

No. 670,666.

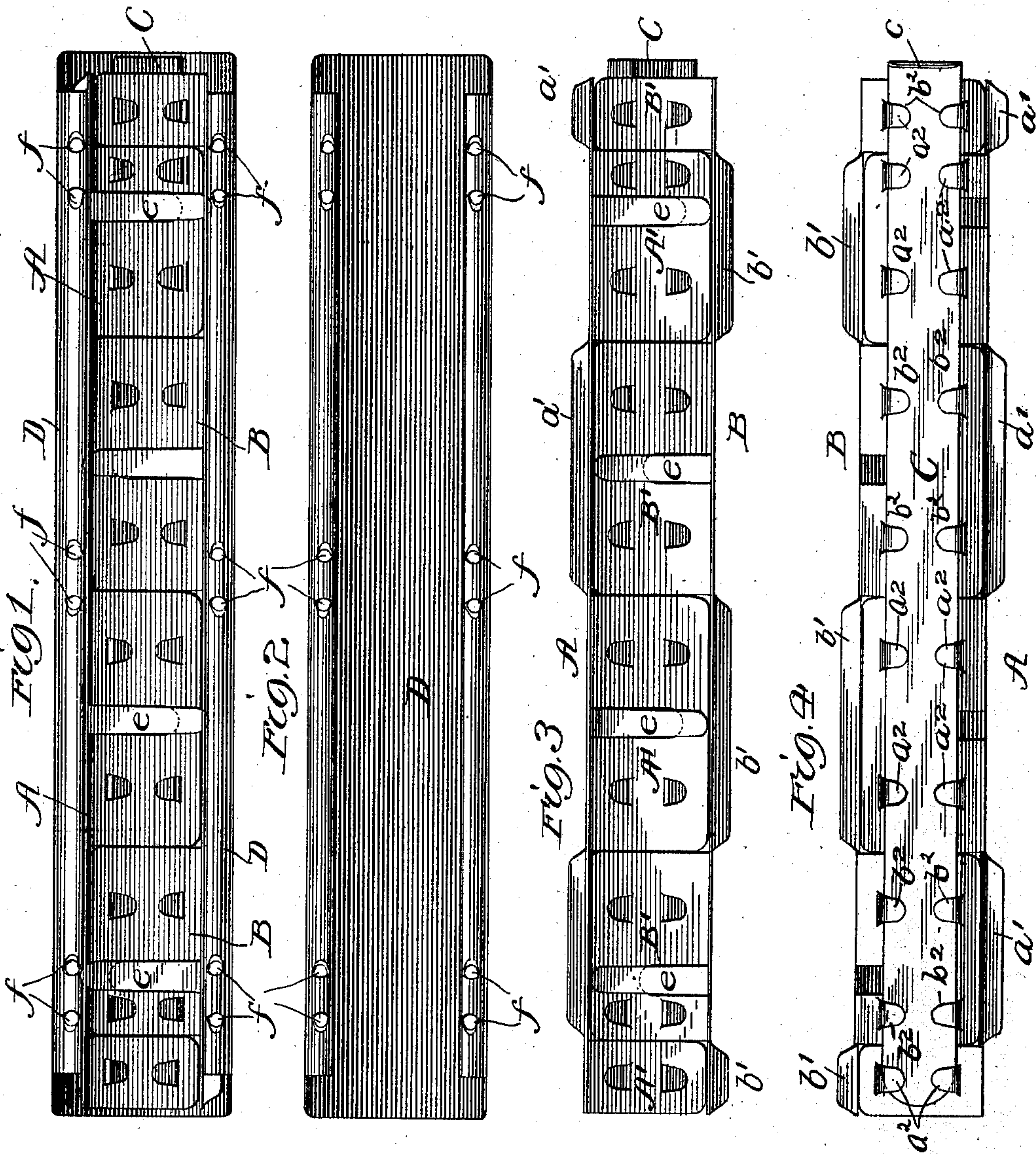
Patented Mar. 26, 1901.

W. F. E. GURLEY.
LOOSE SHEET BINDER.

(Application filed Mar. 30, 1900.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses:

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2 Sheets—Sheet 2.

