

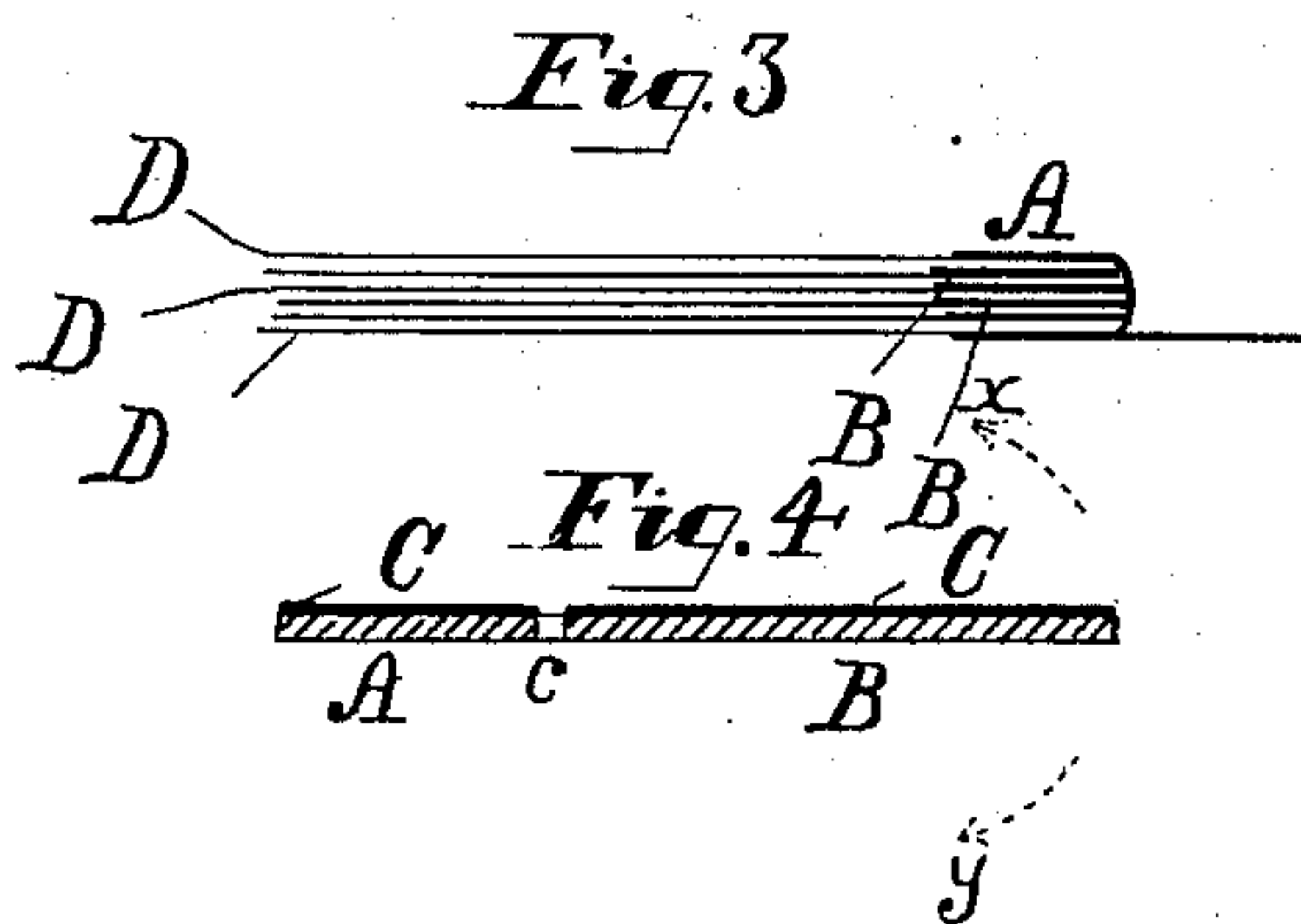
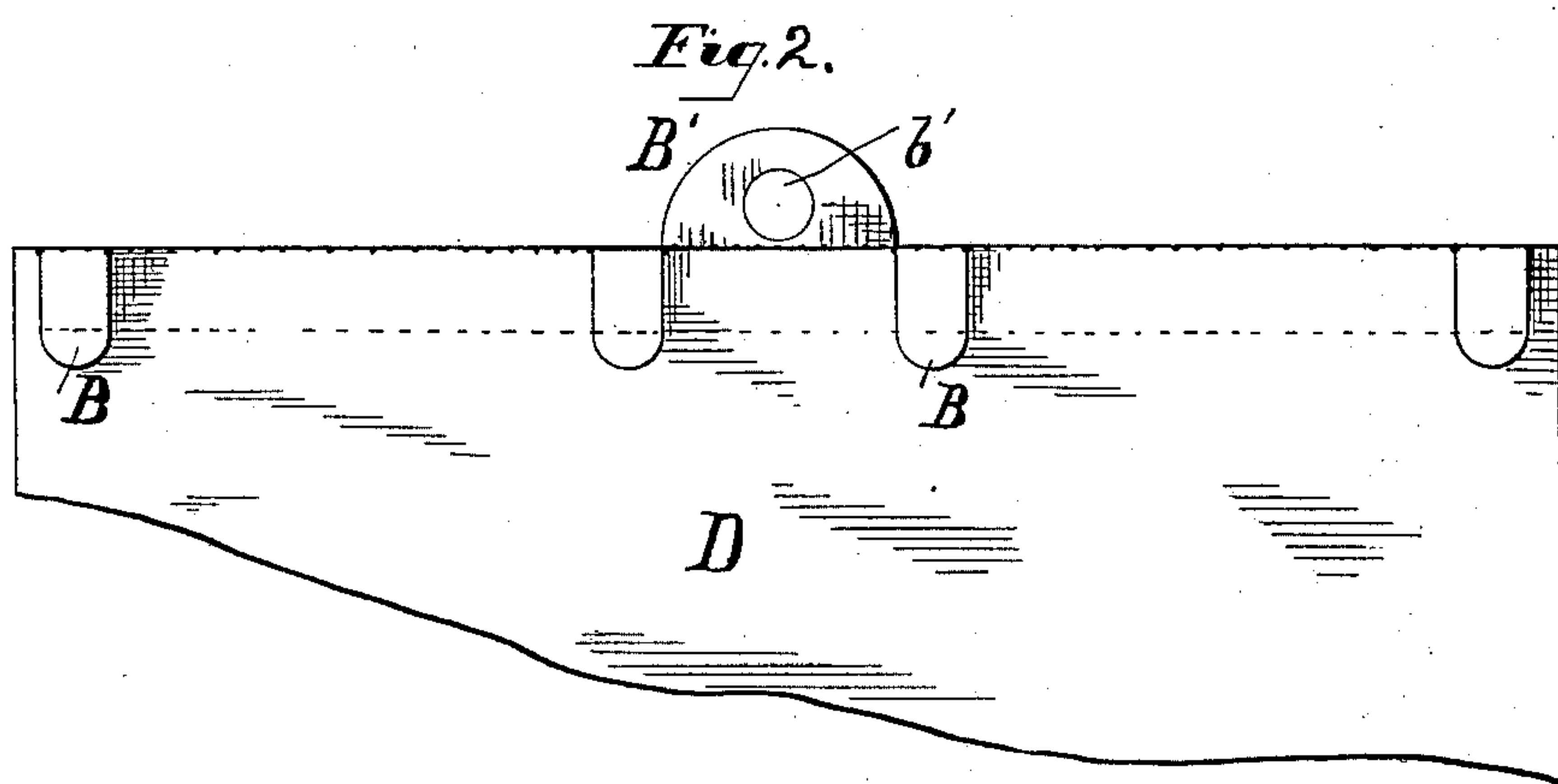
