

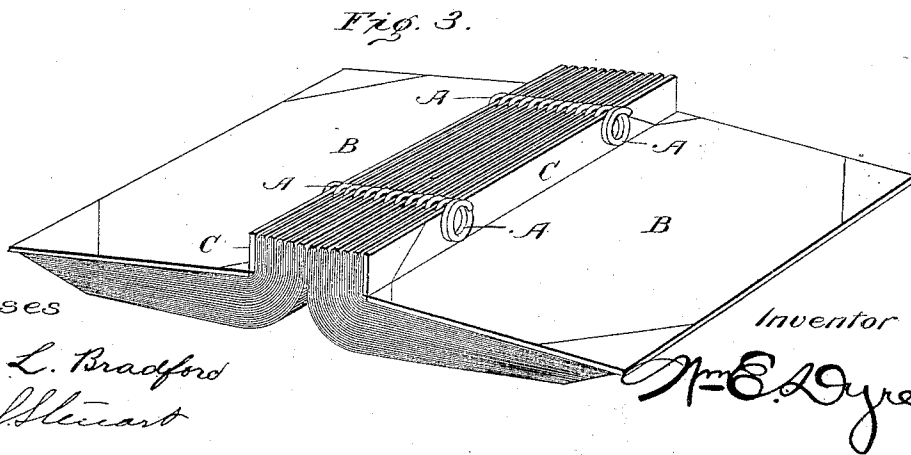
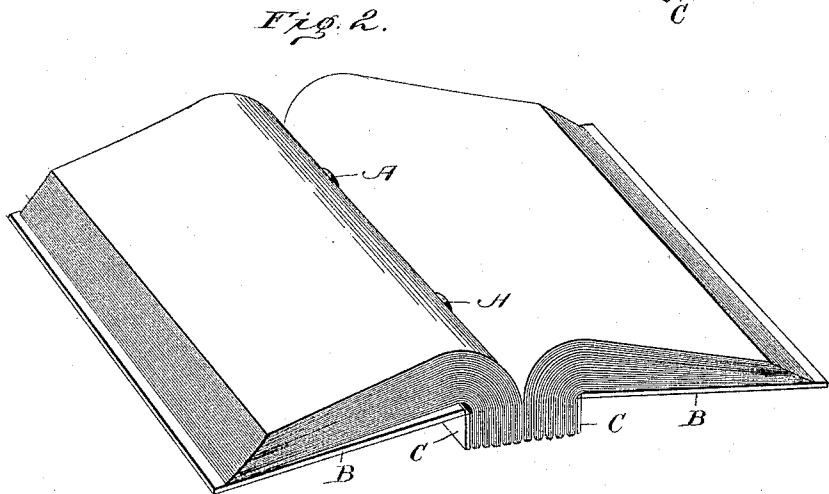
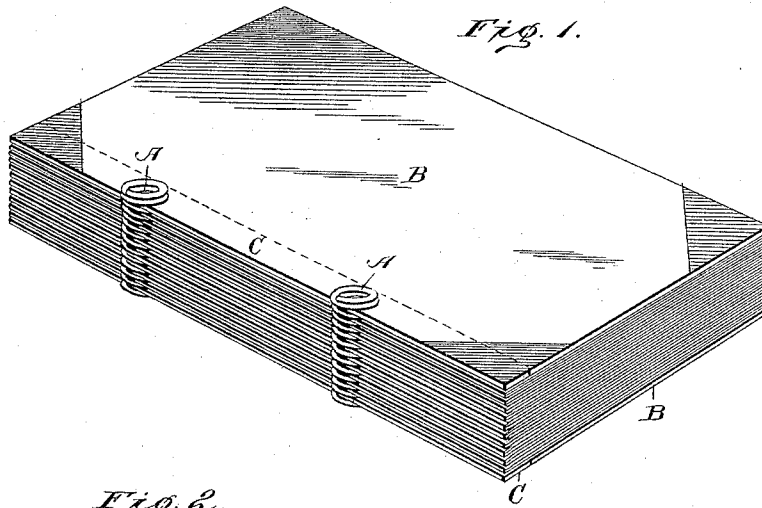
(No Model.)

2 Sheets—Sheet 1.

W. E. DYRE.
TEMPORARY BINDER.

No. 489,794

Patented Jan. 10, 1893.



Witnesses

Edwin L. Bradford
Alex Stewart

Inventor

W. E. Dyre

(No Model.)

2 Sheets—Sheet 2.

W. E. DYRE. TEMPORARY BINDER.

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FIG. 4.

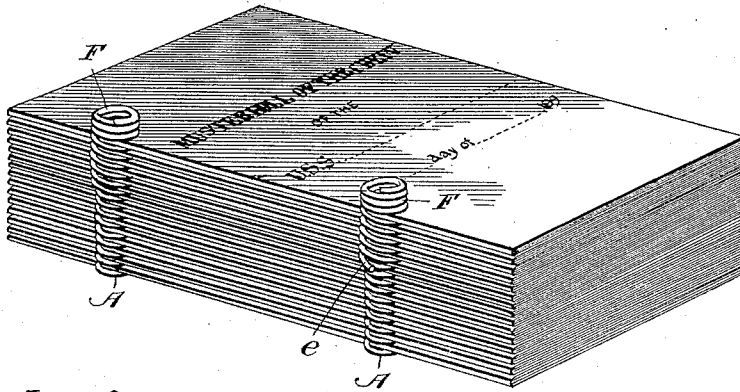


FIG. 5.