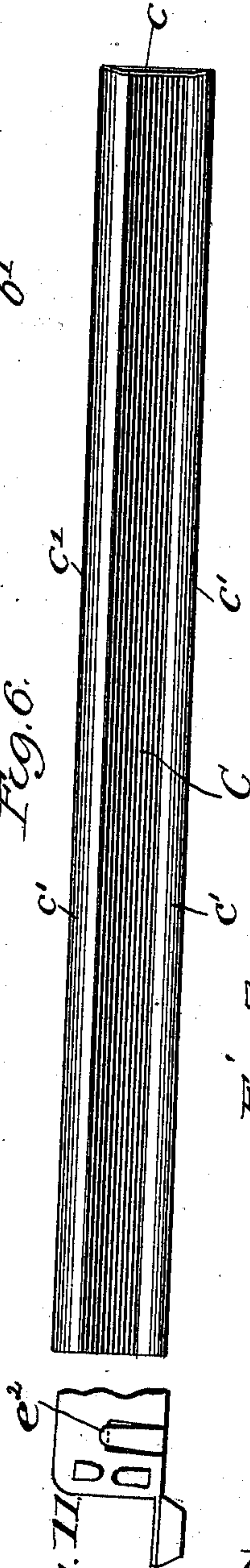
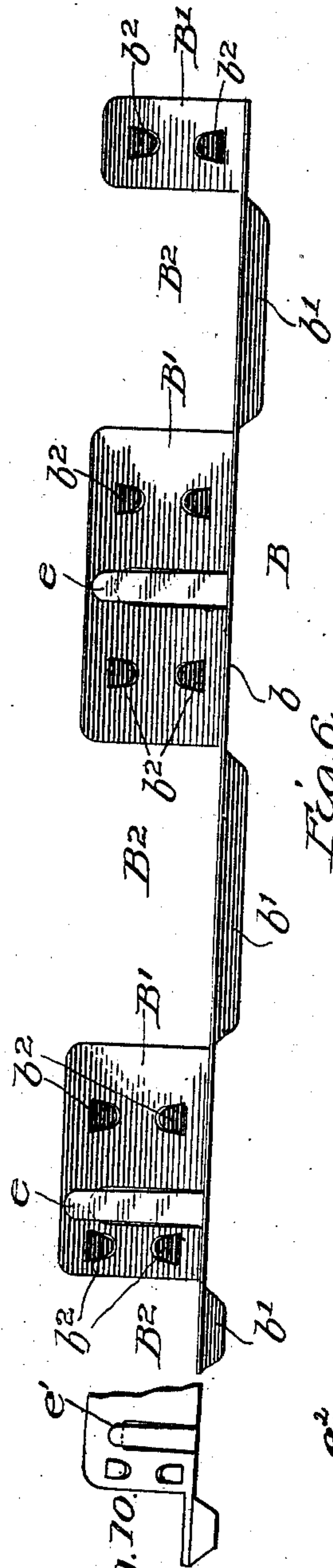
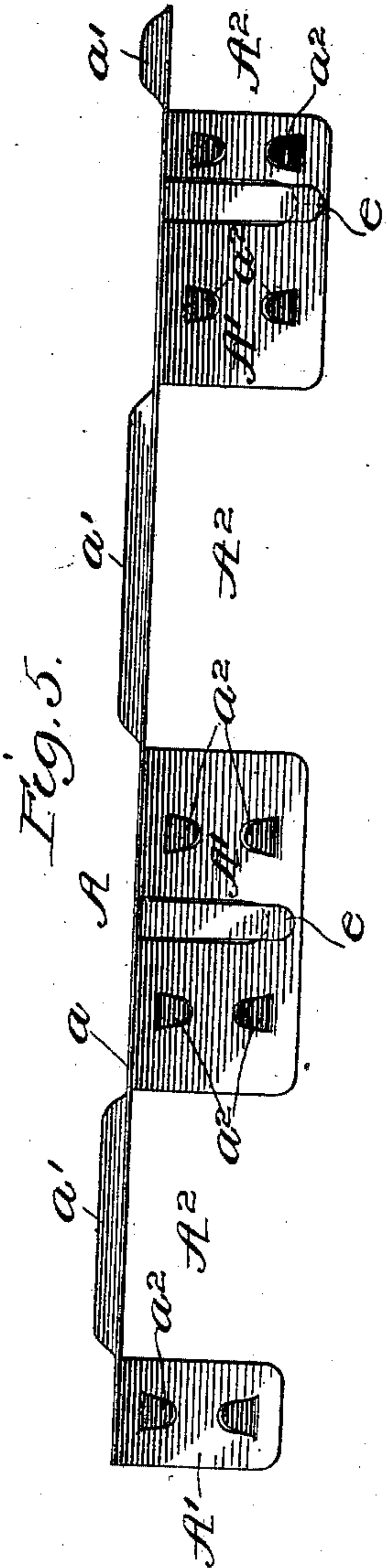


