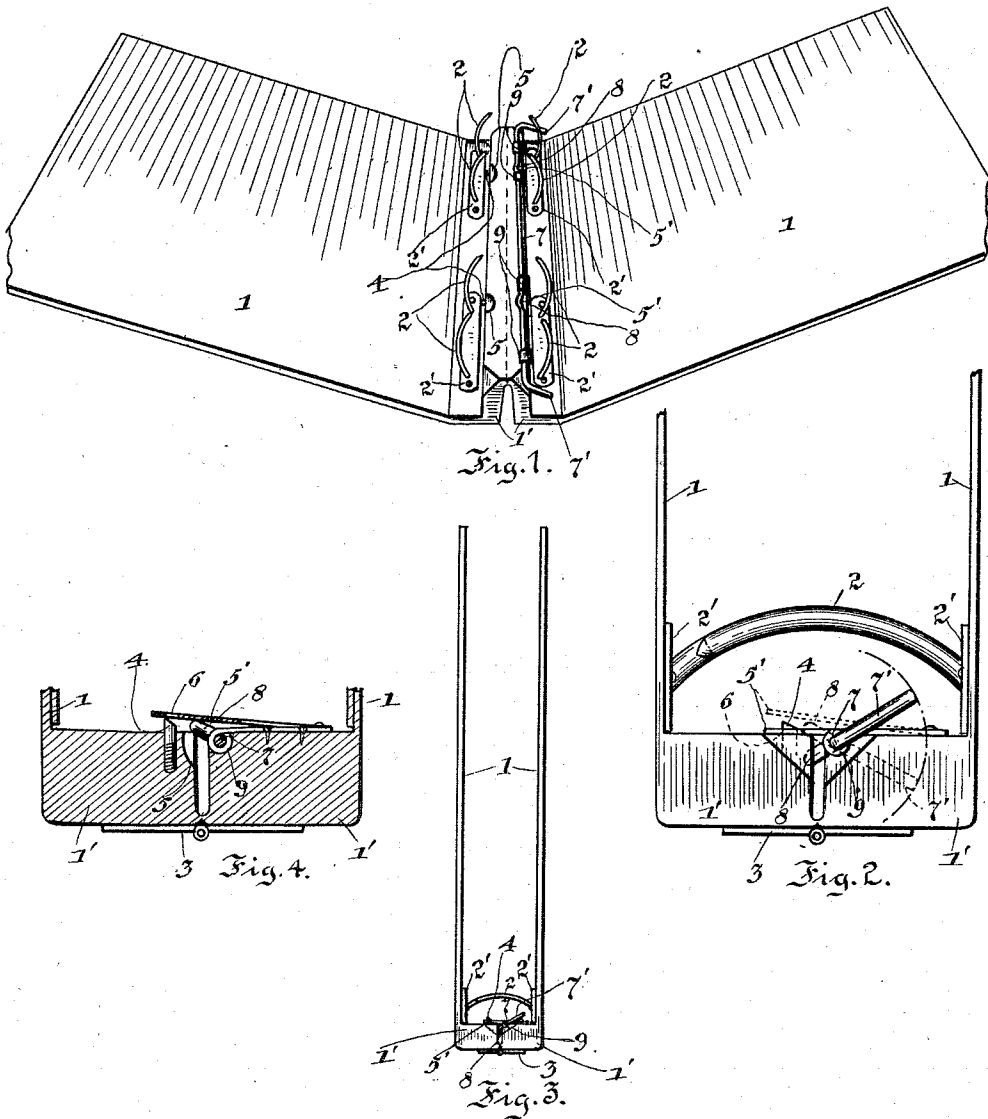


O. C. SCHULTZE.
 LOOSE LEAF BINDER.
 APPLICATION FILED AUG. 29, 1910.

995,035.

Patented June 13, 1911.



Witnesses

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UNITED STATES PATENT OFFICE.

OTTO C. SCHULTZE, OF CHICAGO, ILLINOIS.

LOOSE-LEAF BINDER.

995,035.

Specification of Letters Patent. **Patented June 13, 1911.**

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To all whom it may concern:

Be it known that I, OTTO C. SCHULTZE, a citizen of the United States, and a resident of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Loose-Leaf Binders, of which the following is a specification.

My invention relates to improvements in loose-leaf binders of the hinged back type, the object of the invention being the provision of a simple and easily controlled lock for binders of this character.