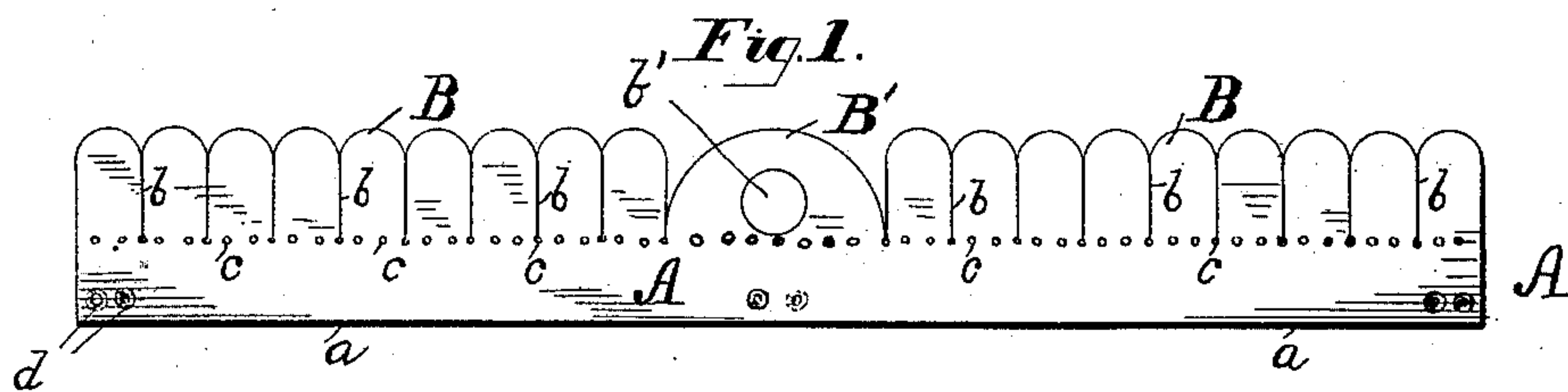
(No Model.)

