

B. J. BECK.
Temporary Binders.

No. 156,871.

Patented Nov. 17, 1874.

Fig. 1.

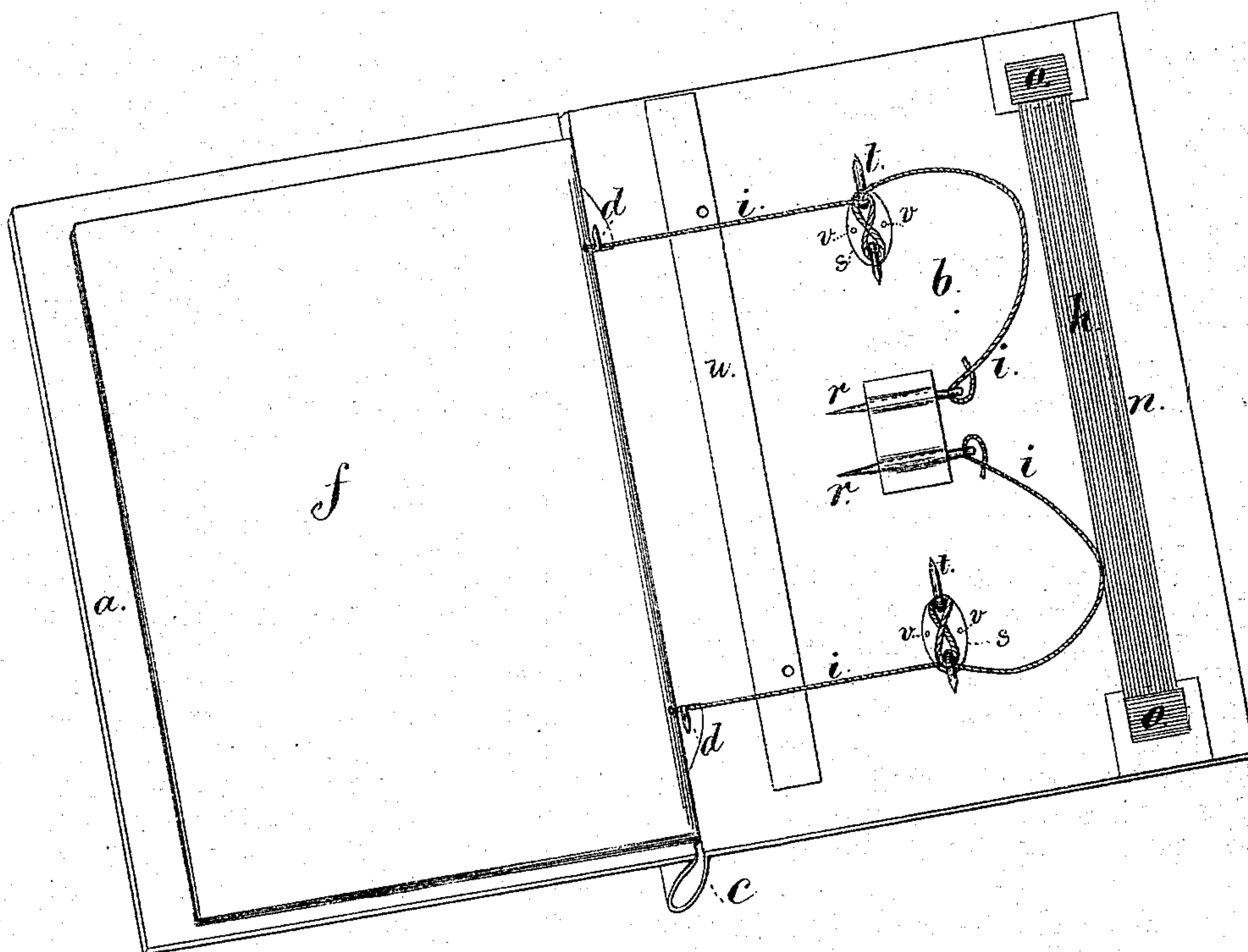


Fig. 3.

