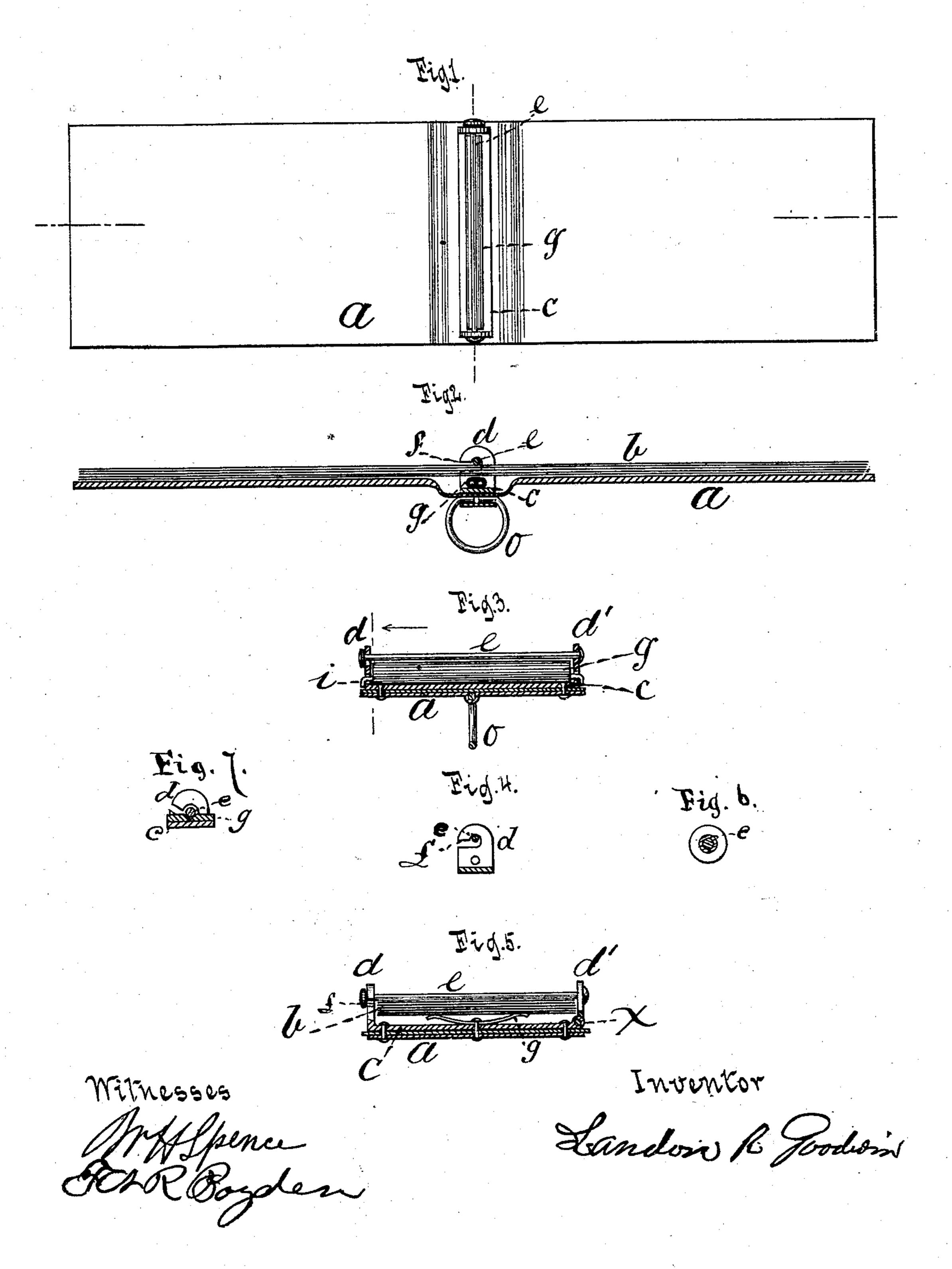
## L. R. GOODWIN.

BOOK BINDING.

No. 286,694.

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## United States Patent Office.

LANDON R. GOODWIN, OF NEW YORK, N. Y., ASSIGNOR TO THE ADJUSTABLE COVER COMPANY, OF SAME PLACE.

## BOOK-BINDING.

SPECIFICATION forming part of Letters Patent No. 286,634, dated October 16, 1883.

Application filed April 27, 1882. (Model.)

To all whom it may concern:

Be it known that I, LANDON R. GOODWIN, of the city of New York and State of New York, have invented a new and useful Improvement 5 in Book-Binding; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 of the drawings represents a plan view of the cover or lids of a book with my improved binder-fastening attached. Fig. 2 represents a longitudinal section of the same with the leaves or paper secured thereto. Fig. 15 3 is a transverse section of the same without the leaves. Fig. 4 represents one of the lugs of the binder and its catch detached, and Fig. 5 represents a transverse section of the binder and cover with a metal spring for clamping the leaves 20 of paper or the body of a book secured therein. Fig. 6 represents a cross-section, on an enlarged scale, of the binder-rod, showing it covered with a tube or coat of india-rubber. Fig. 7 represents a cross-section of the binder, show-25 ing a construction thereof specially adapted to holding single sheets of paper.