I. W. HEYSINGER.

BINDING STRIP FOR PAPERS, &c.

No. 341,005.

Patented May 4, 1886.



WITNESSES:

John W. Clev
M. B. Jennings

INVENTOR

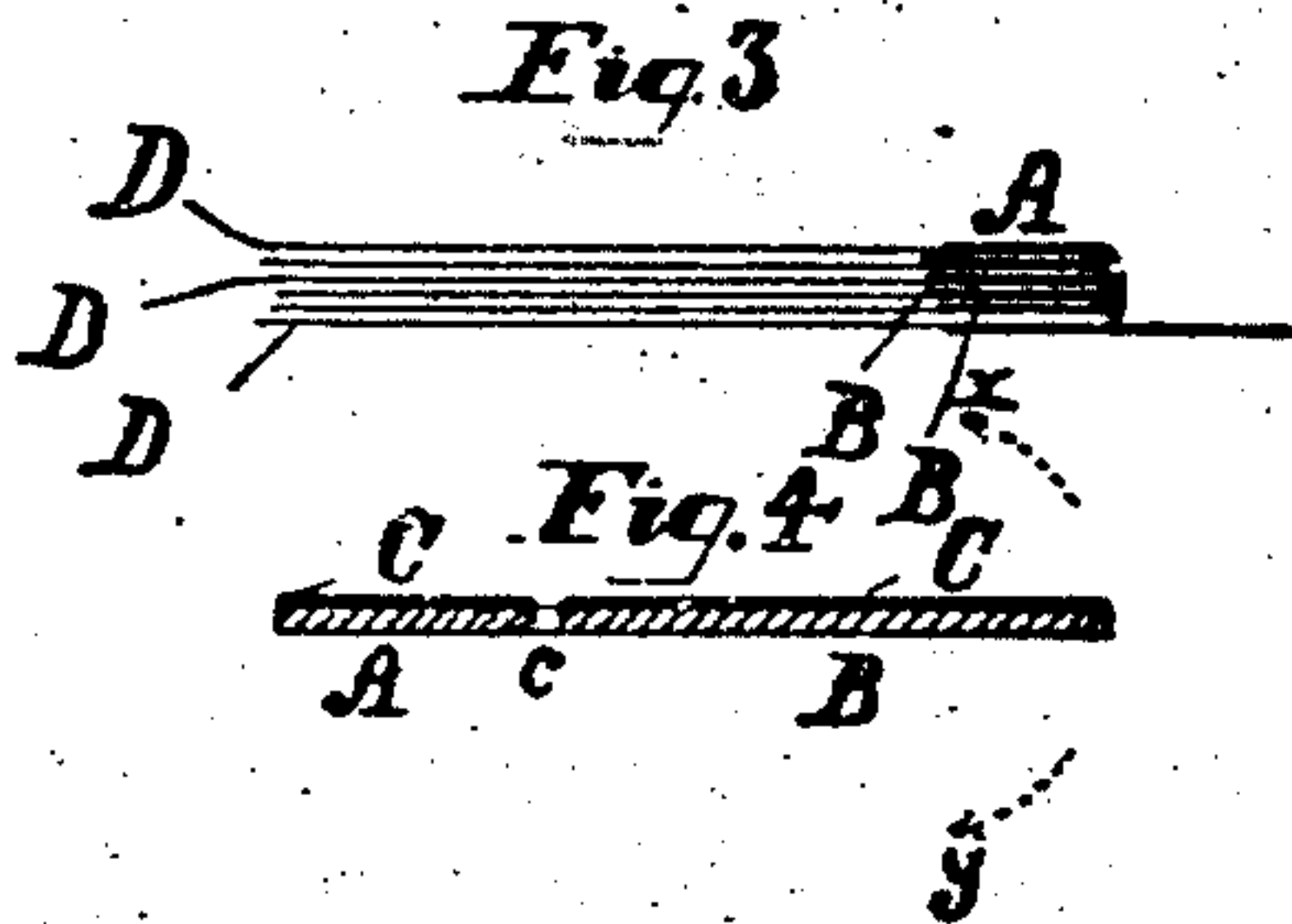
