No. 668,751. Patented Feb. 26, 1901.

J. B. IRVING.

LOOSE SHEET BINDER.

(Application filed Apr. 9, 1900.)

(No Model.)

Fig 1

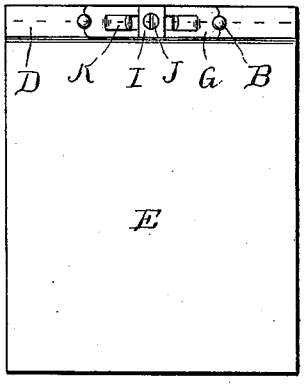


Fig 2

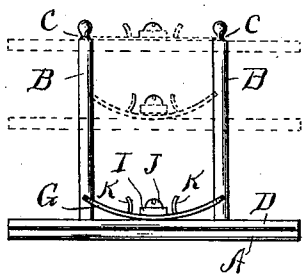


Fig 3

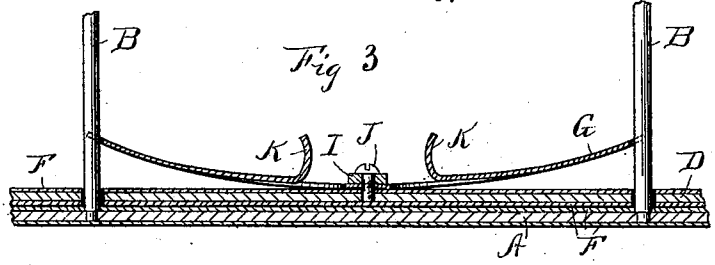


Fig 4

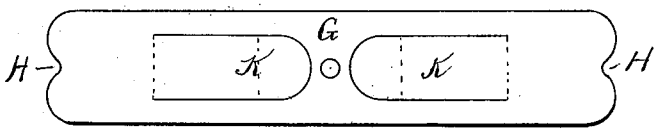
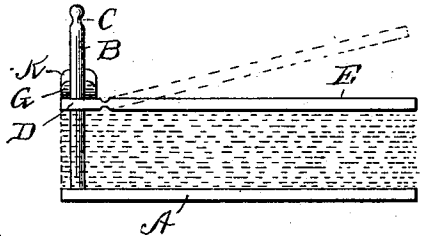


Fig 5



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UNITED STATES PATENT OFFICE.

JUNIUS B. IRVING, OF KANSAS CITY, MISSOURI, ASSIGNOR OF ONE-HALF TO JOSEPH D. HAVENS, OF SAME PLACE.

LOOSE-SHEET BINDER.

SPECIFICATION forming part of Letters Patent No. 668,751, dated February 26, 1901.

Application filed April 9, 1900. Serial No. 12,067. (No model.)

To all whom it may concern:

Be it known that I, JUNIUS B. IRVING, a citizen of the United States, residing in Kansas City, in the county of Jackson and State of Missouri, have invented a new and useful Improvement in Loose-Sheet Binders, of which the following is a specification, reference being had therein to the accompanying drawings, forming a part thereof.

My invention relates to improvements in loose-sheet binders.

The object of my invention is to provide in a loose-sheet binder, comprising a base provided with two parallel posts on which a slidable follower is mounted, means by which the follower is quickly secured in position upon the posts or released therefrom for the purpose of inserting or extracting sheets.

My invention provides, in combination with the base having two posts secured thereto, a slidable follower mounted on the posts and a resilient member carried by the follower and adapted to have engagement with the two posts for preventing rearward movement of the follower thereon.

My invention provides, further, a spring-strip carried by the follower, the ends of the strip normally engaging the two posts on which the follower is slidably mounted, and means by which the spring-strip is bent, and thus removed from engagement with the posts, whereby the follower may be retracted upon the posts.

My invention provides, further, other features of construction hereinafter fully described, and set forth in the claims.

In the accompanying drawings, which illustrate my invention, Figure 1 represents a plan view of a loose-sheet binder constructed in accordance with the principles of my invention. Fig. 2 represents an end view of the same, showing the follower in the closed position. In this view the follower and parts carried by it are shown in dotted lines in the position occupied by them when the follower is retracted. The same parts are also shown in dotted lines in the position occupied by them when the binder is filled. Fig. 3 represents a transverse vertical sectional view taken on the dotted line *a b* of Fig. 1, portions being broken away. Fig. 4 represents a plan view of the blank from which the spring binding or locking strip is formed. Fig. 5 represents a side elevational view of the binder in the closed position when partially filled with sheets.

