No. 687,901. Patented Dec. 3, 1901.

J. H. RAND.

BOOK.

(Application filed Dec. 20, 1900.)

(No Model.)

Fig. 1.

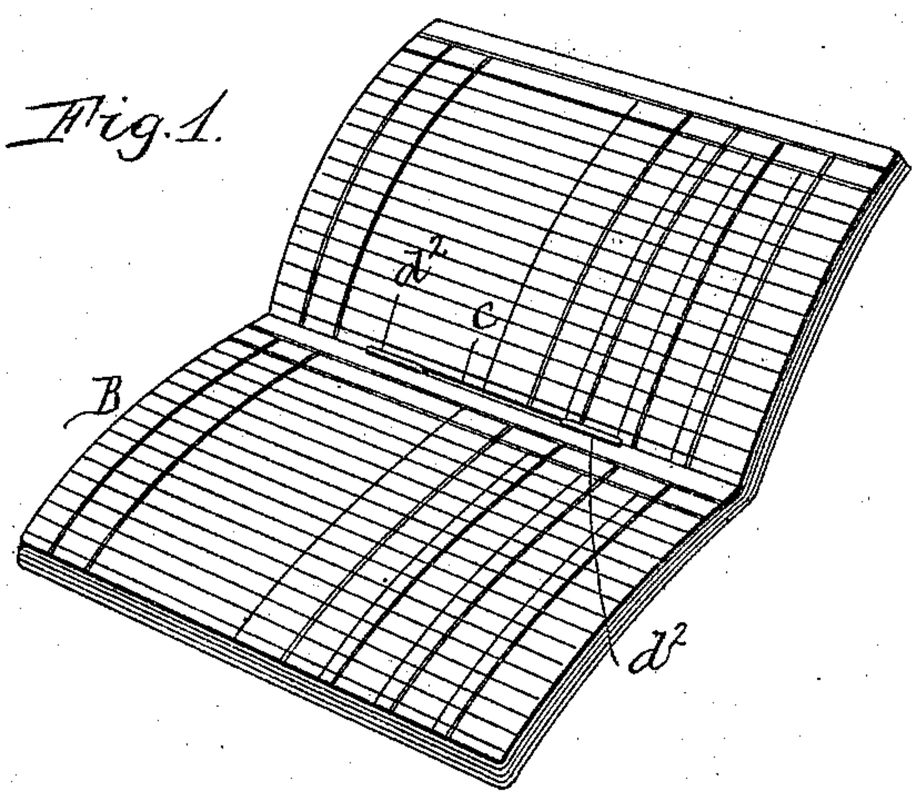


Fig. 2.

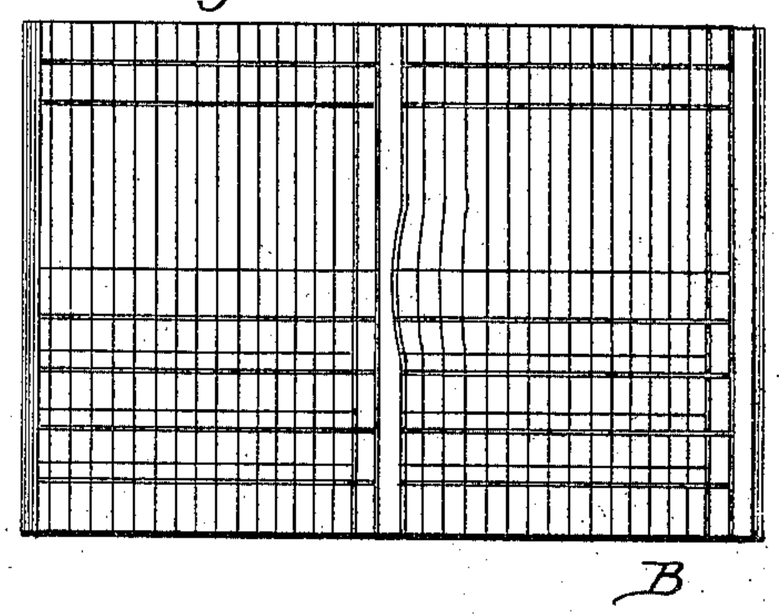


Fig. 3.