Fig. 9

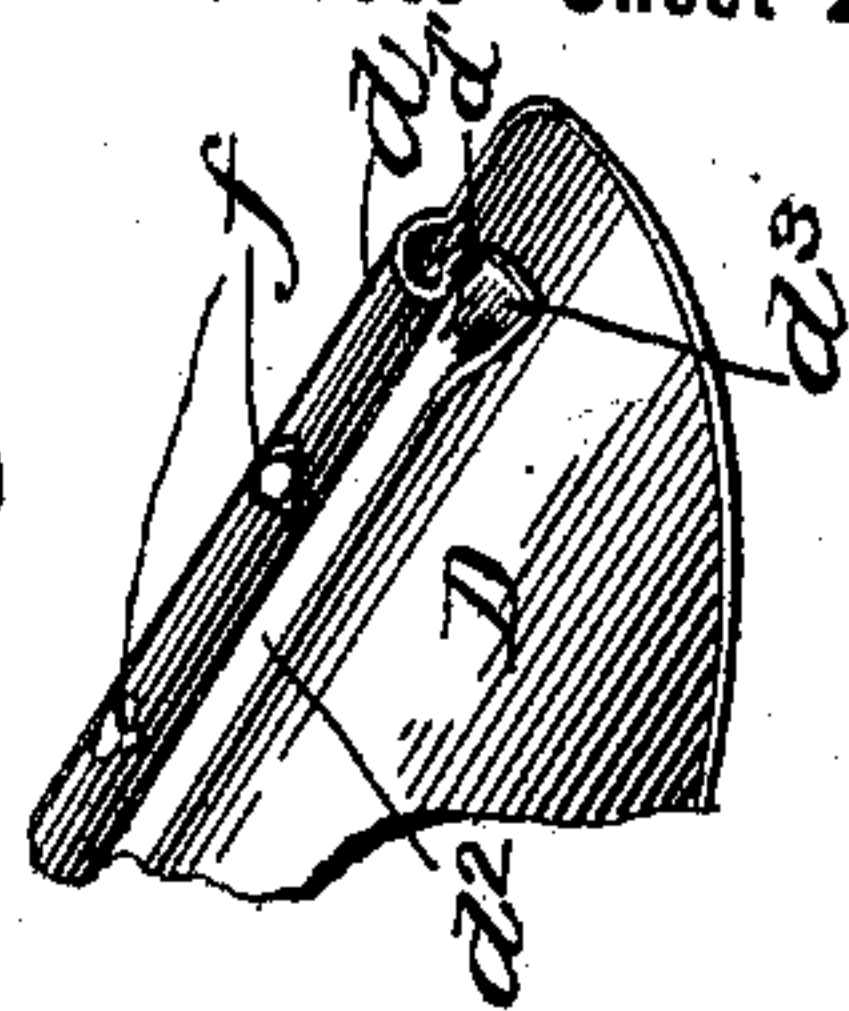


Fig. 8.

