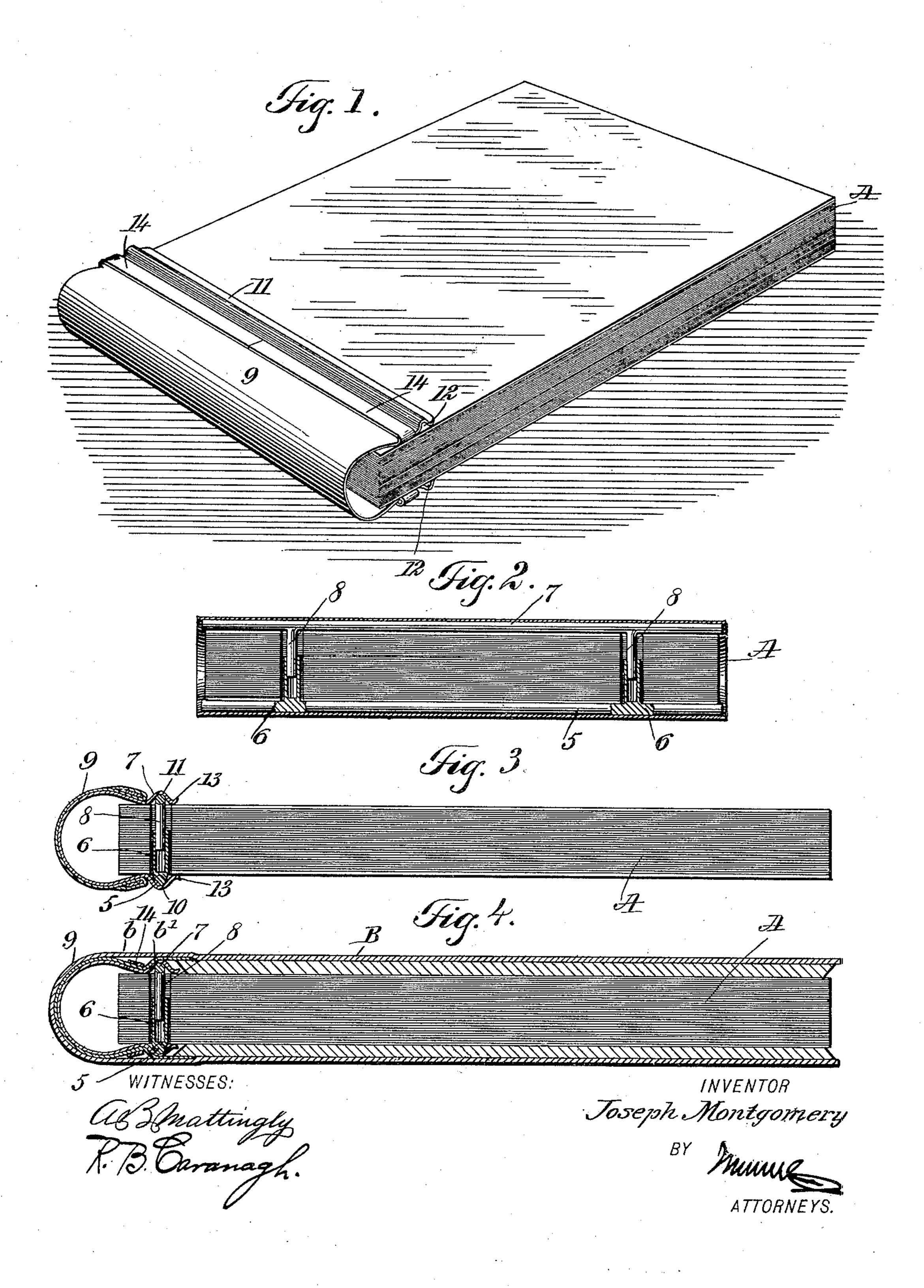
J. MONTGOMERY.

BINDER.

NO MODEL.

APPLICATION FILED JUNE 3, 1903.



United States Patent Office.

JOSEPH MONTGOMERY, OF FORT WORTH, TEXAS.

BINDER.

SPECIFICATION forming part of Letters Patent No. 755,380, dated March 22, 1904.

Application filed June 3, 1903. Serial No. 159,890. (No model.)

To all whom it may concern:

Be it known that I, Joseph Montgomery, a citizen of the United States, and a resident of Fort Worth, in the county of Tarrant and State of Texas, have invented new and useful Improvements in Binders, of which the following is a full, clear, and exact description.

My invention relates to improvements in binders, and appertains particularly to a temporary binder for order-books, cost-books, cash-books, diaries, and the like which are capable of being rolled or folded and carried about in the pocket.

One of the principal objects of the present invention is to provide a device of the character specified which will securely bind and retain a number of loose leaves, the structure of such binder enabling it to be readily attached to and removed from the packet of leaves.

A further object of the invention is to provide an improved temporary binder the parts of which will be so constructed and correlated that there will be little or no possibility of the binder being deranged or injured by rough usage.

Another object of my invention is to provide a device which shall embody the desired and essential features of simplicity, durability, and inexpensiveness.

With the above-recited objects and others of a similar nature in view my invention consists in the construction, combination, and arrangement of parts as is described in this specification, delineated in the drawings, and set forth in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a book formed of a plurality of loose leaves, such leaves being retained in position through the medium of a binder embodying my improvement. Fig. 2 is a transverse vertical sectional view taken through a book and binder of the character shown in Fig. 1. Fig. 3 is a longitudinal sectional view of the binder

and book with the cover removed; and Fig. 4 is a similar view showing the manner of at- 50 taching a cover for the packet of leaves forming the book, said cover being retained in position through the medium of a binder embodying my improvement.