A further object of my invention is to provide an improved lock for the purpose mentioned which may be operated from either end of the binder so as to overcome the present difficulty in locking and unlocking large binders such as are used in railway offices for holding tariff schedules, a further object being to provide a binder which shall be of simple construction, inexpensive to manufacture and efficient in operation.

With these objects in view my invention consists in the novel construction and arrangement of parts as will be hereinafter fully described and more particularly pointed out in the appended claims.

My invention will be best understood by reference to the accompanying drawing forming a part of this specification, and in which,

Figure 1 is a perspective view of my improved loose-leaf binder in its preferred form, Figs. 2 and 3 are end elevations of the binder, the former being enlarged and showing the action of the binder lock by dotted lines, and Fig. 4 is a transverse section.

The preferred form of my invention as illustrated in the accompanying drawing comprises covers 1 flexibly connected to hinged backs 1' and provided with the usual interlocking prongs 2, the latter being secured to plates 2'. The backs 1' are hinged together by means of hinges 3 and when the same are closed as shown in Figs. 2 and 3 the prongs 2 interlock for holding leaves (not shown) in position. Projecting from one of the backs 1' is a pair of studs 4 having beveled ends as clearly shown in Fig. 2, a notch 5 being provided in said back adjacent each of said studs. Secured to the other back 1' is a pair of leaf springs 5' having perforations 6 which are adapted to

automatically engage the studs 4 when the backs 1 are turned to closed position. In order to release the engagement of the springs 5' with the studs 4 a longitudinal rod 7 is provided and journaled in one of the backs 1', said rod being co-extensive with the length of the binder and provided at either end with operating arms 7'. Bent portions 8 are provided in the rods 7 and so arranged as to register with and disengage the springs 5' from the studs 4 when either of the arms 7' are turned by the operator. The rod 7 is journaled in suitable bearings 9 which are secured to one of the backs 1' as shown in Fig. 4.

It is clear from the foregoing description that when the arms 7' are turned that the bent portions 8 engaging the leaf springs 5' will raise the latter and cause the disengagement of the studs 4, thus allowing the device to be opened for taking out leaves which have been held in position by the interlocking prongs 2.

A loose-leaf binder of the construction set forth and especially of the large variety will be found to be easily operated and convenient in use.

While I have shown what I deem to be the preferable form of my improved loose-leaf binder, I do not wish to be limited thereto as there might be various changes made in the details of construction and arrangement of parts described without departing from the spirit of my invention, and hence I desire to avail myself of such changes and alterations as fairly fall within the scope of the appended claims.

Having described my invention what I claim as new and desire to secure by Letters Patent is:

1. In a loose-leaf binder, the combination with substantially rectangular backs hinged together and having covers flexibly connected thereto, of studs projecting from one of said backs, perforated leaf springs secured to the other of said backs, the perforations of said springs being adapted to automatically engage said studs for locking said backs in closed position, and a longitudinal rod journaled in one of said backs having bent portions therein registering with said springs and adapted to disengage the said springs from said studs when turned, and means for turning said rod, substantially as described.

2. A loose-leaf binder comprising a pair

of rectangular backs hinged together, a pair
of studs projecting from one of said backs,
a pair of leaf springs projecting from the
other of said backs having perforations
5 therein for automatically engaging said
studs when the backs are closed, a journaled
rod extending from one end of the binder
to the other end having an uncontrolled
arm at each end thereof, and bent portions
10 in said rod registering with and adapted to
disengage said springs from said studs when
either of said arms are turned by the op-
erator, substantially as described.

3. A loose-leaf binder comprising a pair
15 of backs hinged together and having covers
flexibly connected thereto, prongs provided
in said covers and adapted to interlock when
said backs are in closed position, a pair of

studs projecting from one of said backs, a
pair of leaf springs projecting from the 20
other of said backs and having perforations
therein adapted to engage said studs for
locking the backs in closed position, a rod
co-extensive with the length of the binder
journaled in one of said backs, an arm on 25
each end of said rod, and bent portions in
said rod adapted to disengage said springs
from said studs when turned by means of
one of said arms, substantially as described.

In testimony whereof I have signed my 30
name to this specification in the presence of
two subscribing witnesses.

OTTO C. SCHULTZE.

Witnesses:

FLORENCE E. LILLIS,
JOSHUA R. H. POTTS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
