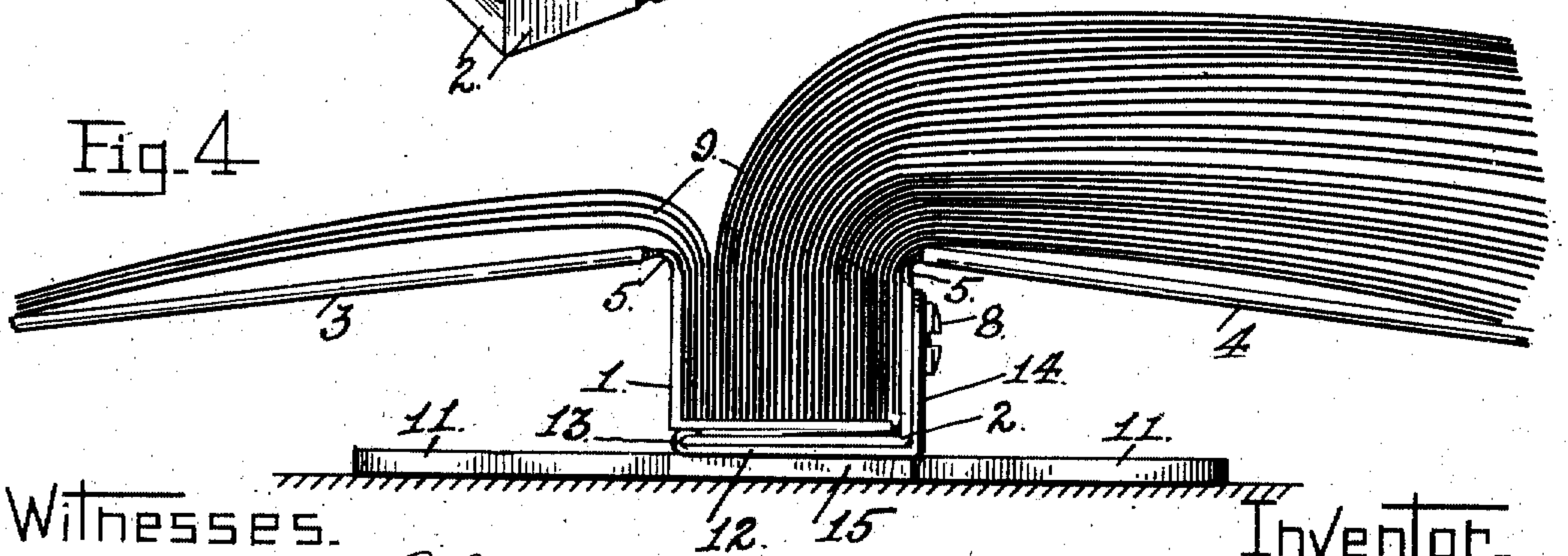


Fig. 4.



Witnesses.

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# UNITED STATES PATENT OFFICE.

SEYMOUR W. WATERHOUSE, OF SAN JOSE, CALIFORNIA, ASSIGNOR TO WATERHOUSE & LESTER CO., OF SAN FRANCISCO, CALIFORNIA, A CORPORATION OF CALIFORNIA.

BOOKBINDER.

985,237.

Specification of Letters Patent.

Patented Feb. 28, 1911.

Application filed October 6, 1910. Serial No. 585,639.

*To all whom it may concern:*

Be it known that I, SEYMOUR W. WATERHOUSE, a citizen of the United States, residing at San Jose, in the county of Santa Clara and State of California, have invented certain new and useful Improvements in Bookbinders, of which the following is a specification.

My invention relates to the class of bookbinders.

My improvement is applicable to binders of various kinds, but more especially to that type of loose-leaf binders in which the side boards are flexibly connected with overlapping back-strips between which suitable leaf-securing devices extend.

The object of my invention is to insure the open position of the book at the desired leaf, without regard to whether said leaf be in the front or the back of the book. This object is attained by holding the back of the binder, under all conditions of open position of the book, perpendicular to the plane of its support, and to this end my invention consists primarily in means connected with the back of the binder adapted to support and maintain said back in said perpendicular position.

It also consists in the novel brace for this purpose, and in the means for applying said brace to the binder, all as I shall hereinafter fully describe by reference to the accompanying drawings, in which—

Figure 1 is a perspective view of a common type of loose leaf binder showing the application thereto of my improvement, the dotted lines showing the operative position of the brace. Fig. 2 is an end view of the binder, showing it open and showing also the functional position and effect of the brace. In this view the leaf securing devices are in section, for the sake of illustration. Fig. 3 is a perspective view of the loose-leaf binder showing my improvement as applied to binders already in use. Fig. 4 is an end view of the binder of Fig. 3, showing it open, the superior weight of leaves being to one side, notwithstanding which the brace holds the back perpendicular to its support, with the effect intended.