Referring now to the accompanying drawings in detail, A designates a book formed of a series or packet of loose leaves, each leaf of the book being provided with perforations near one edge thereof which are adapted to register, the construction being such that when 60 the leaves are assembled in book formall the perforations will be in vertical alinement. It is through these registering perforations of the leaves that portions of my improved binder are adapted to extend for the purpose of retaining such leaves in position.

By referring to Figs. 2, 3, and 4 the construction of my binder proper will be clearly seen. 5 designates a cylindrical rod having thereon a plurality of tubular shanks or studs 7° 6, such studs being preferably formed integral with and extending up from said rod at such a point that one stud will project a certain distance into an adjacent aperture of the packet of leaves forming the book. Arranged to lie 75 upon the opposite edge of the book or packet of leaves is a rod 7 similar in dimensions to the rod 5, said rod having solid pins or studs 8 formed thereon, the construction being such that these pins will also extend through the 80 perforations or apertures in the book and each pin will enter the tubular stud projecting into said perforations from the opposite edge of the book. In order to retain the bars or rods and their pins and studs in their correlated po- 85 sition just described, I have provided a clamping-back portion 9, consisting, essentially, of a sheet of spring-steel or similar material bent or curved so that it is approximately U-shaped in cross-section, each longitudinal edge of such 90 clamping - back being formed with an outwardly-extending bead or rib, as at 10 and 11, the under surface of each of said ribs being formed with a hollow or grooved portion, as at 12, such groove being adapted to seat the 95 adjacent leaf-binding rods when the parts are

assembled. The extreme outer longitudinal edge portions, as at 13 13, of said clampingback are sprung or curved in such manner that they will bear or press upon the book 5 when in position.

A temporary cover composed of leather or the like may be attached securely to the packet of leaves through the following means: At the extreme end portion of each side of the 10 spring clamping-back is formed a strip, as at 14, which strip is preferably cut from the metal of which the back is formed, such strips to all intents and purposes forming relatively long narrow longitudinal tongues or exten-15 sions of the sides of the back. When the cover has been placed over the book and around the clamping-back, these strips are bent or brought inward upon said back portion, so that they lie in the position shown in Fig. 1—that is to 20 say, that their free end portions are almost contiguous or touching—and the cover portion will be held securely in position by reason of the strips lying between the cover and the lining thereof. In Fig. 4 the strips 14 lie, as is 25 clearly seen, between the outer portion b of the back of the cover B and the lining b' of said back.

From the above description, taken in connection with the accompanying drawings, the 3° construction and mode of employing my improved device will be readily understood. The leaves, which have been perforated or apertured, are piled into book form, and the rod carrying the tubular studs is inserted, so that 35 such studs enter the alining perforated portions of the leaf. A second rod, or that carrying the solid pins, is then inserted from the opposite side, and the parts are then slipped into the spring clamping-back from one of the 40 end portions thereof, the parts when so correlated and assembled appearing substantially as shown in Fig. 1 of the drawings. The leaves will then be held without any possibility of derangement, separation, or injury, and when 45 such back portion is used with a flexible cover the book so formed may be rolled with ease and facility and carried about in the pocket.

It is to be observed that there are many other advantages incident to my invention 5° apart from those herein recited; but they will be readily apparent to those familiar with articles of this type, so that it is unnecessary to dwell upon the same in detail here, and while I have shown and described one preferred 55 modification of my invention I wish it to be understood that there may be modifications with respect to minor details without departing from the spirit of the invention or without sacrificing any of the advantages thereof.

Having thus described my invention, I claim 60 as new and desire to secure by Letters Patent—

1. The combination with a plurality of leaves, of a binder therefor, comprising a rod carrying tubular studs, which studs are designed to pass through registering perfora- 65 tions formed in the leaves, a second rod, carrying pins which are inserted in such perforations from the opposite edge, the pins being designed to enter the tubular studs of the opposite rod, and a spring clamping-back for 70 retaining such rods in position, substantially as set forth.

2. A binder comprising rods designed to bear upon the opposite longitudinal edges of a book or the like, and a spring clamping-back 75 independent of the rods, adapted to hold the latter in position, said clamping-back having a hollowrib at each longitudinal edge thereof, said rib forming a seat for the adjacent rod,

substantially as set forth.

3. In a binder, the combination of a plurality of rods, a clamping-back for said rods. said back being substantially U-shaped in cross-section and having a hollow rib extending longitudinally, each rib being designed to 85 seat one of the rods, and cover-engaging strips formed on the ends of the clampingback, substantially as set forth.

4. In a binder, the combination of a rod having tubular studs thereon, a second rod 90 provided with pins for entering the tubular studs when the rods are employed for binding a book, a clamping-back adapted to secure the rods in their opposite position, and strips at the ends of the clamping-back, designed to be 95 folded inward upon said back for securing a cover to the book, substantially as set forth.

5. In a binder for leaves, the combination with binding-rods, of a spring-metal back, said back having hollow outwardly-extending 100 ribs formed along the longitudinal edge thereof, said ribs being designed to seat the binding-rods, and strips formed on said binderback adapted to be folded inward upon the back, the construction being such that a cover 105 for the leaves may be retained in position by said strips, substantially as set forth.

6. The combination of a plurality of rods, a resilient clamping-back for said rods, and a plurality of cover-engaging strips formed on 110 said clamping-back, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH MONTGOMERY.

Witnesses:

WALTER G. KING, MECON L. CHAMBERS.