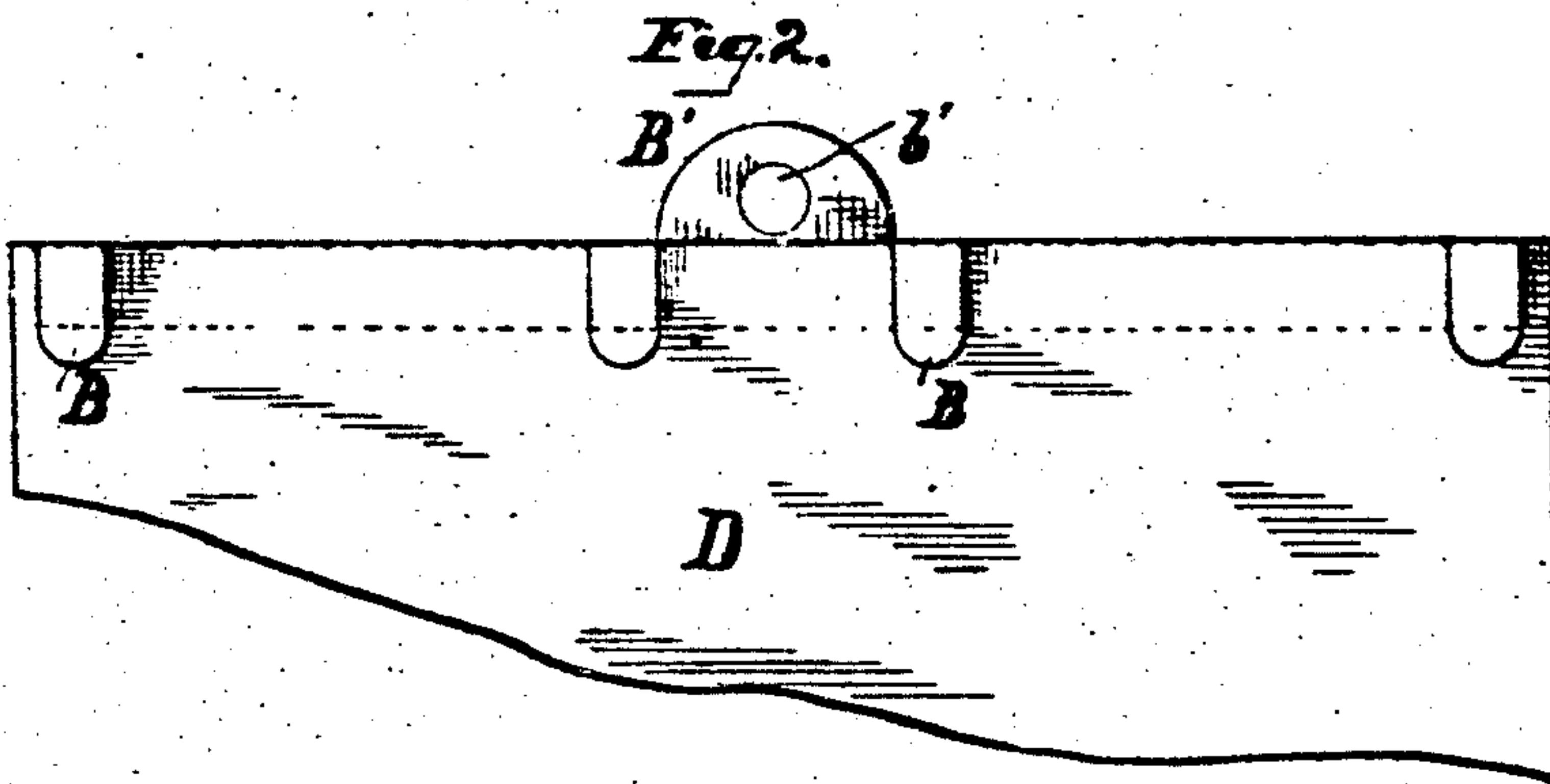
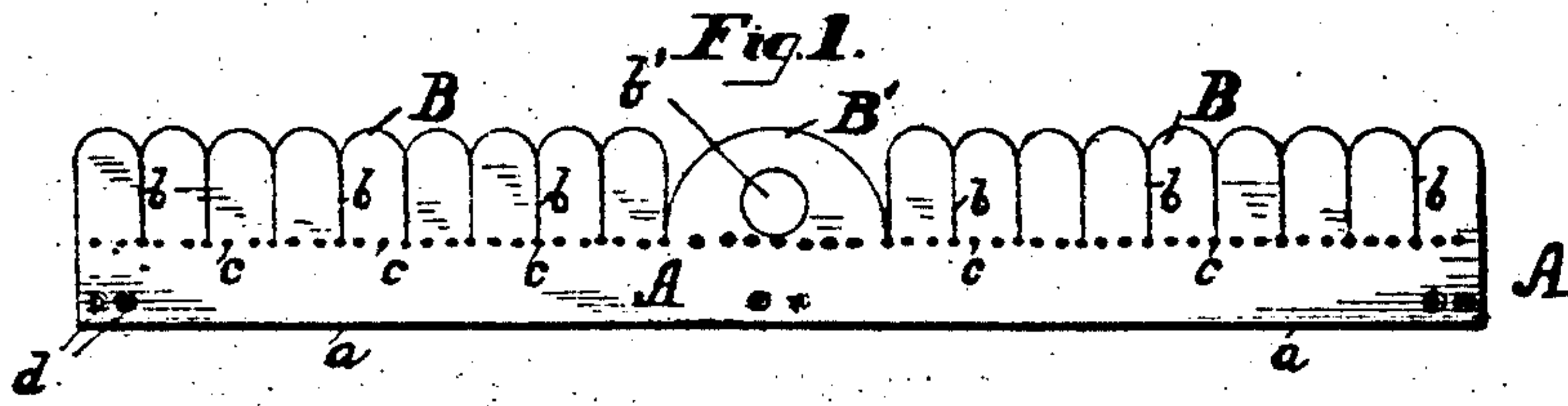
Isaac W. Heysinger