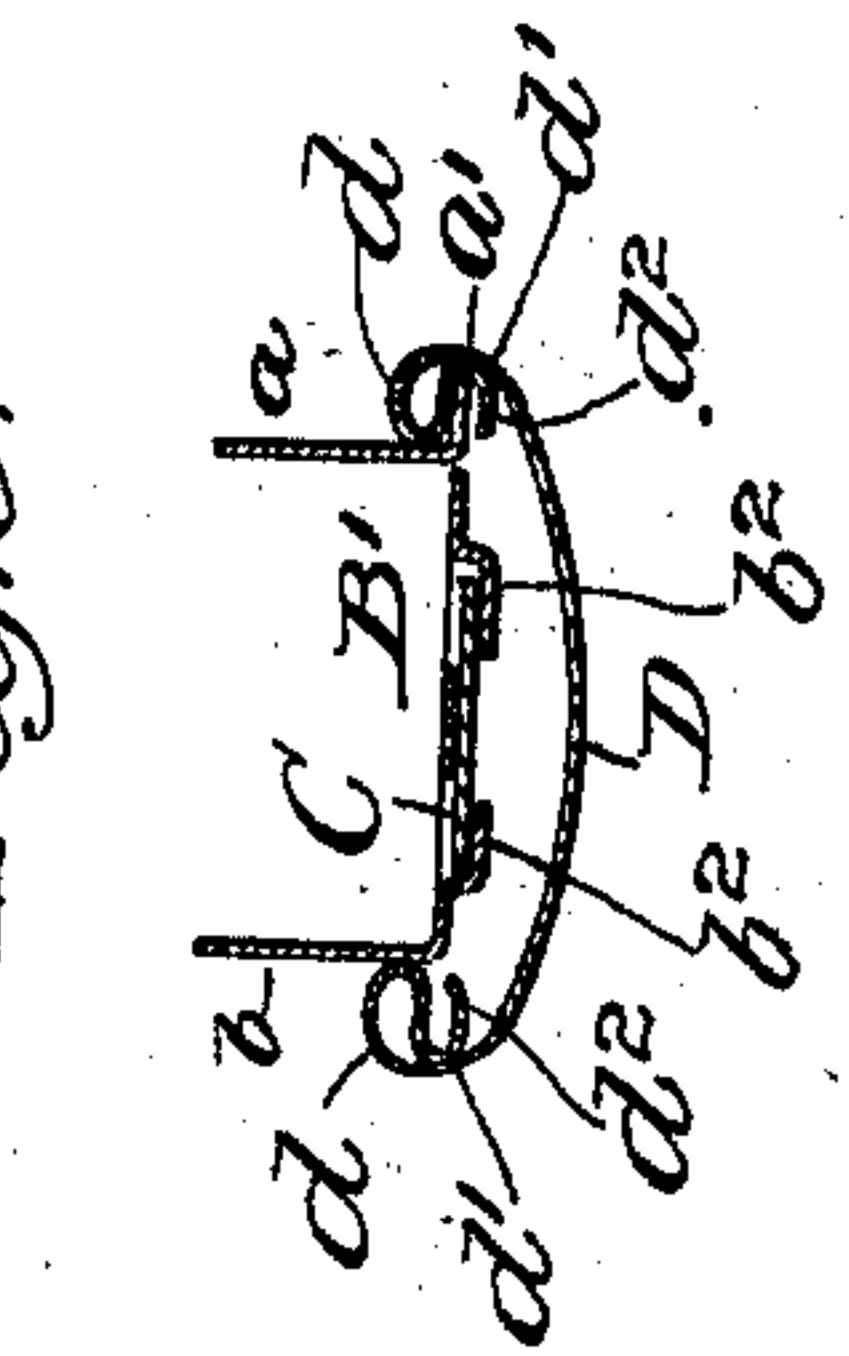


Fig. 7