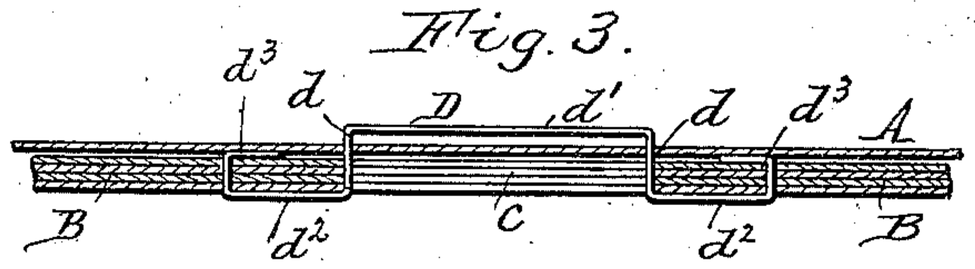


Fig. 4.

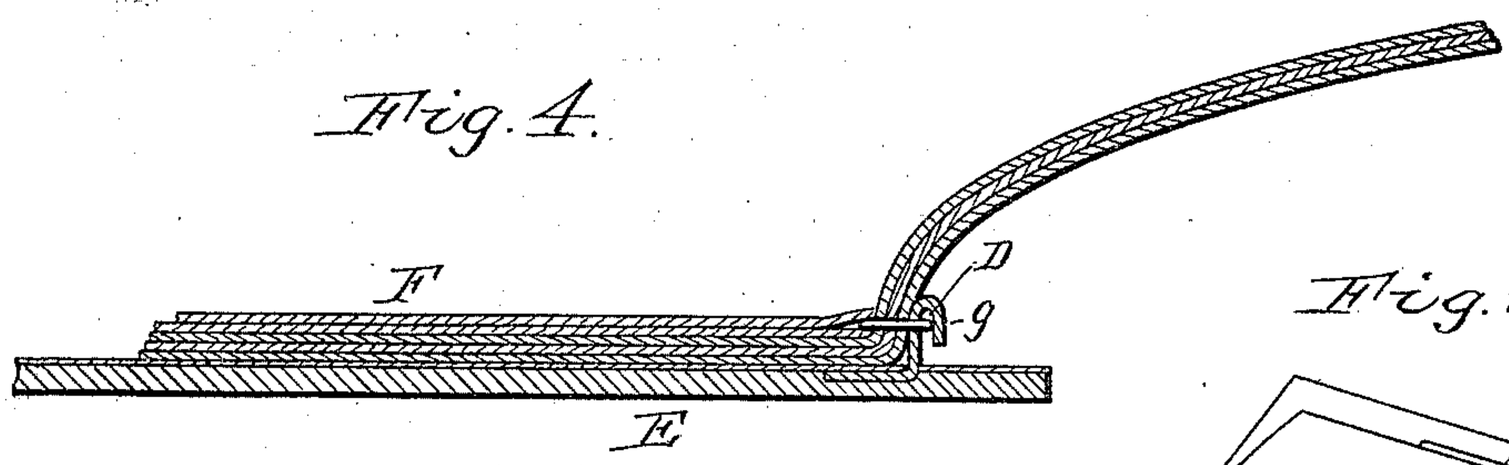


Fig. 5.

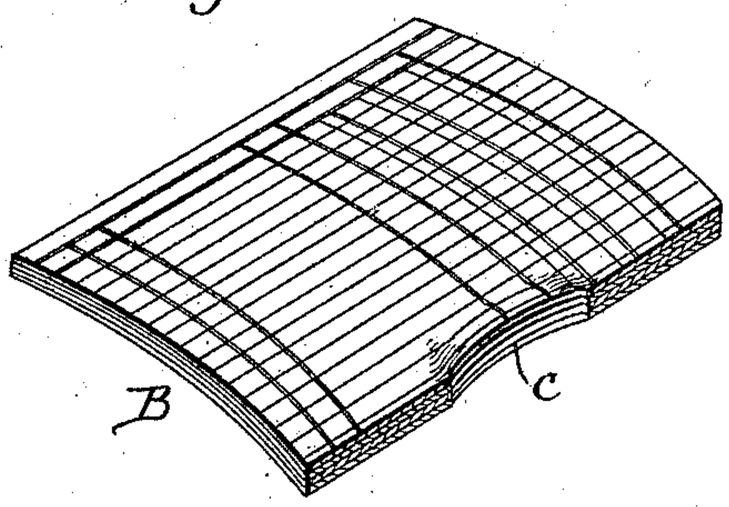


Fig. 6.

