L. M. MORDEN.

TEMPORARY BINDER.

APPLICATION FILED JAN. 29, 1907. RENEWED JAN. 30, 1908.

**908,596.** Patented Jan. 5, 1909.

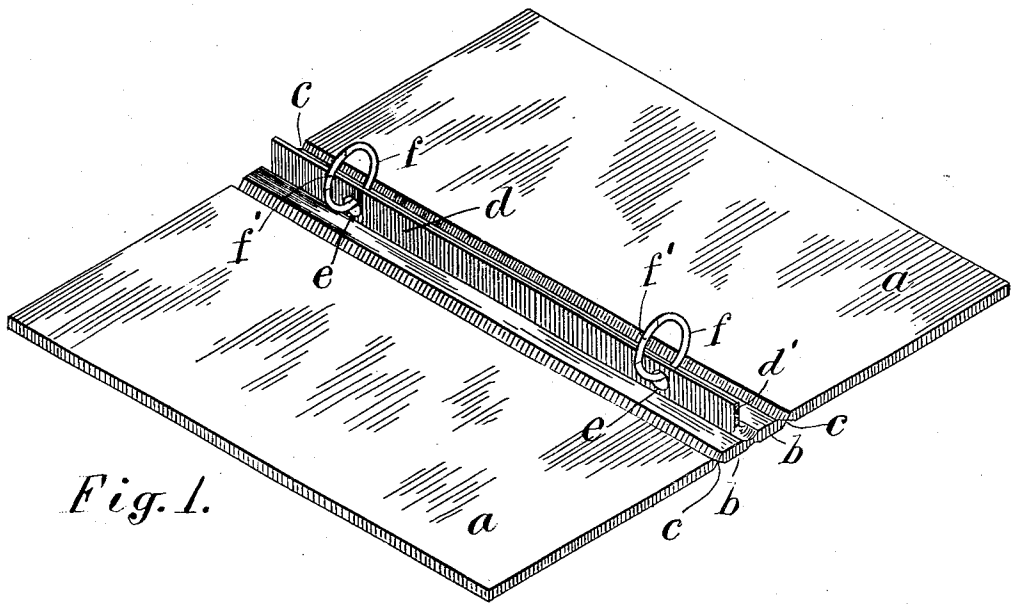



Fig. 1.

Fig. 2.

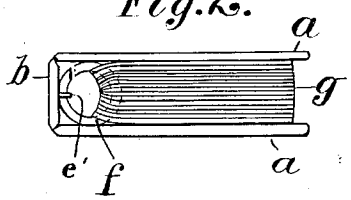



Fig. 3.

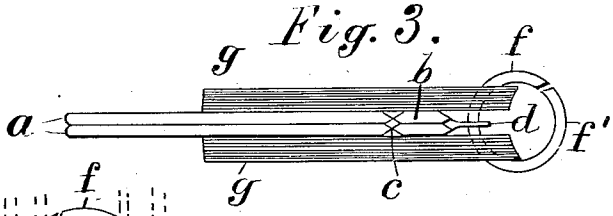



Fig. 4.

