

K. J. SARLES & T. E. HEETER.

LOOSE LEAF BINDER.

APPLICATION FILED NOV. 8, 1909.

973,707.

Patented Oct. 25, 1910.

2 SHEETS—SHEET 1.

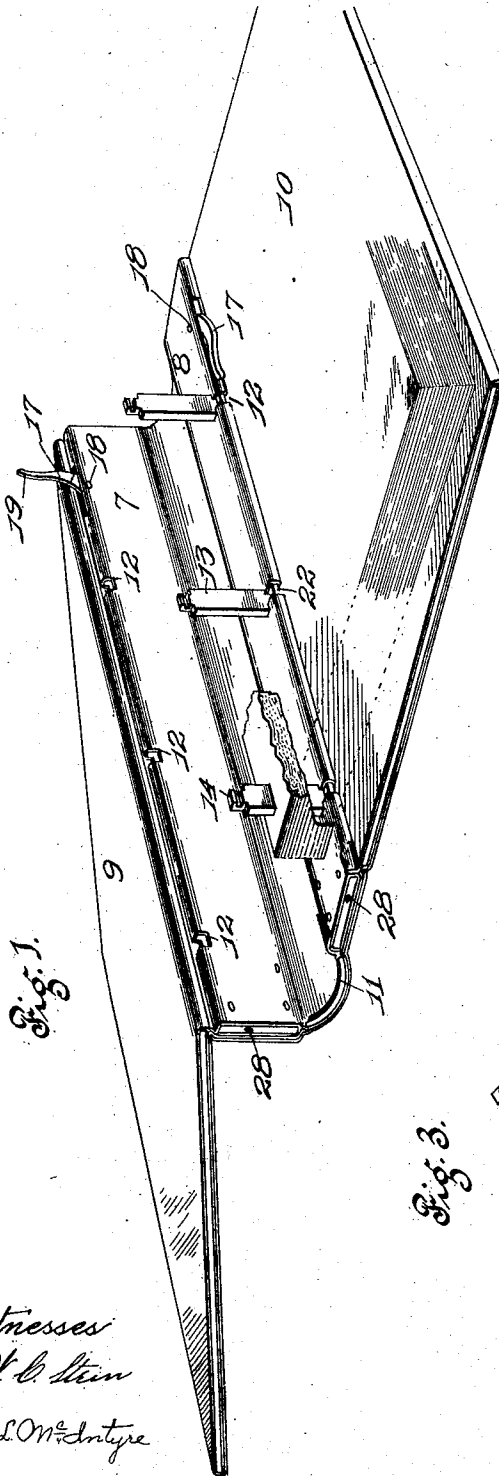


Fig. 1.

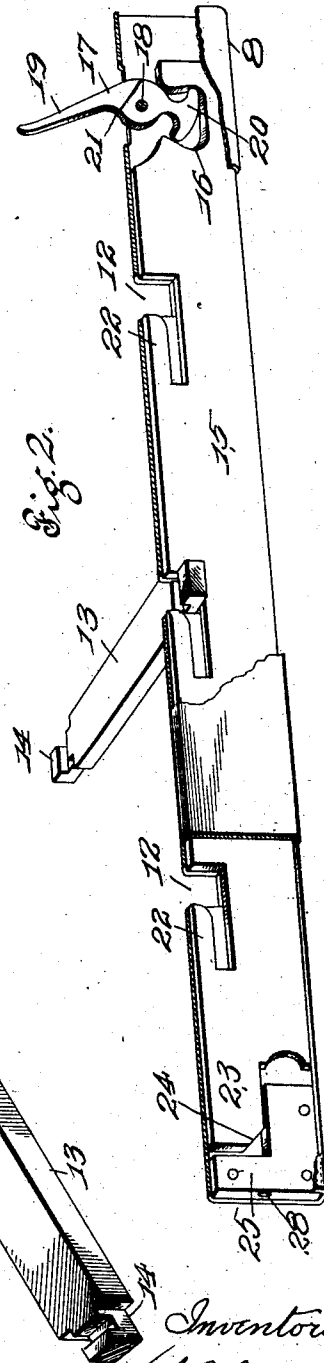


Fig. 2.

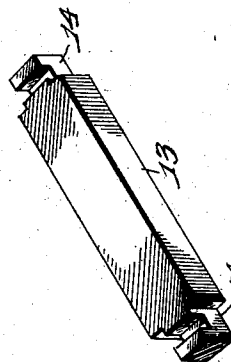


Fig. 3.