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UNITED STATES PATENT OFFICE.

ISAAC W. HEYSINGER, OF PHILADELPHIA, PENNSYLVANIA.

BINDING-STRIP FOR PAPERS, &c.

SPECIFICATION forming part of Letters Patent No. 341,005, dated May 4, 1886.

Application filed October 1, 1885. Serial No. 178,716. (No model.)

To all whom it may concern:

Be it known that I, ISAAC W. HEYSINGER, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improvement in Binding-Strips for Papers, &c., of which the following is a full, clear, and exact description, reference being had to the drawings accompanying and forming a part of this specification, in which—

Figure 1 is a top view of one of my binding-strips as made up for sale as an article of manufacture. Fig. 2 is a back view of the same applied to a number of sheets of paper which are thus bound up by its use. Fig. 3 is an end view of Fig. 2, and Fig. 4 is a transverse sectional view of Fig. 1 through the middle of one of the flaps B.

The lettering in all the figures is uniform. My invention relates to the construction of a strip of book-muslin, leather, leatherette, paper, parchment, or other substance, of suitable width, made up into an article of manufacture, and adapted by its construction to be readily folded along the middle line, to embrace the edges of a number of sheets of paper along one of the sides thereof, so as to form a protective binder or binding-strip, and in which each sheet of paper is separately caught and held, as herein shown and described.

Referring to the drawings, at A is shown one of my binding-strips (see Fig. 1) ready for use, but not folded. It consists of an elongated strip of book-muslin or other suitable material, of such color or ornamentation as may be most agreeable or appropriate, and of a length nearly as great as the width of the sheets of paper to which it is to be applied. For ordinary legal cap, for instance, of eight and a half inches width, the strip should be about eight inches long, but the length may be varied at will; or two or more binding-strips may be used upon a single sheet of paper, engraving, &c. The strip A, which for ordinary purposes may be from one to two inches wide, is perforated from end to end nearly along its middle line, or at a greater distance from one side than from the other, with a series of small perforations, *c c c*, by which means the lateral segments of the strip will be hinged upon this line of perforations, as shown in Fig. 4, so that they may be readily folded in either

direction, so as to present one or the other surface to the outside. Instead of these perforations I sometimes use a line of slits or creases, but I prefer the perforations for the reason, among others, that they give a better hinge-joint, and also one longer in the fold of the hinge, as the perforations form from the interposed material not cut away a series of straps, so to speak, which extend around the edge of the papers, instead of a simple V, as would be produced by a crease. To increase the length of these straps, I sometimes make these perforations elliptical, having the long axis across the strip, whereby straps of any length can be obtained to fold or draw around the edges of bulky papers. Upon one side of this perforated line I usually leave the binding-strip solid from end to end, as shown at *a*, Fig. 1, but upon the opposite side I divide it upon the lines *b b b* at cross-angles to the length of the strip into a series of separate flaps, B B B, which may be from one fourth to one-half inch or more in width, any one of which may be folded down independently of the others, being cut down to the line of perforations *c c c*. I also sometimes use these flaps upon both sides of the seam *c c c*, interdigitating or alternating with each other; but I usually prefer to use them only upon one side, as shown. I generally round or point the ends of these flaps B B B, to prevent corners from turning up, and also to render their appearance more agreeable to the eye, and I often finish the edge of the solid side *a* with ornamentations of various kinds. At the middle of the strip I prefer to replace the flaps B B B with an enlarged flap, B', which I provide with a large hole, *b'*, by means of which the bundle of papers may be hung up, as upon a suspension-ring, or the large flap B' may also be turned down and used upon the papers, like the others, if desired, and I sometimes carry the flaps B B B entirely along the length of the strip, thus dispensing with the flap B' altogether.

Upon the solid side *a* of the strip A, at suitable distances, I usually provide pairs of indentations, perforations, or marks *d d d d*, by means of which the proper points are indicated for the insertion of metallic staples, such as are in common use for binding papers when it is desired to use such staples, whereby when

the binding-strip A is used the staples will be driven at an equal distance from the edge of the papers, and also at proper distances apart along the length thereof, and the edges of the stapled papers will be protected by the binding strip.

I form the strip A as a whole by cutting it by means of a suitable cutting-die out of book-muslin, or other suitable material, and I usually, as shown in Fig. 4, have these sheets gummed or provided with an adhesive surface on one side, C, Fig. 4, before cutting them up into binding-strips, whereby the strips are stamped out ready for use; or the gum or glue may be applied subsequently to cutting them out; or they may be left ungummed until used, when they may be gummed by the purchaser or left ungummed, according to the work to be done with them. I also sometimes, instead of cutting out the flaps B B B, Fig. 1, merely mark the lines *b b b*, so that they may be cut out by the user, or left uncut in whole or part; but I usually prefer to make them complete, as shown in the figures and herein described.