Similar letters of reference indicate similar parts.

A indicates the base, preferably composed of some comparatively rigid substance, as of wood, metal, or paper. Projecting from the upper side of the base A are two vertical parallel posts B, the upper ends of which are recessed, preferably with an annular recess, (indicated by C.) Upon the two posts B is mounted the follower D, preferably provided with a hinged flap E, by raising which easy access to the papers held in the binder is attained. The follower may be made of any desired form or material. It is preferably made of some comparatively rigid substance similar to that used in the construction of the base. I have found it desirable to apply a covering F upon the surfaces of the base A and the follower D, composed, preferably, of cloth, which may be used to form the connecting-hinge between the follower and the flap E. The follower is provided with two holes, through which the posts B are inserted. It is prevented from retracting upon the posts by means of a releasable locking device carried by the follower and adapted to engage the posts. This locking device comprises a member carried by the follower and provided with two resilient arms, which normally are so engaged with the two posts as to prevent retraction thereon of the follower, the resilient arms of the member being provided with two finger-holds so disposed relatively to each other as to be easily grasped by the thumb and forefinger of one hand for the purpose of bending the resilient arms so as to release them from engagement with the posts, and thus permit the retracting of the follower, so that sheets of paper may be inserted into the binder or withdrawn therefrom. There are numerous ways in which this locking device may be made without departing from the spirit of my invention. The preferable way, which is the one illustrated in the drawings, is to provide a resilient sheet-metal strip G at each end with a recess or notch H, adapt-

ed to receive one of the posts B therein. The strip G is secured near its center to the follower D in any desirable manner, preferably by means of a transverse strip I, disposed on the top of the strip G and provided with a vertical hole through which extends a rivet or screw J, which, passing through a hole provided in the strip G, is secured to the follower. The distance between the notches H is such that the strip G when the parts are in the position shown in the upper dotted lines in Fig. 2 will lie horizontally extended, the ends of the strip entering the annular recesses C. When the follower is forced toward the base A from the position designated, the strip G, being of a greater length between the notches H than the distance between the posts B, will be forced into the curved position or form shown in Fig. 3. Any pressure upon the follower tending to force it rearwardly will also tend to cramp the strip G tightly against the posts B, thus locking the strip upon the posts and preventing retraction of the follower thereon. In order to release the strip G, it is provided on each side of the securing-strip I with an upwardly-extending projection K, disposed adjacent to one another and which serve as finger-holds, with which the two arms of the strip G may be rearwardly bent, and thus released from engagement with the posts B. I prefer to make the projecting finger-holds K integral with the strip; but other projections can obviously be employed. In making the integral finger-holds K a tongue is formed on each side of the center of the strip by means of a suitably-constructed punch and die, the free ends of the tongues being adjacent to each other and the outer end of each being upwardly bent, so as to be readily grasped by the thumb and finger of one hand.

In operating my invention the finger-holds K are pressed together, after which the follower may be retracted to a position on the posts B convenient for the insertion of or extraction from one or more loose sheets. When the result desired is accomplished, the follower may be held tightly against the sheets in the binder by releasing the finger-holds and forcing the follower forward on the posts, the resilient character of the arms of the strip G causing engagement at once with the posts. When the binder is entirely filled with papers on file, the ends of the strip G enter the annular recesses C, and thus prevent any accidental rearward movement of the strip and follower. Inspection of any of the sheets held in the binder may be had by lifting the flap E.

My invention may be variously modified without departing from its scope.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A loose-sheet binder comprising a base, two posts secured thereto, a follower on the posts, and a resilient plate secured to the follower between and adapted to engage with its ends the two posts, the resilient plate being weakened on each side of the securing-place by bending upward two tongues, one on each side of the securing-place, the tongues being joined at their outer ends to the resilient plate and their inner bent ends forming finger-holds, substantially as described.

2. A blank for a loose-sheet binder comprising a resilient plate having notched ends and a central securing-hole, the plate being weakened on each side of the said securing-hole by two holes formed one on each side by punching up two tongues joined at their outer ends to the plate and having their inner ends bent upwardly so as to form finger-holds, substantially as described.

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

JUNIUS B. IRVING.

Witnesses:
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LAURENCE E. LYONS.