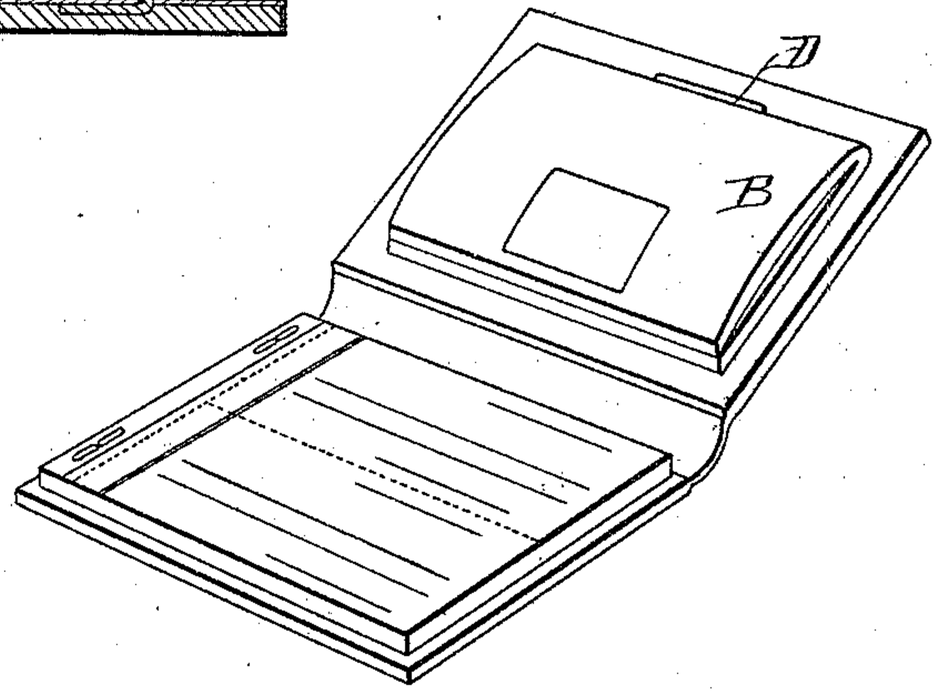
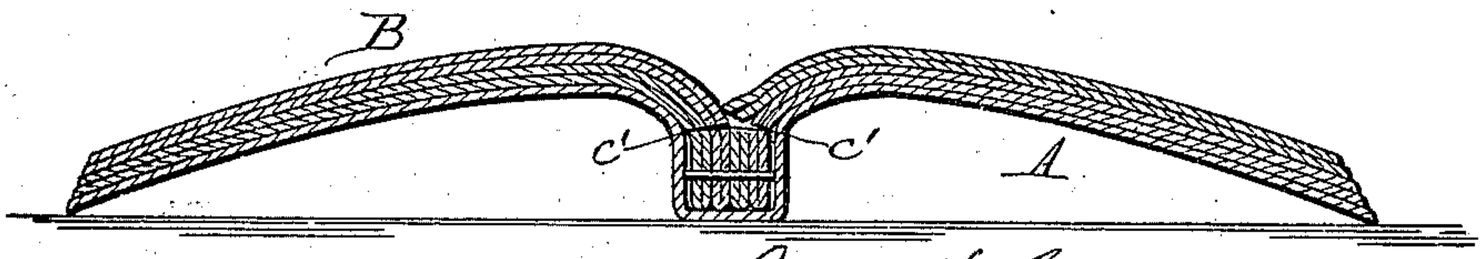


Fig. 7.



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UNITED STATES PATENT OFFICE.

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BOOK.

SPECIFICATION forming part of Letters Patent No. 687,901, dated December 3, 1901.

Application filed December 20, 1900. Serial No. 40,509. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. RAND, a citizen of the United States, residing at North Tonawanda, in the county of Niagara and State of New York, have invented new and useful Improvements in Books, of which the following is a specification.

This invention relates more particularly to the construction of books in which the leaves are bound together by wire staples.

One of the objects of my invention is to provide the leaves with simple means for preventing the same from folding or turning over when the book is open.

Another object is to bind the leaves to the cover by a strong and inexpensive fastening which also serves as a loop for removably attaching the book to a backing or main cover.

In the accompanying drawings, Figure 1 is a perspective view of an account-book or check-record provided with my improvement, showing the book opened at the middle. Fig. 2 is a top plan view of the book, showing the same opened at a different place. Fig. 3 is a fragmentary longitudinal section of the book, on an enlarged scale, the plane of the section being through the fold of the doubled sheets forming the leaves. Fig. 4 is a fragmentary transverse section of the book on an enlarged scale. Fig. 5 is a sectional perspective view of a detached group of leaves of the book, showing the slits in the same. Fig. 6 is a perspective view of a check-book and record embodying my invention. Fig. 7 is a transverse section of a book, showing a modified arrangement of the slits formed in the leaves.

Like letters of reference refer to like parts in the several figures.

