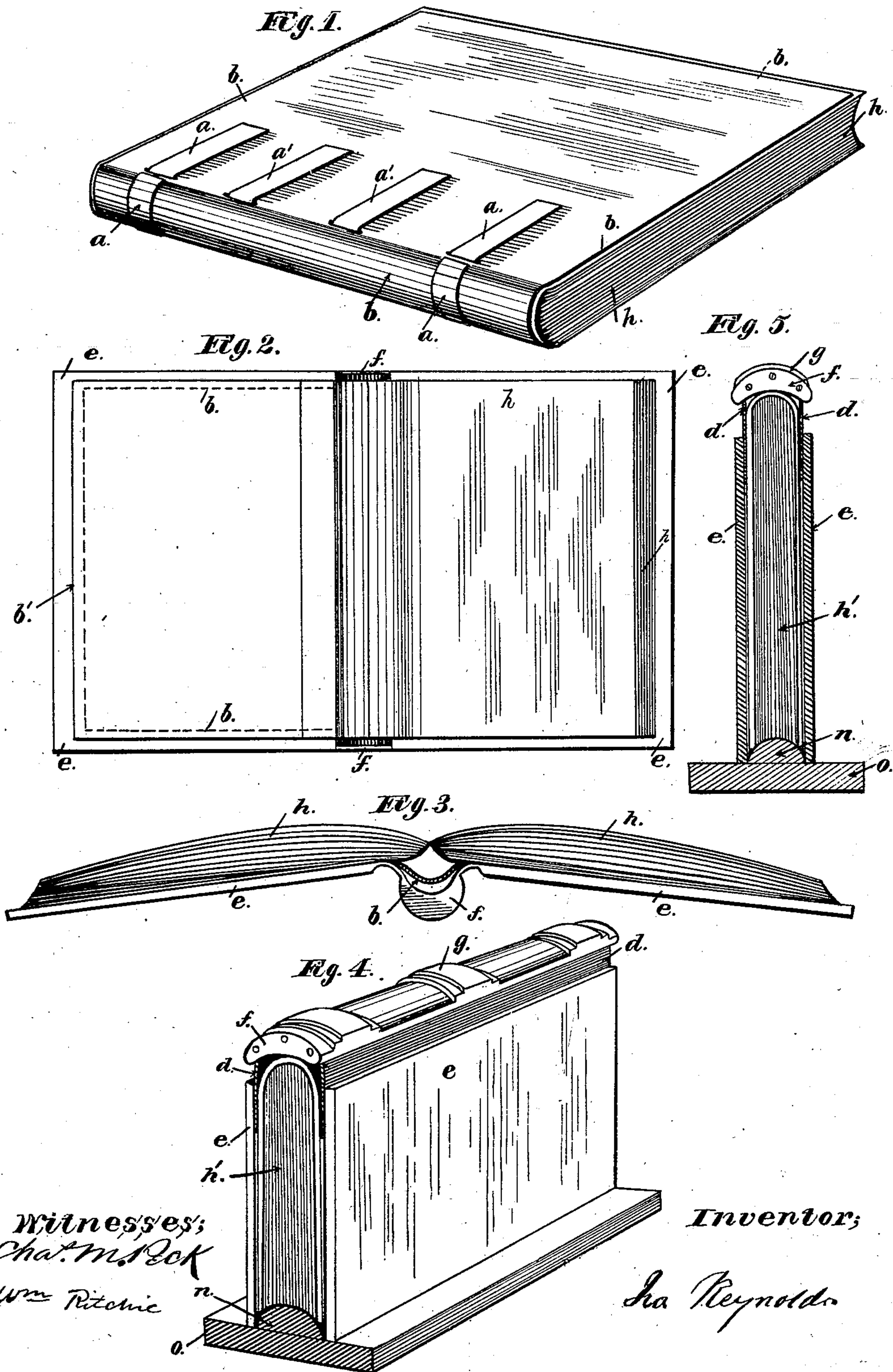


I. REYNOLDS.  
Book Binding.

No. 201,450.

Patented March 19, 1878.





# UNITED STATES PATENT OFFICE.

IRA REYNOLDS, OF DAYTON, OHIO, ASSIGNOR TO REYNOLDS & REYNOLDS,  
OF SAME PLACE.

## IMPROVEMENT IN BOOK-BINDING.

Specification forming part of Letters Patent No. **201,450**, dated March 19, 1878; application filed  
February 27, 1878.