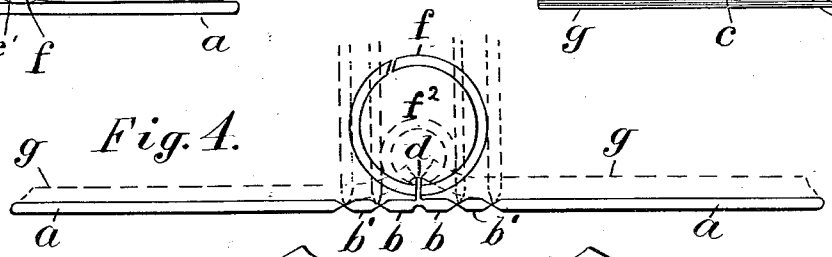
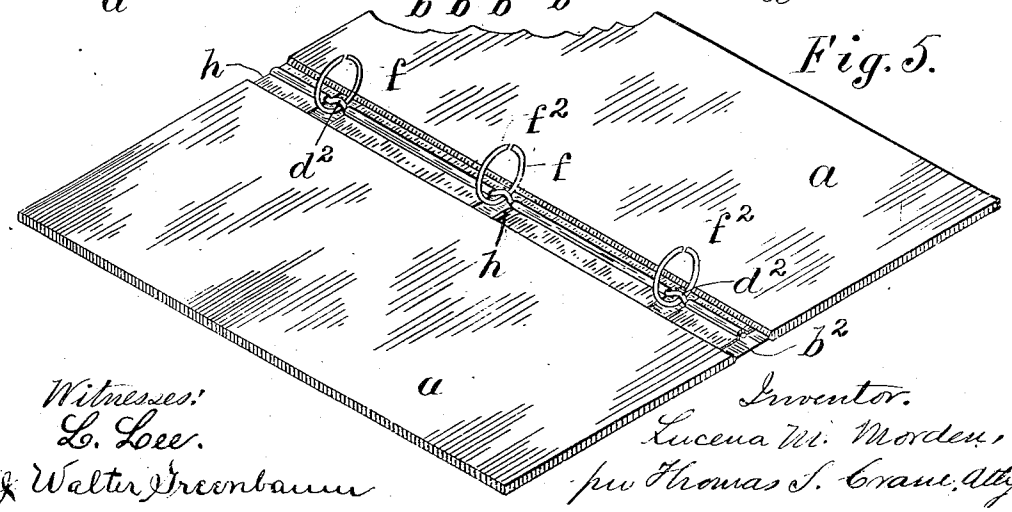



Fig. 5.




Witnesses:
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# UNITED STATES PATENT OFFICE.

LUCENA M. MORDEN, OF WATERBURY, CONNECTICUT.

## TEMPORARY BINDER.

No. 908,596. Specification of Letters Patent. Patented Jan. 5, 1909.

Application filed January 29, 1907, Serial No. 354,692. Renewed January 30, 1908. Serial No. 413,468.

*To all whom it may concern:*

Be it known that I, LUCENA M. MORDEN, a citizen of the United States, of 59 Grand street, Waterbury, county of New Haven, and State of Connecticut, have invented certain new and useful Improvements in Temporary Binders, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

The object of this invention is to furnish a temporary binder having covers to inclose the leaves or papers therein, with means for holding the papers so that they may lie perfectly flat upon the covers of the binder when opened. In the present invention, this object is accomplished by securing rings transversely in the back of the binder by means of a tongue or other longitudinally extending fastening means for securing the rings transversely. The rings are preferably made detachable from the back so as to be removed if desired, to retain the leaves together apart from the binder, other rings then being inserted in the back of the binder to retain other leaves in the binder.

The connection of each ring with the back of the binder by a single tongue or other longitudinal fastening permits the leaves to be parted at any point and laid flat upon the adjacent covers, and the detachability of the rings permits the capacity of the binder to be increased from time to time by removing rings of any given size and inserting larger rings when desired.

The tongue may be made of the same material as the back, as cloth and pasteboard, or it may be made of metal and attached to the back in any convenient manner, or the ring may be secured transversely in the back by longitudinal stitches or wire staples; and as the function of the fastenings is solely to hold a series of rings upon the back of the binder, the fastening tongue may extend the whole length of the back, as shown in part of the drawings, or consist of separate sections projected from the back at intervals to furnish a perforation for a single ring.

The invention will be understood by reference to the annexed drawing, in which,

Figure 1 is a perspective view of the binder opened, without any papers therein; Fig. 2 represents a flexible back binder closed, with a quantity of papers upon the file rings; Fig. 3 shows a binder with the covers and leaves folded back to show the degree to which the parts can be laid flat, when using it upon a desk or table; Fig. 4 is an end view of a binder with double joint-strips for the covers, adapting them to close upon large or small rings, the smaller ring being indicated by a dotted circle. Fig. 5 shows an alternative construction for the tongue made of a wire bent with loops or openings at intervals.