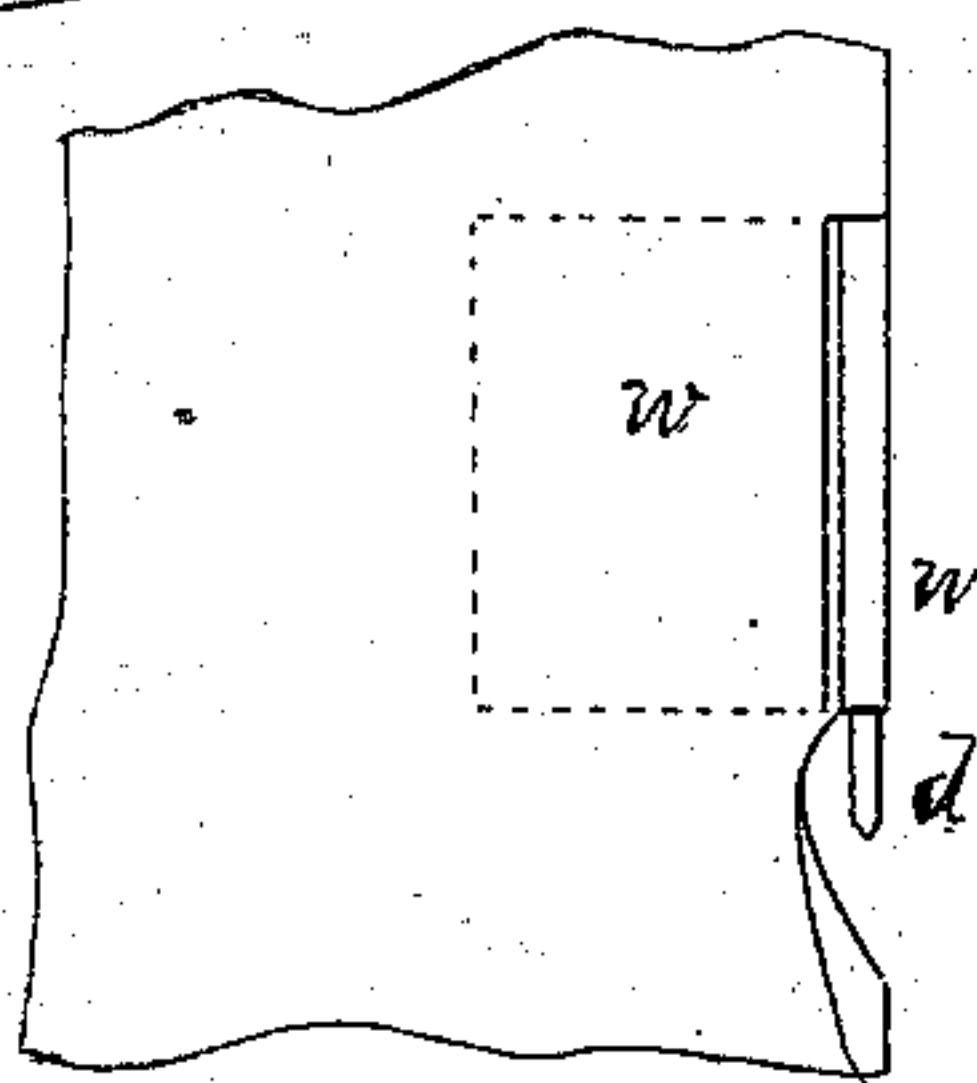
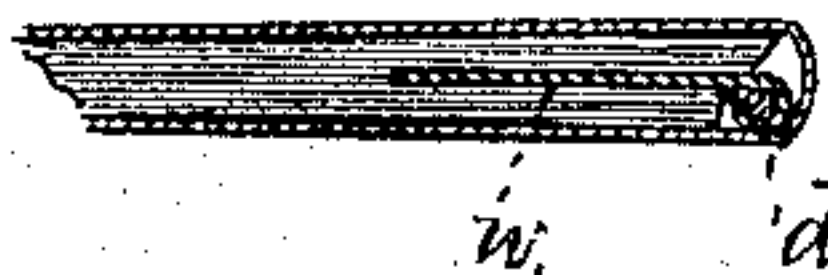


Fig. 4.



Witnesses

Geo. D. Walker

Geo. J. Pinckney

Fig. 2.



Bernard J. Beck

per L. W. Serrell

atly

UNITED STATES PATENT OFFICE.