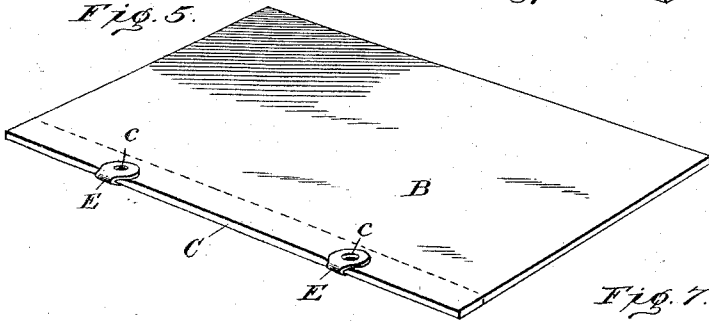


FIG. 7.

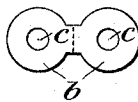


FIG. 8.



FIG. 6.

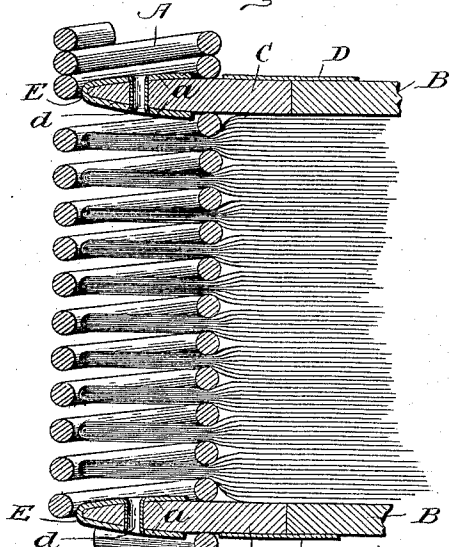


FIG. 9.

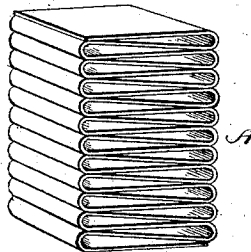
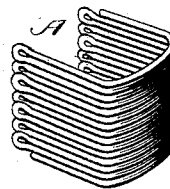


FIG. 10.



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UNITED STATES PATENT OFFICE.

WILLIAM E. DYRE, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR OF ONE-HALF TO EDWARD S. YORK, OF SAME PLACE.

TEMPORARY BINDER.

SPECIFICATION forming part of Letters Patent No. 489,794, dated January 10, 1893.

Application filed November 16, 1892. Serial No. 452,172. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. DYRE, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Temporary Binders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to temporary binders and has for its object improvements in this class of devices, whereby a binder is produced capable of receiving books, pamphlets, or papers, and securely retaining them in a detachable or temporary manner.

Broadly stated, the present device consists of a duplicate series of superposed clamping jaws designed, arranged, and adapted to receive and securely hold in compact book form, documents consigned thereto.

Temporary binders as ordinarily constructed "stab" or otherwise disfigure the margin of books bound therein, and when partially filled are further objectionable owing to the ill appearance presented by a high standing back, as well as the positive limit placed upon their capacity by fixed top and bottom covers. In contradistinction to this, and for the purpose of rectifying these evils mainly, the hereinafter described binder is produced, in which disfiguration or mutilation of the individual signatures or documents is rendered impossible; a systematic, compact, and neat arrangement thereof maintained at all times; and a practically indefinite extension permitted, whereby the capacity of the binder is correspondingly increased.

The invention will now be particularly described and pointed out in the appended claims.

In the accompanying drawings which form part of this specification, and in which like letters of reference indicate like parts wherever employed: Figure 1, is a perspective view illustrating my invention as applied to use, in a closed position. Fig. 2, the same open. Fig. 3, the same inverted. Fig. 4, a similar view, showing a set of extension clamps partially filled with books. Fig. 5, also a perspective, rep-

resenting the top cover removed. Fig. 6, a vertical transverse section through one series of clamping jaws and adjacent parts. Figs. 7 and 8, detail views of an edge protecting clip showing respectively a blank from which it is formed, and a perspective thereof when bent, and Figs. 9 and 10, represent in perspective two modified forms of the clamping jaws employed.

Reference being had to the drawings and letters thereon, A A indicate duplicate series of superposed clamping jaws, which, owing to simplicity and cheapness of construction, are preferably of a convolute form, made of relatively stiff spring metal, and in practice adapted to be distended for the reception of signatures or books, as illustrated by Figs. 1—2—3—4— and 6.

