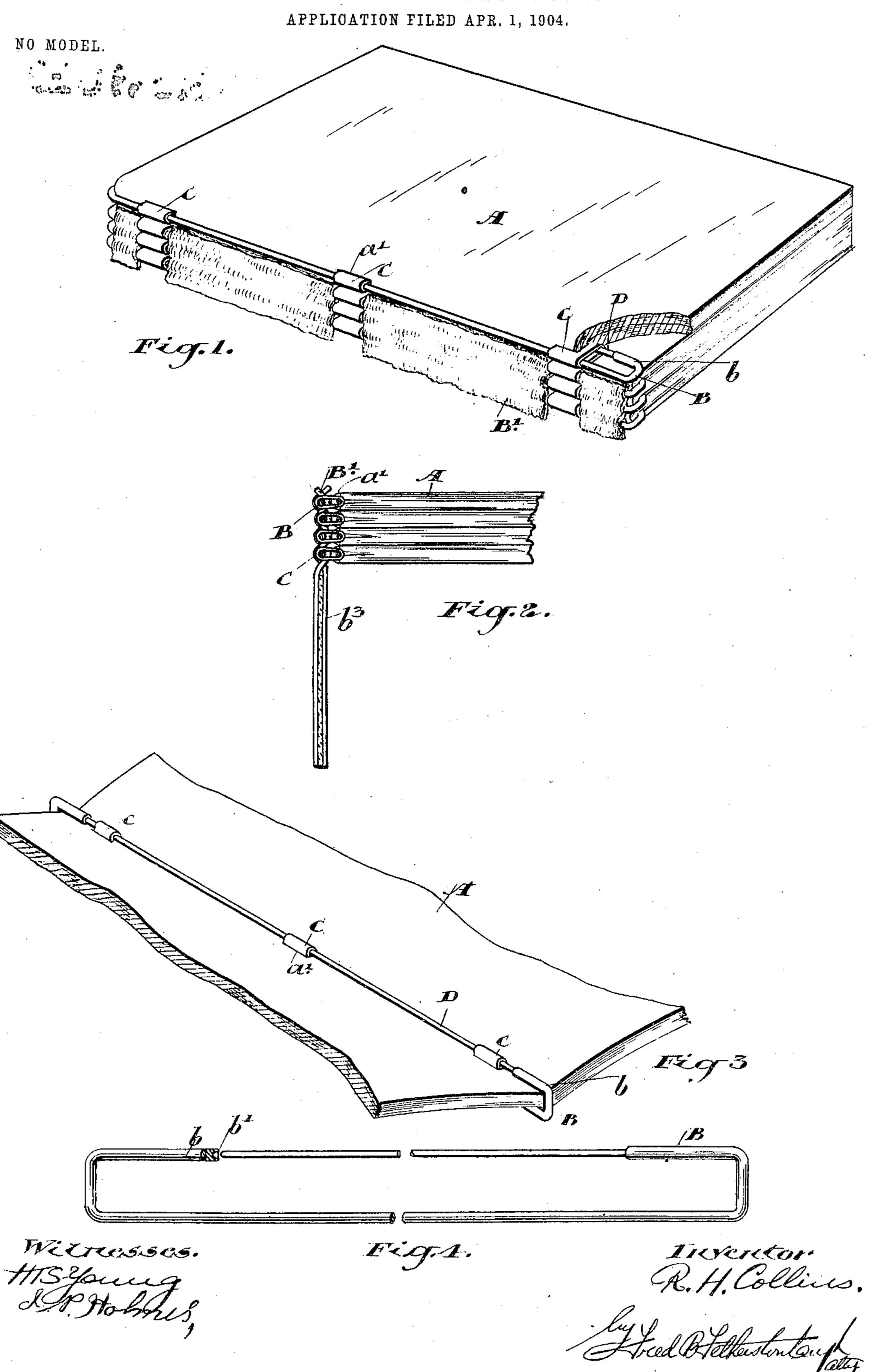
R. H. COLLINS. PERPETUAL BINDER FOR BOOKS.