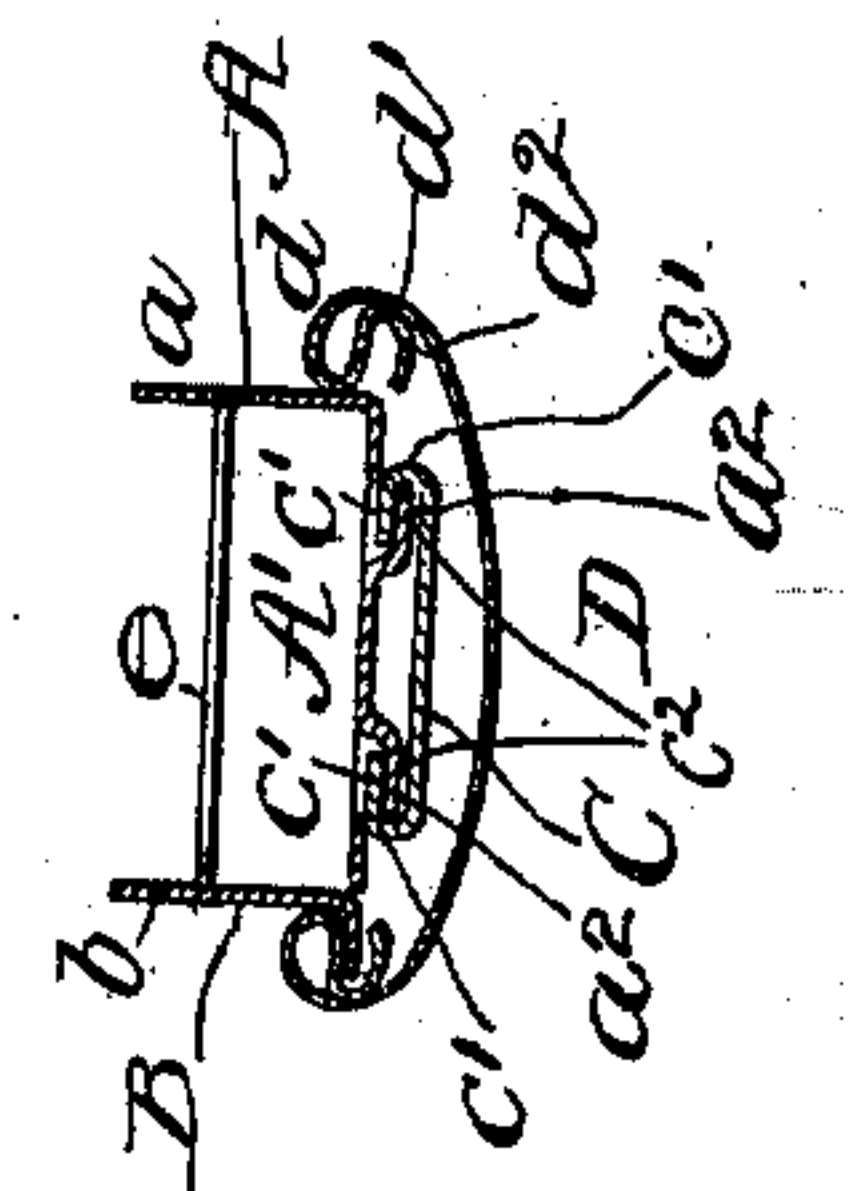
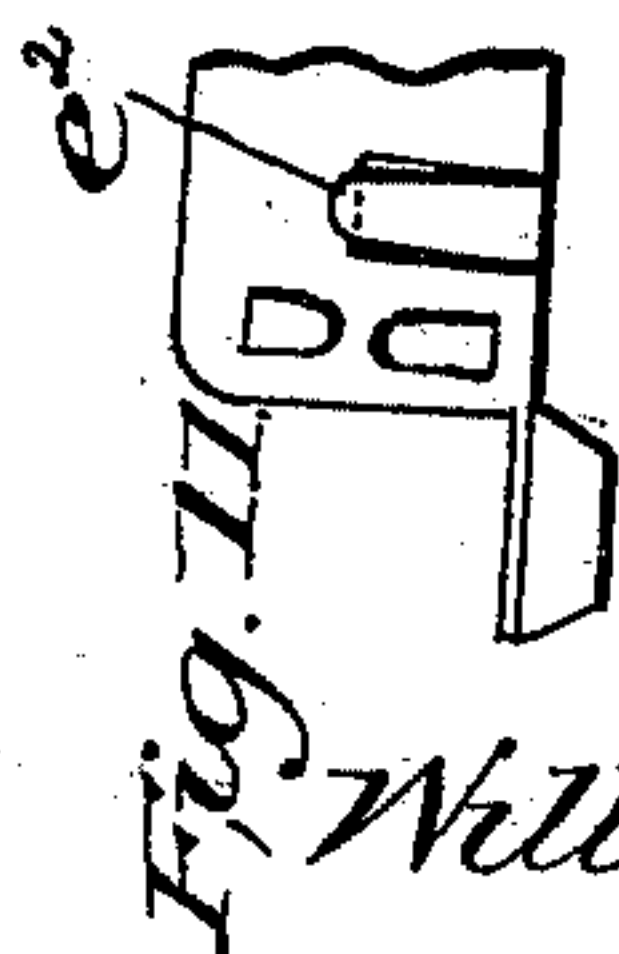