Like letters designate corresponding parts

in all of the figures.

The object of my invention is to provide a 30 self-adjusting book-binder which will secure separate sheets of paper in the form of a book of any desired thickness, and which will allow the removal of the paper constituting the book, or any number of the sheets or leaves compos-35 ing it, and be capable of securely retaining any number of sheets or leaves until they are from time to time exhausted or used, the purpose being to furnish for commercial use a bookbinder especially adapted for bills, tally-sheets, 40 memoranda, and other similar papers which are required to be detached and used separately from time to time in their integrity; and my invention constitutes an improvement upon the invention patented by Charles F. Mc-45 Gill, November 7, 1876, which patent is numbered 184,094, as my said improvement embraces self-adjusting features herein described. That invention embraced a catch and bindingrod which permitted the insertion of a book 50 or bulk of paper that was thereby secured to a cover; but a removal of a portion of the book | gitudinally upon its upper side for the binder-

or sheets of paper would cause the remaining portion to become loose and liable to slip out of the fastening or binder, while on the other hand my self-adjusting binder will act to re- 55 tain the sheets or leaves until all are used, when the binder is ready to receive and hold securely a new supply of any desired quantity.

In the drawings, a denotes the cover, b the leaves, of the book; c, the thin metal plate or 60 base of the binder, riveted or otherwise secured to the central flexible part of the cover. d d'are the lugs or uprights of the binder, one of which may be hinged, as shown at x, Fig. 5. e is the binder-rod secured to lug d'. f is the 65 catch formed in  $\log d$ , for holding the binderrod in place while securing the book or leaves b; and g is a tubular rubber spring, fastened longitudinally upon the base-plate of the binder by the wire i, which passes through the rubber tube 70 and through holes in lugs d d', where it is secured by any suitable means, as shown in Fig. 3. This spring g fills the space between the binderrod e, and the base or back of the binder, and compensates for the withdrawal of any num- 75 ber of sheets or leaves from the binder, adapting the space also to any number of leaves, whether few or many. It is therefore an essential part of my invention. The ring o may be used as a means of suspending the bound 80 book when used in an office; but when carried in the pocket the ring will not be required. The binder-rod e is sufficiently elastic to retain its place in the hook or catch f, and when any quantity of paper is to be placed in the 85 binder, rod e will be moved laterally from the catch f, and, whether secured at its opposite end to a rigid or to a hinged lug, will yield sufficiently to permit the book or body of paper to be inserted below it upon the retaining 90 rubber tube or spring, upon which the paper is clamped by rod e. The continuous elastic tube, which, in the absence of the paper or book, fills the space between the binder-rod  $e^{-}$ and base-plate c, serves to securely hold a sin- 95 gle sheet or leaf of paper, as well as any desired number of sheets, and to allow their separate removal without deranging or disturbing the security of that which remains.

Instead of a tubular spring, a rectangular 100 rubber spring having a V-shaped groove lon-

rod e may be used, as represented in Fig. 7. For holding single sheets of paper, this grooved rubber is preferable for the compensatingspring, since it produces also friction on the 5 paper, thereby resisting the pulling out of the paper. The rubber spring g not only serves as a compensating-spring to fill the space not occupied by the leaves of paper, but furnishes a frictional surface to prevent the sliding of to the leaves under the binder-rod. In Fig. 5, however, I have shown a metallic spring, g, and it is obvious that this will serve fully for a compensating-spring. When, in large books, a frictional surface is desired to prevent the 15 sliding of the leaves, or in any case where it is desirable, I cover the rod e with an elastic substance, like a rubber tube, as shown in Fig. 6, which furnishes a good frictional surface, and likewise furnishes a compensating spring 20 or material to a certain extent.

Having described my invention, I claim—1. The combination, with the binder-rod,

of a grooved rubber compensating-spring, substantially as and for the purpose herein specified.

2. In a book-binder, the combination, with a binding-rod, e, and base c, of a compensating-spring, g, located between the said parts, substantially as and for the purpose herein specified.

3. The combination of the base c, provided with two lugs, d d', the binder-rod e, attached to one lug, d', and held by a hook, f, on the other lug, d, and the compensating-spring g, substantially as and for the purpose herein 35 specified.

4. In combination with the base c and compensating-spring g, the binder-rod e, surrounded by an elastic material, substantially as and for the purpose herein specified.

LANDON R. GOODWIN.

Witnesses:

H. P. K. PECK, E. N. FURLOW.