United States Patent Office.

ROBERT HIPWELL COLLINS, OF TORONTO, CANADA.

SPECIFICATION forming part of Letters Patent No. 770,711, dated September 20, 1904.

Application filed April 1, 1904. Serial No. 201,146. (No model.)

To all whom it may concern:

Be it known that I, ROBERT HIPWELL COL-LINS, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, 5 have invented certain new and useful Improvements in Perpetual Binders for Books, of which the following is a specification.

My invention relates to improvements in perpetual binders for books; and the object ro of the invention is to devise a simple, cheap, efficient, and secure yet readily-adjustable means for binding one or more folded sheets or sets of sheets into a book which will allow of the leaves being opened flat, which will dis-15 pense with sewing, and in which any number of leaves or sets of leaves may be removed when filled with matter and other leaves or sets of leaves substituted in their place without destroying the binding of the book; and 20 it consists, essentially, of a folded leaf or sets of leaves having slots extending through the leaf at the fold, a back bar forming the weft of a web and having bent ends, metal loops embracing the bar and extending through the 25 slots in the leaves, and a retaining-wire extending through the projecting portion of the loops within the fold of the leaves and into the bent end of the back bar forming the weft of the binding-web, the parts being otherwise 30 constructed and arranged in detail, as hereinafter more particularly explained.

Figure 1 is a perspective view of a portion of a book, showing my invention. Fig. 2 is a cross-section through the book, showing the 35 form of the binding. Fig. 3 is a perspective view of portion of a set of leaves, showing the fold and the binding-bar. Fig. 4 is a detail of the binding-bar.

In the drawings like letters of reference in-40 dicate corresponding parts in each figure.

A represents a set of leaves folded at a and provided with slots a' extending through the leaves at the fold.

B is a binding-bar which is provided with 45 the bent ends b, having sockets b'. The bars B, as will be seen on reference to Figs. 1 and |

2, form the weft-wires for the web B', the warp-threads of which are formed, preferably, of the ordinary cotton or linen threads. The ends of the threads are fastened to a piece 50 of leather b^3 , (see Fig. 2,) which is secured to the back of the book in any suitable manner, thereby securely holding the web to the back.

Crepresents a set of metal loops which embrace the bar B and extend through the slots 55

a' at the folded portion of the leaves.

D is a wire, preferably of spring metal, which is designed to be removable and is passed through the inner ends of the loops C into the sockets b' in the bent ends b of the bar 60 B. The wire D serves to hold the leaves securely in position to the binding.

In order to remove each set of leaves, it is merely necessary to spring out the bar D from the sockets, when the sets of leaves may be 65 readily withdrawn from between the ends b of

the bar B.

It will now be seen that when any set of leaves is filled up by writing or other matter that a new set of leaves may be readily sub- 7° stituted when desired.

What I claim as my invention is—

1. In a perpetual book-binder, the combination with a folded leaf or set of leaves having a slot extending through the leaves at the 75 fold, of a bar having bent ends, said ends having sockets therein, a loop embracing the bar and extending through the slot at the fold and a retaining-bar extending to the inside of the fold and through the inner end of the loop 80 into the sockets at the ends of the bar as and for the purpose specified.

2. In a perpetual book-binder, the combination with the web having the bars forming the weft in the web and provided with bent 85 ends, said ends having sockets therein and a set of leaves extending through the bent ends of the bars and folded opposite the bars, and a retaining-wire for each leaf extending into the sockets in the bent ends of the bar as and 90

for the purpose specified.

3. In a perpetual book-binder, the combi-

nation with the web having the bars forming the weft in the web and provided with bent ends, said ends having sockets therein and a set of leaves extending through the bent ends of the bars and folded opposite the bars, and provided with slots at the fold, loops embracing the bars and extending through the slots and a retaining-wire extending through the

loops at the inside of the fold and fitting into sockets in the bent ends of the bar as and for 10 the purpose specified.

ROBERT HIPWELL COLLINS.

Witnesses:

M. McLaren,

J. P. Holmes.