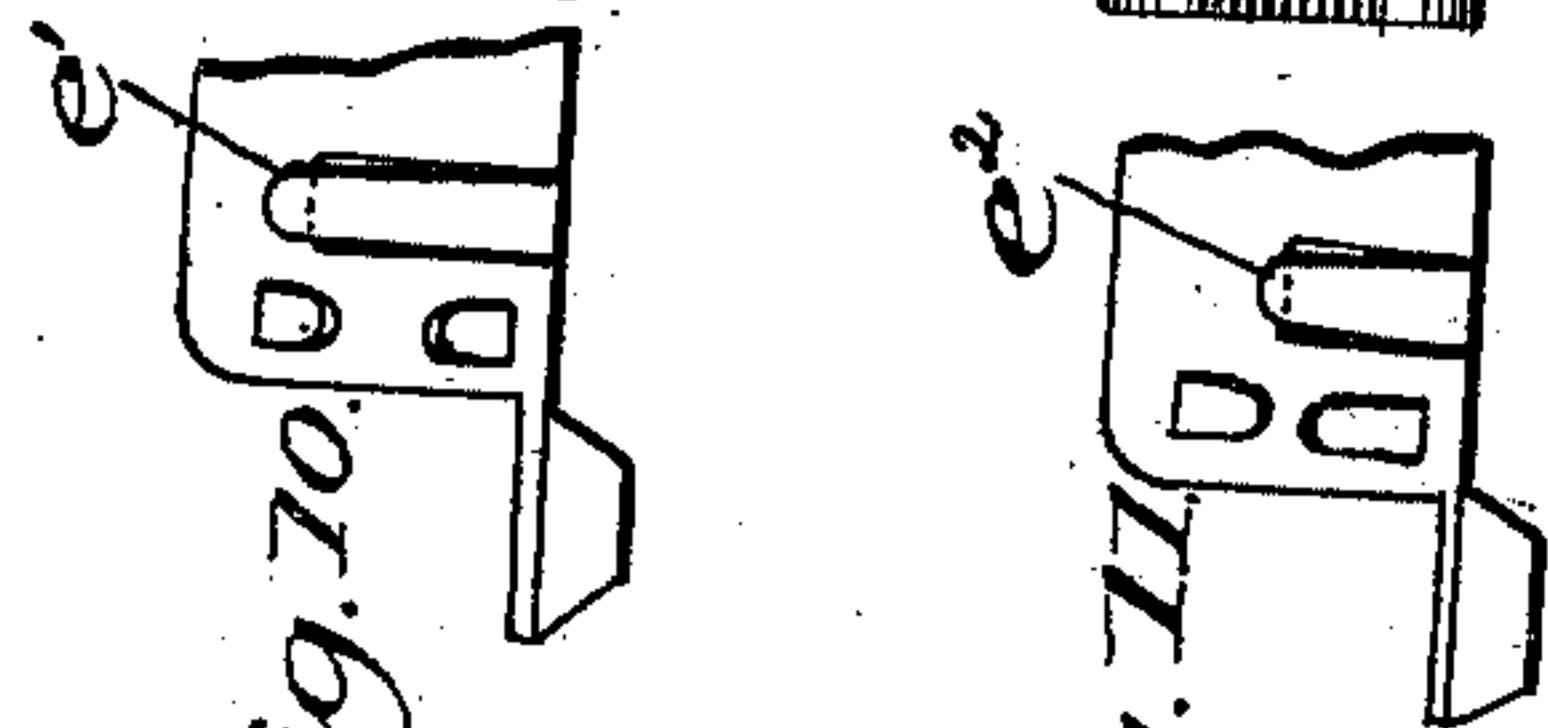


