T. J. CRICHTON.

TEMPORARY BINDER.

No. 176,516. Patented April 25, 1876.

Fig. 1.

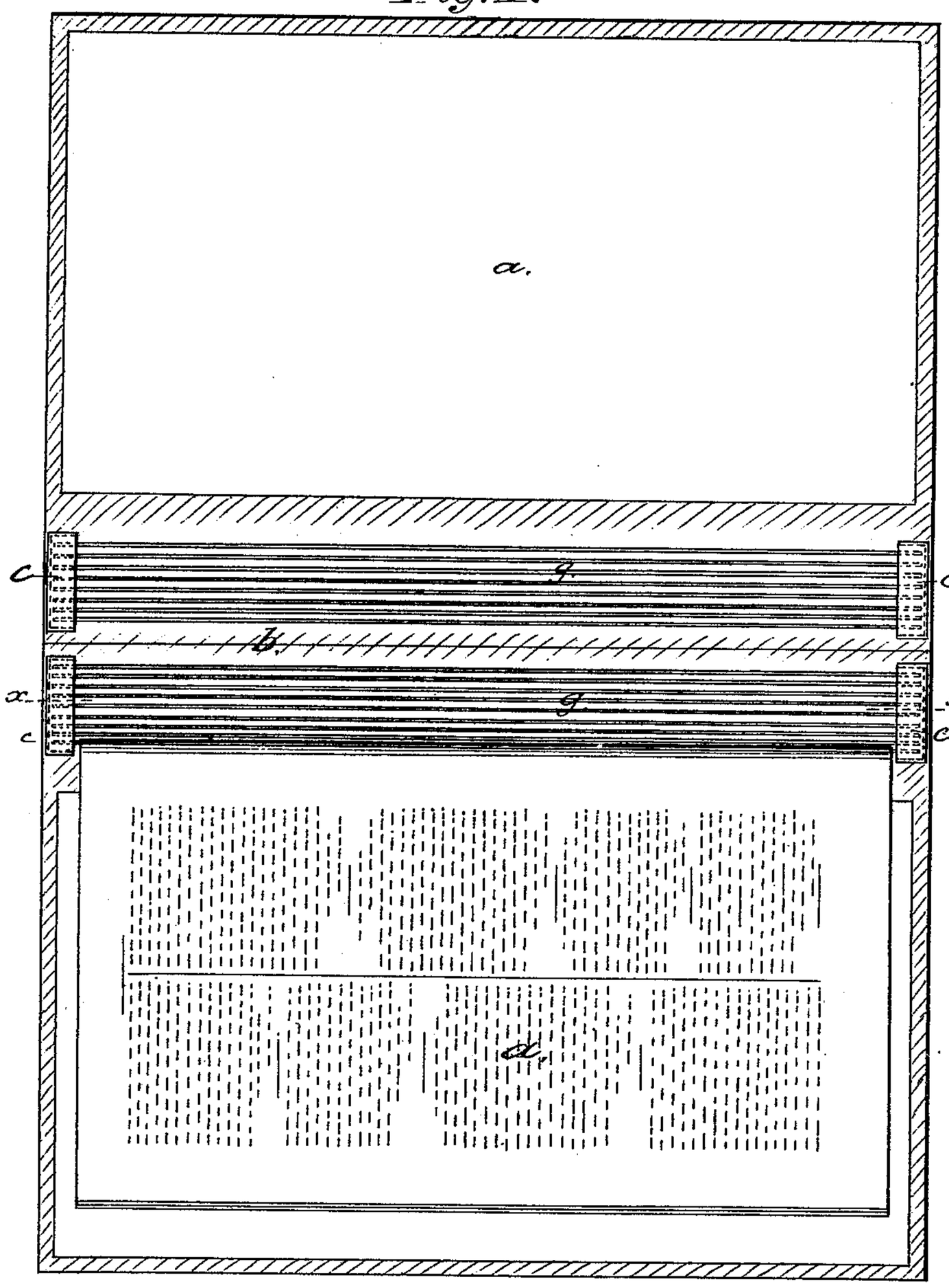


Fig. 2.

Fig. 3.

Fig. 4.