*a* designates two covers which are connected together by one or more joint-strips *b*, which are hinged to one another and to the covers by a flexible cloth or leather covering *c*. A portion of such flexible covering is shown in Figs. 1, 3, and 4, extended longitudinally from the junction of the joint-strips, forming a central tongue or strip *d* which is stiffened by an internal strip of millboard or other material *d'*, and has perforations *e* in which the rings *f* are fitted. In some cases, when the perforations or openings *e* are of sufficient size, it will be observed that the rings are movable or shiftable in a circular path, so that the rings could be shifted toward one or another section of leaves if desired.

Any class of ring may be used by which perforated leaves can be secured to the tongue, sectional rings being indicated in Fig. 1 of the drawing, having a section, as *f'*, which can be opened to insert the perforated leaves, and also permitting the rings to be held detachably upon the tongue *d* so as to be exchanged for rings of different size, when desired.

Fig. 3 shows the covers of Fig. 1 folded back upon one another, with leaves *g* upon the ring parted and folded in like manner above and beneath the covers so that the whole is adapted to lie flat upon the table.

Sections or portions of the tongue or strip shown in Fig. 1 would suffice to hold the two rings upon the back without the necessity of this strip extending the whole length of the same, and therefore in some constructions it would not be necessary to have such strip or fastening extend the entire length of the back.

In Fig. 2, I have therefore shown the back formed with a single joint-strip *b* with the covers hinged to its edges, and each ring attached thereto by a separate loop or staple, *e'*, which does not differ in appearance in this end view from the tongue *d* shown in the preceding figures. Fig. 4 shows the back formed with two joint-strips *b* and *b'*, thus adapting the covers to close upon a large ring

$f$, as indicated by dotted lines extending from the edges of the outer strips $b'$, or upon a smaller ring $f^2$, as shown by dotted lines extended from the outer edges of the strips $b$. This figure shows the covers opened flat in full lines, and leaves $g$ extended from opposite sides of the ring and lying flat upon the covers.

Rings of different sizes may obviously be inserted at different times in the holes of the tongue, thus enabling a smaller ring to be used when using only a small number of leaves within the covers, and a larger ring to be used when it is required to increase the capacity of the binder, so that the rings may be considered as interchangeable.

Instead of multiplying the number of strips in the back of the cover, the back may be wholly flexible to adapt the covers for folding upon rings of any size. Fig. 5 shows such a back $b^2$ formed wholly of flexible material with a metal tongue extended longitudinally upon the same and formed of a wire bent at intervals into loops $d^2$ which form perforations to receive the rings $f$.

The wire is shown secured to the back by pieces of cloth or leather $h$ which clear the loops and are fitted over the body of the wire and secured to the back at each side of the wire. It is obvious that portions of such wire embracing each a single loop could be secured upon the back in the same manner as the entire wire, to hold the separate rings in the same positions.

Instead of a jointed opening section like that on the ring shown in Fig. 1, the rings $f$ are formed each with an inclined cut $f^2$ through which the edges of the perforated leaves may be successively inserted and removed. Rings thus constructed are not detachable from the tongue, but the leaves can be detached when filled and replaced with others.

Heretofore, temporary binders have been made with two tongues in the back between which perforated sheets can be secured; but in such case the two tongues prevent the papers from separating from one another at the base when opened, and from lying flat upon the covers, as when one tongue is used, and as illustrated in Fig. 3.

In the present invention, the rings are a substitute for the two tongues as a means of supporting the papers, and permit of their being parted and turned over to lie upon the opposite covers; and the single tongue which is shown herein therefore performs an entirely different function from the two tongues referred to, which are the direct and only means of securing the leaves to the back of the binder.

The tongue in the present invention serves only for supporting the rings upon the back of the cover.

Detachable rings serve in this construction not only to secure the leaves within the binder, but also, when desired, as a means of permanently retaining the papers together when removed from the binder.

The word "tongue" is used herein to embrace any longitudinal projection or fixture upon the back having a transverse perforation to admit the ring and hold it transversely upon the back.