The binder comprises the usual angular rigid back strips 1 and 2, the latter being the outermost and overlapping the former, and the side boards 3 and 4 flexibly connected along the lines 5 to the back strips 1

and 2 respectively. Secured to and projecting from the inner face of the side of the back strip 1, as seen in Fig. 2, are the internally threaded studs 6 over which are fitted the sleeves 7, and into which are screwed the binding screws 8 which pass through the back strip 2. Upon the sleeves are to be removably fitted the leaves 9 of the book, said leaves being shown in Fig. 4. This is a well known type of loose-leaf binder.

To understand my improvement it will be well, at this point, to indicate the disadvantage in book-binders which it is the object of my invention to overcome. When the book is opened to expose the leaves in the front portion, the upper board turns back and lies over to the left, but the back of the binder, under the superior weight of the leaves in the back portion of the book, turns over on its side and lies parallel with its support and in line with the lower board. The consequence of this is that the fewer leaves turned open in the direction of the upper board, tend to turn back again and to close down on the greater number of leaves. In other words, the book will not stay open at the desired page due to this position of the rigid back. The same thing occurs, though in a reverse direction, if the book be opened in its back portion. It is only at the approximate middle of the book, that it will stay open, for in this position the two boards lie at substantially right angles to the rigid back which now is and remains perpendicular to its support and as all weight is about equally distributed there is no tendency for the leaves to close or turn. It is this position of parts which my invention is intended to secure, namely the perpendicular position of the back, under all circumstances, so that whether the book be opened in the front, or at the back portion, the back of the binder being firmly held upright, will not tend to throw the leaves of inferior weight over. This result I accomplish as follows:—For new binders, and during their construction, I pivot at 10 to the back face of the overlapping back strip 2, as shown in Fig. 1, the brace 11. When not in use, this brace lies parallel with the back, as shown in full lines in Fig. 1; and in order to let the book when opened lie flat on its back and insure stability, it is best to countersink the brace into the back, a result which is easily attained by providing



the face of the back strip 2, beyond the ends of the brace 11, with projections or raised portions 2', of about the thickness of the brace.

5 To use the brace 11, it is turned at right angles as indicated by the dotted lines in Fig. 1, and then the book is laid flat on its back, and the boards opened as shown in Fig. 2. It will now be seen that no matter  
10 on which side the superior weight of leaves may lie, the brace 11 will prevent the back from lying over to either side, and will hold it perpendicular with the result that there will be no tendency whatever for the leaves  
15 to turn over. This will be true for all portions of the book.

For binders already made, I provide for the ready attachment and application of the brace, as follows:—Referring to Figs. 3 and  
20 4, the brace 11 is pivoted at 10 to a plate 12, which along one edge, as shown in Fig. 4, is formed with a lip 13 adapted to slide upon and engage the free edge of the back of the outer back strip 2, and on its other  
25 side it is formed with ears 14 which lie upon the side of said back strip and receive the binding screws 8. The plate 12 may thus be readily slipped upon and secured to the binder. The outer face of this plate is pro-  
30 vided with the raised portions or projections 15, to permit the binder to rest upon a stable back.

Having thus described my invention what I claim as new and desire to secure by Let-  
35 ters Patent is—

1. In combination with a book-binder, a brace pivotally connected with the back of the binder in position to lie upon and parallel with the back, and to be turned at an  
40 angle thereto to hold said back perpendicular to the plane of its support when the binder is opened, the back of the binder being provided with raised portions to afford stability thereto in said open position.

45 2. In combination with a book-binder, a plate provided with means for securing it to and parallel with the back of the binder,

and a brace pivotally connected with said plate in position to lie upon and parallel with the plate and to be turned at an angle  
50 thereto to hold the back of the binder perpendicular to the plane of its support when said binder is opened, said plate being provided with raised portions to afford stability to the binder back in said open position. 55

3. In combination with a loose-leaf binder having overlapping back strips and leaf securing means including binding screws passing through the side of the outer back strip, a plate provided with ears on one edge  
60 adapted to receive the binding screws, whereby said plate is secured upon and parallel with the back face of said outer back strip, and a brace pivotally connected with said plate in position to lie upon and parallel with the plate and to be turned at an  
65 angle thereto to hold the back of the binder perpendicular to the plane of its support when said binder is opened.

4. In combination with a loose-leaf binder  
70 having overlapping back strips and leaf securing means including binding screws passing through the side of the outer back strip, a plate provided with ears on one edge adapted to receive the binding screws, and  
75 being also provided on its other edge with a lip adapted to engage the free edge of said outer back strip, whereby said plate is secured upon and parallel with the back face of said outer back strip, and a brace pivot-  
80 ally connected with said plate in position to lie upon and parallel with the plate and to be turned at an angle thereto to hold the back of the binder perpendicular to the plane of its support when said binder is  
85 opened.

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

SEYMOUR W. WATERHOUSE.

Witnesses:

WM. F. BOOTH,  
D. B. RICHARDS.