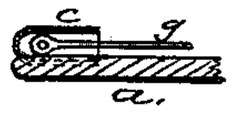
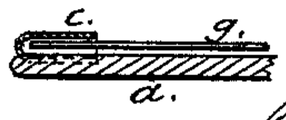


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

THOMAS J. CRICHTON, OF NEW YORK, N. Y.

IMPROVEMENT IN TEMPORARY BINDERS.

Specification forming part of Letters Patent No. **176,516**, dated April 25, 1876; application filed March 6, 1876.

To all whom it may concern:

Be it known that I, THOMAS J. CRICHTON, of New York city, county, and State, have made certain new and useful Improvements in Paper or Book Binders, all of which will be described in the following specification, reference being had to the accompanying drawing, and the letters of reference marked thereon, and in which—

Figure 1 is an open inside view of binder, representing the mode of binding; Figs. 2 and 3, longitudinal sections through line *x x* of Fig. 1; and Figs. 4 and 5, enlarged views of tips with binding-rods.

My invention relates to binders for papers, pamphlets, and the like; and consists in a back for such a binder, provided with tips adapted to receive the ends of detachable binding rods; also, in a back for such a binder, provided with three or more joints, between which are fastenings for the binding-rods, whereby the back is made capable of extension; and in the combination, with a back of such a binder, of tips and detachable binding-rods, all of which I will proceed to describe.

In the accompanying drawing, *a a* represent the cover or sides of the binder, made of board covered with cloth, leather, or paper, or other suitable material, and *b* represents the flexible back of said binder. The said flexible back is represented in the drawing as having three joints running parallel with the binding rods, strips, or wires *g*, one joint being in the middle, or thereabout, of the back, and the other two being at or about the point where the said back joins the sides of the binder. It is obvious that the number of these joints may be multiplied. At both top and bottom of the flexible back, between the joints of the same, are caps or tips *c*, made of metal or other suitable rigid material. These tips are closed on three sides, and are pasted, riveted, pinned, sealed, or otherwise fastened, as the judgment of a skilled workman suggests, to the flexible back.

Instead of making the back flexible, and readily yielding, and attaching directly thereto the tips or caps *c*, the back may be made rigid, or slightly yielding, and the tips attached to flexible supplemental backs, such as are well-known to book-binders.

The means used for holding the papers or periodicals to the binder are wires, or rods, or strips *g*, of metal, reed, or other elastic material adapted to the purpose. These rods, strips, or wires are not permanently connected to any of the tips, but are detachable, so that they may be supplied, when required, in any number, and adjustable, that they may be adjusted to the thickness of the papers or periodicals to be bound.

In Fig. 3 these strips, bands, rods, or wires are shown with a knob at both ends, and in Fig. 4 a knob is shown at one end only.

These knobs tend to strengthen the rods, strips, or wires, and fit neatly in the tips *c*, in order to prevent the rods moving too freely from side to side in the tips.

I have stated that the back proper may be rigid or flexible; but the advantage of a flexible back over a rigid back is, that a binder with a flexible back can be more snugly folded for the purpose of packing or sending through the mail.

It is obvious that the tips and detachable rods may be applied to a binder having but two joints without departing from the spirit of that part of my invention.

When a paper or periodical is to be put in the binder just described, one of the rods is removed, placed between two folds of the paper or periodical, and the ends placed within the two tips of the binder, thereby firmly binding the paper or periodical to the binder.

The tips *c* may have a separate and distinct opening for each rod, instead of one clear opening from one end to the other of the tip.

The joints to the back heretofore described may be formed in any suitable manner known to the trade or to a skilled workman.

I am aware that binders have been made by hinging a flexible rod at one end and passing the other end into a slot. This arrangement does not admit of ready adjustment of the number of rods as required for papers or

pamphlets of different thicknesses. I am also aware that pins have been hinged at both ends. I claim neither of these.

Having described my invention, what I claim is—

1. A back for a binder for papers or periodicals, provided above and below with tips, having an opening or openings adapted to receive the ends of the binding-rod, substantially as described.

2. A back, substantially as herein described, for a binder for papers and pamphlets, provided with three or more joints, and fastenings between the joints for the binding-rods, whereby the back is rendered capable of extension, for the purposes set forth.

3. In combination with the back of a binder for papers and pamphlets, detachable binding-rods and tips, adapted to receive the ends of said rods, substantially as described.

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Witnesses:

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