Having thus set forth the nature of the invention what is claimed herein is:

1. In a temporary binder, the combination, with two covers, of a back jointed thereto and provided with a longitudinal tongue, and rings secured transversely to the tongue to retain the leaves upon the back with freedom to part the same to lie flat upon the opposite covers when opened.

2. In a temporary binder, the combination, with two covers, of a back jointed thereto and provided with a longitudinal tongue having transverse perforations, and rings secured in such transverse perforations to retain leaves upon the back, with freedom to part the same to lie flat upon the opposite covers when opened.

3. In a temporary binder, the combination, with two covers, of a flexible back permitting of expansion and contraction and provided with a longitudinal tongue having transverse perforations, and rings secured in such transverse perforations to retain leaves upon the back, with freedom to part the same to lie flat upon the opposite covers when opened.

4. In a temporary binder, the combination, with two covers, of a back formed of a plurality of joint-strips flexibly connected to the back and to one another, a tongue secured to the back and formed with perforations $e$, and rings $f$ held detachably in such perforations the flexible back adapting the covers to fold close upon rings of different sizes.

5. In a temporary binder, the combination, with two covers, of a back jointed thereto and provided with a longitudinal tongue having transverse perforations, and rings $f$ secured in such perforations and provided with opening sections $f'$ for securing perforated leaves and holding them removably between the covers.

6. In a temporary binder, the combination, with two covers, of a back formed of straight strips with flexible covering material forming hinges thereto, a portion of such material being projected to form a longitudinal tongue with perforations, and rings held in such perforations to receive perforated leaves.

7. In a temporary binder, the combination of a relatively narrow supporting means having a plurality of openings or perforations located in alinement along the same, and leaf-receiving rings constructed to per-

mit the leaves to pass freely around the same from side to side, normally located in parallelism one in each of said openings to extend crosswise of such supporting means to retain the leaves upon the supporting means with freedom to part the leaves to lie flat when such leaves are open.

8. In a temporary binder, the combination of supporting means having a plurality of openings or perforations located in alinement along the same, and interchangeable leaf-receiving rings constructed to permit the leaves to pass freely around the same from side to side, normally located in parallelism one in each of said openings to extend crosswise of such supporting means to retain the leaves upon the supporting means with freedom to part the leaves to lie flat when such leaves are open.

9. In a temporary binder, the combination of supporting means having a plurality of openings or perforations located in alinement along the same, and detachable, interchangeable and movable leaf-receiving rings constructed to permit the leaves to pass freely around the same from side to side, normally located in parallelism one in each of said openings to extend crosswise of such supporting means to retain the leaves upon the supporting means with freedom to part the leaves to lie flat when such leaves are open.

10. In a temporary binder, the combination with the back of a pair of book-covers, said back having perforations or openings located in alinement longitudinally thereof, of readily detachable leaf-receiving rings located one in each of said openings to extend crosswise of such back to retain the leaves upon the back with freedom to part the leaves to lie flat when such leaves are open.

11. In a temporary binder, the combination with supporting means provided with a longitudinally extending strip, of a plurality of leaf-receiving rings detachably and interchangeably secured to such strip normally in parallelism to extend crosswise thereof to retain the leaves upon the supporting means with freedom to part the leaves to lie flat when such leaves are open.

12. In a temporary binder, the combination with a flexible back provided with a longitudinally extending upstanding strip having openings therethrough, of detachable leaf-receiving rings located one in each of said openings to extend crosswise of the strip to retain the leaves upon the back with freedom to part the leaves to lie flat when such leaves are open.

13. In a temporary binder, the combination with the back member of a pair of book-covers, said back having perforations or openings located in alinement longitudinally thereof, of detachable and interchangeable leaf-receiving rings located one in each of said openings crosswise of such back to retain the leaves upon the back with freedom to part the leaves to lie flat when such leaves are open.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

LUCENA M. MORDEN.

Witnesses:
EMIL G. LAVIGNE,
CLARA L. DODGE.