BERNARD J. BECK, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN TEMPORARY BINDERS.

Specification forming part of Letters Patent No. **156,871**, dated November 17, 1874; application filed August 4, 1874.

To all whom it may concern:

Be it known that I, BERNARD J. BECK, of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Temporary Binders, of which the following is a specification:

The cord that passes through the separate sheets or leaves to hold them together goes around hooks on the back edges of the cover, such as seen in Letters Patent granted to me July 28, 1874, or else through eyes at the same places.

My present invention relates especially to a spring-clip, for holding the cord after it is drawn tightly to its place. I also make use of a pocket upon the cover, into which are inserted the needles at the ends of the cords, thereby retaining them in place ready for use, and preventing the needles injuring the paper when the book is closed. I also employ small wires inserted in the fold of the sheets to prevent the cords tearing through the back edges, and these wires are within the cover of the binder, retained by elastic pockets at their ends.

In the drawing, Figure 1 is a perspective view of the binder open. Fig. 2 is a section of the spring cord-clip.

The covers *a b* are preferably united by a flexible back, *c*, and at the back edges of the covers *a b* the wire-hooks *d* are inserted in a manner similar to those shown in my said patent. There are similar hooks on both covers, and the cord or cords *i* are passed around such hooks, and hold the sheets or leaves *f* in place, such sheets having in the fold of each a wire, *h*, over which the cord passes, so that the sheet will not tear away from the cord. A bundle of these wires is shown at *n*, and their ends are retained in the elastic pockets *o*, secured to the book-cover, so that they are in a convenient position for one wire to be taken out and inserted into the fold of the sheet to be held, and then the needles *r* on the cords *i* are passed through the sheet contiguous to the wires, and the cords drawn through the sheets, and then introduced into the hooks *d* at the edge of the cover, or through eyes if provided at these places. The cords are to be drawn sufficiently tight and wound upon the spring-clips, to

hold them firmly. Each spring-clip is made of a metal plate, *s*, with four holes in it—two serve for the wire *t* to pass through and the other two receive the rivets *v v*, that attach such plate to the cover. This plate *s* is made concave and of thin sheet metal, for the purpose of forming a bearing all around the plate, to rest against the cover, and to give room for the portion of the wire *t* that is beneath that plate; and this construction renders the plate sufficiently elastic to yield slightly without becoming bent by the compression or strain of the string.

The peculiarity of these clips will be apparent by reference to Fig. 2.

The wire *t* is bent so that the opening between the wire and the surface of the plate is less than the thickness of the cord *i*, and the opening becomes less toward the hole in the plate through which the wire passes; thereby the cord, as drawn in between the plate and wire, is compressed, and both the plate and the wire spring slightly, so that the cord is firmly held by being passed into the opening first at one side and then at the other of the clip. By this construction the clip occupies but little space; it holds the cord very firmly; the entire book-formed file is very firm and reliable; the elastics heretofore sometimes employed are dispensed with, and the separate sheets are held in a manner corresponding to a bound book.

In Figs. 3 and 4 I have shown the manner which I find preferable in connecting the hooks at the edges of the cover. The straight wire is held within the folded edge of the strip of sheet metal *w*, and the thick card-board cover is notched to receive the parts, and also opened between the layers of such card-board for the sheet metal to be inserted, after which a strip of muslin is glued or pasted around the edge to hold all the parts in place.

The gage-strip, of card-board, shown at *u*, is made with holes at distances corresponding to the places where the cords are to be passed through the sheets, so that by placing such strip upon the sheets the paper may be marked and the cords inserted with accuracy.

I am aware that the cords in temporary binders have been wound around buttons or belaying wires.

I claim as my invention—

1. A temporary binder made with covers and with elastic pockets upon the inside of one of the covers, for receiving and holding the wires that are employed in the folds of the sheets, as set forth.

2. The spring-cleat, for holding the cord in a file or binder, made of a wire passing up through a concave metallic plate, and bent nearly parallel to the surface of such plate,

at a distance less than the diameter of the string to be secured, as and for the purposes set forth.

Signed by me this 30th day of July, A. D. 1874.

B. J. BECK.

Witnesses:

GEO. T. PINCKNEY,

GEO. D. WALKER.