*To all whom it may concern:*

Be it known that I, IRA REYNOLDS, of Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Books, and also means for facilitating their construction; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of my present invention is to produce a cheap book and cover which shall more fully meet the wants of business men, being an improvement on my patents of July 10, 1877, and January 22, 1878. It more fully carries out the general ideas then and there suggested in a minute and special form, covering every variety and style of large book not then and there named, but used by business men.

In the accompanying drawings, Figure 1 is a perspective view of the book proper, showing the inside flexible cover *b*, with the single and double tapes or bands *a* and *a'* as passed through, brought forward, reverted backward, and firmly secured thereto. Fig. 2 is a plan or top view, showing the book proper as secured to the finishing-binder *e*. The dotted lines show the inside flexible cover as secured to the finishing-binder and covered by the inside finishing-sheets of the book proper. Fig. 3 is an end view of the book as secured to the finishing-binder, showing the inside flexible cover *b* as acting to produce what may be termed a "double spring-back." Fig. 4 is a perspective view of a former or substitute book, *h'*, with the finishing-binder *e* placed over the same, as in process of construction. Fig. 5 is an end view of the same, showing the end of the hub *g*, metal piece *f*, linen *d*, cover *e*, representative book *h'*, with appendages *n o* attached thereto.

In making the book proper I sew the sheets, in the usual manner, around either single or double tapes, bands, or cords, and, as in my patent of January 22, 1878, I provide a reasonably stiff but flexible board cover, which I term the "inner" or cover to the book proper;

and the difference between the manner of making my book and that of making ordinary books is, that the cords, tapes, or bands *a'* and *a* (when used) pass through the inner flexible cover *b*, and their ends are then turned forward, (instead of back or retroverted, as in my patent of January 22, 1878,) and firmly pasted or glued thereto, except when found necessary to produce a very strong book, in which case I sew around double tapes or bands, which pass through the flexible cover *b*, the inner one of which is turned forward, as above, and the outer one is reverted and secured to the back of the cover, as seen at *a*, Fig. 1, and may be covered with pasteboard, cloth, or leather, as in my patent of January 22, 1878.

These books, being thus constructed with the inner flexible cover slightly smaller, as seen by dotted lines, Fig. 2, than the finishing-sheets *b'*, Fig. 2, may be subsequently applied to or furnished with the outer or finishing leaves or covers, as it will be seen that when the two come together, and the inner flexible cover is united to the finishing-binder, the finishing-sheets *b'* hide the inner flexible cover, and the tapes, bands, or cords come between the inner flexible cover and the stiff boards *e* of the finishing-binder, and when the book is opened the inner cover, being secured to the book and finishing-binder, throws the book up flat in the center, and forms what I term a "double spring-back book," as seen at *b*, Fig. 3.

In the formation of the finishing-binding *e*, I use my wooden back, as patented January 22, 1878; and the main difference between the making of my cover and the ordinary practice is, that I use a former or substitute book *h'*, with its appendages *n o*, instead of forming the finishing binder or binding over the book proper. This manner of forming a finishing-binder for either a permanent or removable book over a former or substitute book is very desirable, as the former or substitute book *h'*, with its appendages *n o*, gives the exact size of the finishing-binder. The appendage *n* is supposed to give the requisite projection of the two lids of the cover over the book, while the appendage *o* forms a perfect stop for the rapid and exact adjustment of the two lids *e e* of the cover.



It will be seen that any girl capable of working in a bindery can, by using the former or substitute book *h'*, Figs. 4 and 5, produce any number of binders or bindings exactly the same size, as the linen or other material, being first glued or pasted to the inside of the wooden back, forms flaps *d d* for the reception of the two lids *e e* of the cover, and when placed upon the former or substitute book, as seen in Fig. 5, they are quickly united to the linen or other material, which is secured to the inside of the wooden back, and forms the first connection between the stiff boards of the cover and wooden back.

The former or substitute book is designed to be the exact size of the finishing-binder of any desirable size of book, and may be composed of paper, pasteboard, wood, or any other material which will form a substantial former or substitute book, with appendages *n o* for the rapid and exact formation of the fin-

ishing binders or bindings for stationary or removable books.

Having described the nature of my invention and improvements, what I claim, and desire to secure by Letters Patent, is—

1. The book *h*, the inner flexible cover of which consists of an outer stiffening-board, *b*, smaller than the book proper, and an inner finishing-sheet, *b'*, the edges of which project beyond the stiffening-board *b*, whereby it may be attached to the finishing-cover *e*, in the manner shown and described.

2. The herein-described former or substitute book *h'*, having the appendages *n o*, whereby the formation of the outer finishing-cover *e* is accurately and quickly accomplished, substantially as shown and described.

IRA REYNOLDS.

Witnesses:

CHAS. B. WOOD,  
WILLIAM JONES.