Fig. 10.



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UNITED STATES PATENT OFFICE.

WILLIAM F. E. GURLEY, OF CHICAGO, ILLINOIS.

LOOSE-SHEET BINDER.

SPECIFICATION forming part of Letters Patent No. 670,666, dated March 26, 1901.

Application filed March 30, 1900. Serial No. 10,814. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. E. GURLEY, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Temporary or Loose-Sheet Binders, of which the following is a specification.

In the use of what are known generally as "temporary" binders, which are employed for the purpose of binding together loose sheets or leaves and which when full are also used as permanent binders, it is desirable to have the construction of the binder one which can be readily separated as to its component parts for the purpose of withdrawing a sheet and inserting an additional sheet or sheets or for changing the sheets or for removing one sheet and replacing it by another or for other changes in the arrangement of the sheets, and it is also a requisite of this class of binders that the sheets when inserted shall be held firmly and without liability of becoming displaced. Another requirement is the easy detachment of the parts and their ready reassembling for use.

The object of the present invention is to construct a temporary or loose-sheet binder, also capable of use as a permanent binder, having therein the features hereinabove noted; and the invention consists in the novel features of construction and combination of parts hereinafter described and claimed.

In the drawings illustrating the invention, Figure 1 is a plan view looking at the inner face of the binder, with the parts united together; Fig. 2, a plan view looking at the inner face of the back plate which receives the binding-plates proper; Fig. 3, a plan view looking at the inner face of the binding-plates proper, with the back plate removed and showing the locking-catches outwardly instead of inwardly turned; Fig. 4, a plan view looking at the outer face of the binding-plates proper with the back plate removed; Fig. 5, a plan view looking at the inner face of the binding-plates proper and showing the plates separated; Fig. 6, a plan view of the locking-bar adapted for use with the construction of locking ears or catches of Fig. 3; Fig. 7, a cross-section showing outwardly-turned locking ears and catches and the locking-bar

therefor; Fig. 8, a cross-section showing inwardly-turned locking ears or catches and the locking-bar therefor; Fig. 9, a detail in perspective of a corner of the back plate; Fig. 10, a detail in plan showing the end of a plate with the tongue stopping short of the side wall, and Fig. 11 a detail in plan showing the end of a plate with the tongue end passing the center of the plate only.

The binder proper is formed of two companion plates A and B, each having a similar formation or construction. Each plate may be made from sheet metal of any suitable character, and each plate has a side wall and a bottom composed of alternating ears and openings. The plate or section A has a side wall *a* and on its exterior at the bottom line is provided with lips *a'*, and has a bottom or support formed by ears *A'* and openings *A²*, as shown in Fig. 5, and each ear has catches or lips *a²* struck out from the body of the ear. The plate or section B has a side wall *b* and on its outer edge at the bottom has lips *b'*, and on the inside has a bottom formed of ears *B'* and openings *B²*, and each ear *B'* has catches or lips *b²* struck from the body of the ear, as shown in Fig. 5. The ears and openings of the two plates or sections lie opposite each other—that is, an ear on the plate A is opposite an opening on the plate B and an ear on the plate B is opposite an opening on the plate A—so that when the two plates or sections are brought together the ears will fill the openings and a continuous bottom will be formed, having a series of catches or lips on the rear side with a space between them and the body of the ears forming a continuous passage from end to end of the binder as a whole. The two plates after being brought together are locked in that position by a locking-bar C, having one end turned to form a catch or finger *c*. The opposite end of this bar to facilitate insertion may be rounded, and the bar is inserted on the rear face of the two plates or sections when together, passing beneath the catches or lips *a²* and *b²* where the lips are turned inwardly, as shown in Figs. 1, 4, and 5. The lips instead of being struck and turned with their points or free ends inwardly projected, may be struck and turned from the body of each ear with their points or ends outwardly projected and when

the ears are of this arrangement the locking bar or strip fits over the ears and is of the construction shown in Fig. 6, having on each side a turned edge c' , forming a groove or recess c^2 to receive the ears, as shown in Fig. 7. The slipping of the locking-strip over the catches or ears gives a more finished appearance, but with either form of construction the two companion plates or sections of the binder will be rigidly and firmly locked one to the other, so as to firmly and strongly unite and hold the two plates or sections together.

The binder in order to present a neat appearance can be provided with a back plate or backing D, which backing is formed from sheet metal, so as to have a semicircular body with a locking or retaining groove on each side to receive the side lips of the plates or sections. As shown, the retaining-groove is formed by turning the outer edge of the body so as to form on each side a bead or rounded portion d and then turning the free edge d^2 inward, so as to form a groove d' between the bead and the turned edge, and to facilitate entering of the binder proper into the cover the corners d^3 of the free edge d^2 can be struck down, so as to form an opening or mouth for easily entering the side lips of the binder, and this turned-down corner also forms a guard against tearing a leather or other binding in case such binding is used around the back, as in case of a book or similar use.