To use my invention, I take a number of sheets of paper which I desire to bind together and moisten the gummed surface of one of my strips, which I lay upon the table gummed side up. I lay my first sheet of paper face down, with the edge thereof upon the adhesive strip, the edge of the paper coming up flush with the front margin of the row of perforations *c c c*, and I smooth it down, so as to cause it to adhere along its length. I then lay a second sheet upon this first sheet, face down also, and (leaving undisturbed the two outside flaps) fold down two of the flaps near the opposite ends, and two near the middle, the flaps being already moistened, though in most cases two flaps only will suffice to hold the sheet of paper securely, which may vary according to the number sheets to be bound together. Then a third sheet is laid upon these, face down, and two more flaps are drawn down and fastened to the back thereof, and so on until, when the last sheet is laid down, the two outside flaps and the two nearest the center B', as shown in Fig. 2, are drawn down and cemented fast, which gives a good firm finish to the whole. It will be seen (see Fig. 3) that the papers open clear back to the edge of the sheets, which allows the bound sheets to lie flat upon a table or be bent over backward perfectly flat as the pages are read, which makes this especially useful for lawyers, legal papers, Patent Office specifications, or for the use of clergymen, authors, lecturers, &c. When the flaps upon one binding-strip are not sufficiently numerous to bind all the sheets of paper required, after binding as many together as can be conveniently done, (starting with the first page, face downward, and so on consecutively,) then moisten another binding-strip and lay it down, as before, gummed side up, and upon its solid side *a* lay the bound edge of this bundle, already bound together,

just as with the first sheet, and bind it fast with the cement. The flaps will now project, as before, and separate sheets laid on can be attached to the first bundle in the same way indefinitely; or the succeeding binding-strips may be otherwise applied, as desired. The central flap, B', may be left, as in Fig. 2, to act as a suspension tag or ring; or it may be pasted down with the rest, as may be thought preferable. As shown by the dotted lines *x y* of Fig. 4, the strip can be readily folded either to the front or back. In one case the cemented surface C will be inside for binding in the manner above described. In the other case the cement or gum C will present outward. When folded thus, the strip forms an admirable mounting-hinge for engravings, &c., by means of which they can be attached at their margins to the heavy mounting-boards upon which they are hinged. When the strip is longer than is required for this purpose, it can be divided across the lines *b b b* and made into shorter pieces of any suitable length.

In addition to the uses indicated, the device, as shown and described, is capable of being used for many other purposes in offices, &c., for filing bills, hanging up show-cards, calendars, almanacs, fastening leaves into books, pasting in price-lists, attaching index or reference tags to books as permanent markers, &c., and I vary the construction somewhat as may be required for the special purpose in view without departing from the general construction and adaptation herein shown and described.

While any suitable material may be used, I prefer to employ book-muslin of various colors, or other textile material, as being stronger in use, more flexible, and also more easily applied, as well as agreeable to the eye, and more durable in the foldings to which the bound papers are liable to be subjected.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

1. As an article of manufacture, the adhesive binding-strip A, consisting of a flat strip of muslin or other suitable fabric gummed or cemented upon one side, divided into two lateral halves, *a* and B, by the longitudinal row of perforations *c c c*, or its equivalent, the part *a* being solid and the opposite side being subdivided into the series of independently-operated flaps B B B by the divisions *b b b*, substantially as described.

2. The binding-strip A, having a perforated longitudinal central seam, *c c c*, uncut side *a*, and opposite side, B, divided into a series of flaps B B B and B' by the divisions *b b b*, extending in from the free edge of the strip to the longitudinal seam *c*, substantially as described.

3. The binding strip or tag A, having a longitudinal perforated seam, *c*, solid side *a*, and opposite suspension-flap, B', provided with hole *b'*, substantially as shown and described.

4. A binding-strip consisting of a flat piece

of suitable material divided longitudinally by a row of perforations or a folded seam into two lateral segments, one of the said segments being provided with perforations, indentations, 5 or marks to indicate the places at which binding-staples are intended to be driven when used upon papers, &c., substantially as shown and described.

10 5. The adhesive binding-strip A, consisting of a flat strip of muslin, paper, or other suitable material cemented or gummed upon one of its faces and divided by a row of perfora-

tions, so that the two lateral segments thereof may be freely bent or folded against each other, either to bring the gummed surface to the out- 15 side or the inside of the said fold, and adapted to be used either entire or divided into suitable lengths for binding sheets of paper, mounting engravings, or other like purposes, substantially as described.

ISAAC W. HEYSINGER.

Witnesses:

M. B. FENNINGER,
J. L. HEYSINGER.