A is the cover of the book, and B represents the leaves of the same, which preferably consist of a suitable number of superposed sheets doubled or folded at their middle, so that each sheet forms two leaves. In the construction shown in Figs. 1 to 6 each of the doubled sheets is provided in its fold with a longitudinal slit *c*, and the slits of all the sheets register with one another and are adapted to admit a wire binder or fastening D. As most clearly shown in Fig. 3, this binder consists of a staple, the legs *d* of which pass inwardly through the back of the cover and through coinciding slits *c* of the leaves, the connecting-bar *d'* of said legs being arranged on the outer side of the cover-back. The staple-legs are provided at their free inner ends with outwardly-extending branches d^2, which bear against the fold of the innermost sheet of the book, as shown in Fig. 1. These branches terminate in return-bends d^3, which pass outwardly through openings formed in the folds of the sheets and are thence bent inwardly or clenched against the back of the outermost sheet, as shown in Fig. 3. By this construction the several leaves are securely bound to the cover.

The binding-staple D preferably extends beyond the back of the cover, as shown, to form a loop, by which the book may be attached to a backing or support—such, for instance, as the stiff cover E of a check-book of the kind shown in Figs. 4 and 6. In this case a pad of check-blanks F is attached to the lower half of the cover, and the upper half of the cover is provided with a hook *g*, to which a check-record constructed in accordance with my invention is removably attached by means of its staple D.

The slits *c*, while forming an opening for the passage of the staple-legs *d*, serve also as a simple means of resisting the turning of the leaves and preventing accidental closing of the book when open. The natural curving of the leaves in the open position of the book causes the portions of the leaves which bound the slits to arch or bulge outwardly, so that the bulging edge of the slit in one of the two exposed leaves overlaps or abuts against the opposing leaf, as shown in Fig. 4, thereby forming a stop, which resists the turning of the leaves at the place where the book is opened. While such overlapping or abutting portions or the slitted leaves do not hold the leaves in a flat condition, they resist the turning of the leaves to a sufficient extent to enable the matter on the exposed leaves to be conveniently read. This renders the improvement especially desirable for a check-record of the kind herein shown and also for hymn-books and other books having comparatively narrow leaves, which are liable to turn over unless held in place by hand, or by a clasp or holder of some kind. In the drawings, the extent to which the slitted portions of the leaves bulge upon opening the book and the stop

action of the edges of the slits are exaggerated for the sake of clearness. The width of the slits is also exaggerated to better illustrate the invention. In practice they are formed by knife-cuts, so that there is practically no separation between the edges of the slits.

While I have shown in Figs. 1 to 6 a single binding-staple D, two or more staples and a corresponding number of slits may be employed, according to the size of the book.

Instead of forming the slits in the folds or creases of the leaves and passing the binding-staples through the same the slits may be independent of the staples and arranged at a short distance from the creases, as shown at c' in Fig. 7. By this arrangement the edges of the slits resist the turning of the leaves, as in the arrangement first described. In this modified arrangement the leaves may be bound together by ordinary staples passing transversely through the leaves, as shown in Fig. 7, or by other suitable means.

I claim as my invention—

1. A book having its leaves provided adjacent to their bound portions with longitudinal slits or knife-cuts having practically no separation between their edges, whereby when the book is opened, the edge portion of the slit in one of the exposed leaves bulges outward and abuts against the opposing leaf, substantially as set forth.

2. A book having leaves formed of doubled sheets which are provided in their fold or crease with registering longitudinal slits or knife-cuts having practically no separation between their edges, whereby when the book is opened, the edge portion of the slit in one of the exposed leaves bulges outward and abuts against the opposite leaf, substantially as set forth.

3. A book having leaves which are provided adjacent to their fold or crease with registering longitudinal slits, a cover inclosing the leaves, and a binder consisting of a staple which passes inwardly through the back of the cover and the slits of the sheets and which has its legs provided with outwardly-extending branches terminating in return-bends which pass through the leaves and are clenched on the back thereof, substantially as set forth.

4. A book having leaves formed of doubled sheets which are provided in their fold or crease with registering longitudinal slits, a cover inclosing the leaves, and a combined binder and attaching-loop consisting of a staple passing inwardly through the back of the cover and the slits of the sheets and projecting beyond the back of the cover to form a loop, and having its legs provided at their inner ends with outwardly-extending branches terminating in return-bends which penetrate the sheets, substantially as set forth.

Witness my hand this 5th day of December, 1900.

JAMES H. RAND.

Witnesses:
CARL F. GEYER,
JNO. J. BONNER.