Each plate or section of the binder proper has inwardly-projecting tongues e , two on each plate or section in the arrangement shown, and these tongues pass through suitable slits therefor cut into the leaves or sheets to be bound together, so that when the two plates or sections are brought together the sheets or leaves will be held in place between them by the tongues. The tongues e may extend from side wall to side wall, or they may stop short of the opposite side wall, as shown in Fig. 10 by the tongues e' , or they may be arranged so as to have their inner ends pass each other midway of the binder, as shown in Fig. 11 by the tongues e^2 , so long as the arrangement is one by which the tongues will operate to secure the loose sheets or leaves in the binder. It is to be understood that with the form of tongue shown in Fig. 10 such form is to be used on both plates, and that with the form of tongue shown in Fig. 11 such form is to be used on both plates, the figures only showing one tongue as an illustration.

The tube or bead d on each side of the back plate may be provided with openings f for the passage of tie-cords, by means of which a suitable cover can be united to the binder if so desired.

The operation will be understood from the foregoing description, but, briefly, is as follows: The back plate is slipped from the binder proper and the retaining or locking strip C is slipped from engagement with its catches or ears, leaving the two plates or sections of the binder proper free to be separated

by pulling them apart, such separation drawing out the tongues from the sheets on one side or both sides, if so desired. When separated, a new sheet or sheets can be inserted by slipping onto the tongues of one plate or section and then entering the tongues of the other plate or section into their slits and bringing the two plates or sections together and again locking them by the strip and applying the back plate and restoring the binder to its normal condition. This separating of the parts is easily performed, and when separated the leaves or sheets can be changed as desired, or some of the sheets removed or new sheets be added without any inconvenience or trouble, and when the leaves or sheets are arranged as desired the parts can be brought together and secured, as hereinbefore described, forming a permanent retainer for the sheets.

The device is exceedingly simple in construction, and the several parts of which it is composed can be easily and quickly separated and brought together, enabling the changing of the leaves or sheets to be performed without any great inconvenience.

I claim—

1. In a temporary binder, the combination of two separable companion plates or sections, each having alternating bottom ears and openings offsetting each other in the two plates the width of each plate, and means for locking and rigidly uniting the two plates or sections when in juxtaposition, substantially as described.

2. In a temporary binder, the combination of two separable companion plates, each having a side wall with inwardly-projected tongues and each having alternating bottom ears and openings offsetting each other in the two plates the width of each plate, and means for locking and rigidly uniting the two plates when in juxtaposition, substantially as described.

3. In a temporary binder, the combination of two separable companion plates, each having a side wall with inwardly-projected tongues and each having alternating bottom ears and openings offsetting each other in the two plates, each bottom ear having catches or lips rearwardly projecting, and a locking strip or bar engaging with the catches or lips and locking and uniting the two plates when in juxtaposition, substantially as described.

4. In a temporary binder, the combination of two separable companion plates, each having a side wall with inwardly-projected tongues and each having at the bottom outwardly-extending lips and each plate having alternating bottom ears and openings offsetting each other in the two plates, each bottom ear having catches or lips rearwardly projecting, a locking strip or bar engaging with the catches or ears and locking and uniting the two plates when in juxtaposition and a back plate having on each side grooves to receive the outwardly-extended lips of the

plates or sections for securing the back plate to the binder proper, substantially as described.

5 In a temporary binder, the combination of two separable companion plates, each having a side wall with inwardly-projecting tongues and each having at the bottom outwardly-extending lips and each plate having alternating bottom ears and openings offset-
10 ting each other in the two plates, each bottom ear having catches or lips rearwardly projecting, a locking strip or bar engaging with the catches or ears and locking and uniting the

two plates when in juxtaposition, and a back plate having its edge on each side rolled into
15 a tubular form and turned inward to form a groove for receiving the outwardly-extended lips of the binder plates or sections and having the corner of the inwardly-turned edge struck down for entering the binder proper
20 in the back plate, substantially as described.

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