For use in connection with the clamping jaws A, are provided top and bottom covers being counterparts one of the other, preferably made of card-board, in two sections B C, connected by a suitable hinge as D; and adapted to be inserted between adjacent convolutions of each series of clamping jaws A. At their points of engagement with said jaws the covers B, C, are chamfered as at *a, a*, and equipped with edge protecting clips E, E; the latter being stamped from sheet metal in the form of connected disks *b, b*, each perforated as at *c, c*, bent into an over-lapping wedge shape, as shown by Fig. 8, and finally secured in position by means of hollow rivets *d, d*; said clips projecting above and below the surfaces of the covers to which they are secured a distance equal to the thickness of metal from which the clips are made.

As thus far described the capacity of the invention is limited to a given number of signatures or collections of smaller documents, such limit being in proportion to the number of connected convolutions of which the clamping jaws A A are composed; but provision is made for an indefinite extension of each series of clamping jaws by the addition of supplemental sets or series of jaws F, F, similar to the main jaws A A, except that they are provided with a tangential end *e*, are of a different diameter and thus adapted to alternately screw one within the other, as shown

by Fig. 4, said tangential end *e*, facilitating the attachment by leading into the spaces, between two or more book-backs without the necessity of being guided.

5 The effect and use of modified forms of clamping jaws illustrated by Figs. 9 and 10 are the same as that already described, and need not therefore be herein dwelt upon further than with relation to their extensibility; 10 which in such cases is effected by the mere addition of supplemental series of like jaws, the latter being allowed to overlap two or more folds of the former, and being adjusted to such position from the rear.

15 This being substantially the construction of my invention its use and operation are as follows: Section C of the bottom cover is first presented to the lowermost convolutions of jaws A between which an entrance is easily 20 effected owing to the wedge shape form of protecting clips E E, which being farther forced into the clamping jaws are finally inclosed thereby at the instant said jaws spring into their resting place back of and around 25 the slightly raised disks *b*. The clamping jaws A now being distended books, papers, &c. may readily be placed therein, after which—the distending force having been removed—it is obvious that the individual convolutions of the clamping jaws will bind upon 30 the books with ample retaining force, in the natural tendency to resume their normally closed position. One or more books having been thus committed to the binder the top cover B, C, is inserted in the next free clamping jaw above, in the manner and with the same effect as that already ascribed to the adjustment of the bottom cover. Thus as the 35 number of books in the binder increases the top cover is elevated step by step, so that it always rests upon the surface of the uppermost book.

Having thus described my improved binder, its use and operation, I desire it understood 45 that I by no means limit myself to the precise construction and arrangement of parts set forth, as obviously many minor changes may be made and substituted for those herein shown and described without in the least 50 departing from the spirit of my invention, as for instance, flexible top and bottom covers may be employed, thus dispensing with the hinge D; or but one centrally located series of clamping jaws may be used, in which case 55 an angle iron, secured near one or both ends of the bottom cover or board proves to be a desirable and effective means of retaining the bound books in systematic order with their backs in vertical alignment.

60 This being the substance of my invention, what I claim is:—

1. In a temporary binder, the combination with a base board, of a series of superposed spirally arranged clamping jaws, substantially as described.

2. In a temporary binder, the combination

with a hinged base board, of a series of superposed spirally arranged spring clamping jaws, substantially as described.

3. In a temporary binder, the combination 70 with top and bottom covers, of a series of superposed spirally arranged clamping jaws, substantially as described.

4. In a temporary binder, the combination 75 with detachable top and bottom covers, of a series of interposed spirally arranged spring jaws, substantially as described.

5. In a temporary binder, the combination with the covers of an interposed connected series of spirally arranged clamping jaws, 80 substantially as described.

6. In a temporary binder, the combination with top and bottom covers of an interposed integral series of spirally arranged spring clamping jaws, substantially as described. 85

7. In a temporary binder, the combination with front and back covers having edge protecting clips secured thereto, of one or more interposed series of clamping jaws, substantially as described. 90

8. In a temporary binder, the combination with front and back covers, of series of interposed clamping jaws, and wedge shaped edge protecting clips secured to the covers at their points of engagement with said jaws, 95 substantially as described.

9. In a temporary binder, the combination of a main and supplemental series of superposed clamping jaws, adapted to connect one with the other whereby the capacity of 100 the binder is increased, substantially as described.

10. In a temporary binder, the combination of a main and supplemental series of convolute clamping jaws of different diameters, 105 adapted to screw one within the other whereby the capacity of the binder is increased, substantially as described.

11. In a temporary binder, the combination of a main and supplemental series of convolute clamping jaws, of different diameters, the latter terminating in a tangential end, and adapted to screw one within the other whereby the capacity of the binder is increased, 115 substantially as described.

12. In a temporary binder, the combination with a main series of superposed clamping jaws, of extensible screw sections, formed by convolutes of relatively stiff spring metal, 120 substantially as described.

13. In a temporary binder, the combination with series of superposed clamping jaws, front and back covers, of wedge shaped edge protecting clips overlying and secured to the covers by hollow rivets, substantially as described. 125

In testimony whereof I subscribe my signature in presence of two witnesses.

WM. E. DYRE.

Witnesses:

THOMAS DURANT,
ALEX. S. STEUART.