Witnesses
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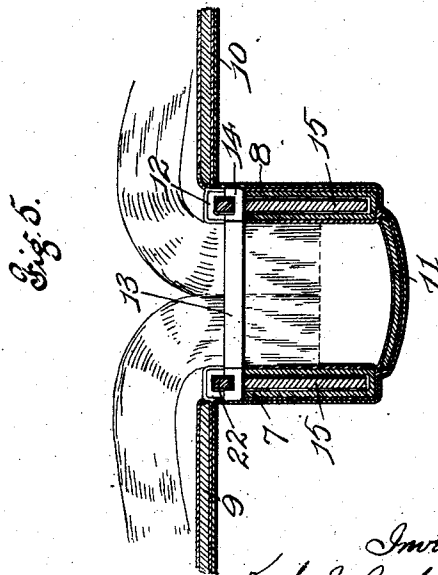
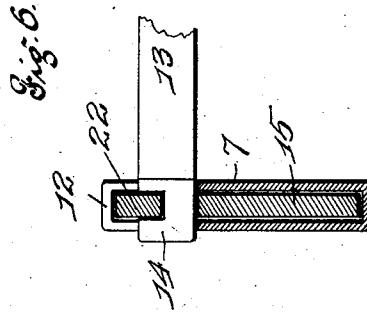
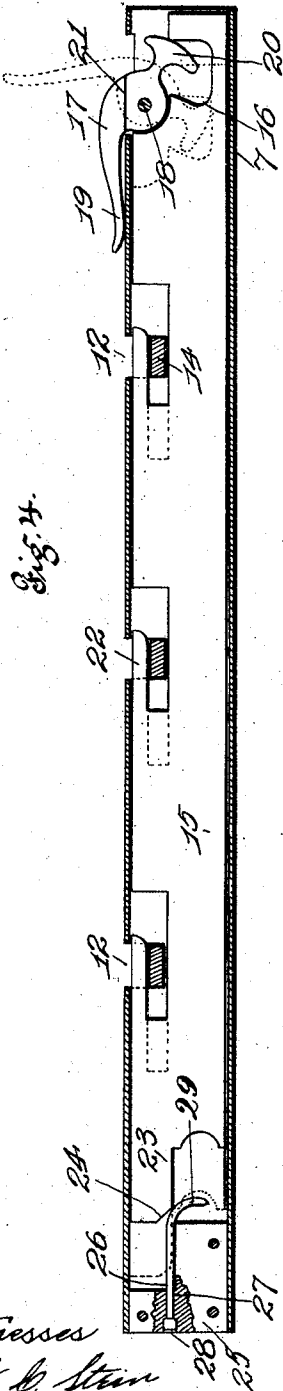
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UNITED STATES PATENT OFFICE.

KARL J. SARLES, OF KENWOOD SPRINGS, AND THOMAS E. HEETER, OF ST. LOUIS,
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LOOSE-LEAF BINDER.

973,707.

Specification of Letters Patent.

Patented Oct. 25, 1910.

Application filed November 8, 1909. Serial No. 526,858.

To all whom it may concern:

Be it known that we, KARL J. SARLES and THOMAS E. HEETER, citizens of the United States, and residents of Kenwood Springs and St. Louis, Missouri, respectively, have invented certain new and useful Improvements in Loose-Leaf Binders, of which the following is a specification.

Our invention relates to improvements in loose-leaf binders, and has for its object to provide a loose-leaf binder which, when filled to the desired point, may be permanently locked.

Other functions and advantages of our invention will appear from the following description.

In the drawings Figure 1 is a perspective view of a device embodying our invention. Fig. 2 is a perspective view of the latch employed in our invention and its actuating means, the housing containing said latch being broken away. Fig. 3 is an enlarged perspective view of one of the binding posts employed in our invention. Fig. 4 is a side elevation of the latch employed in the device of our invention, in place within its housing and permanently locked. Fig. 5 is a transverse sectional view of a portion of the binder, showing its contents in place, taken along the line of one of the binding posts. Fig. 6 is a transverse sectional view of one of the latches in place within its housing, showing the end of the binding posts in locked position.

As shown in the drawings, we employ a front housing 7 and a back housing 8, each of which is provided respectively at its front edges with the hinged covers 9 and 10, and which are hinged together at their rear edges by means of the hinge 11. The housings 7 and 8 being identical in construction, a description of one will suffice for both. The front edge of each housing is provided with a series of apertures 12 which are adapted to receive one end of the binding posts 13, the binding posts 13 being of the form illustrated in Figs. 1, 2 and 3, having the hooked extremities 14—14. Within each housing is slidably mounted a latch 15 which is apertured at one end as indicated by the numeral 16, to accommodate the lever 17 which is mounted within the housing by means of the pin 18, the lever 17 comprising a protruding arm 19 and an arc-shaped inner extremity 20. The lever 17 is provided with a trans-

verse groove 21 to enable the protruding portion 19 to be broken off flush with the edge of the housing when the binder has been permanently locked, as will be hereinafter described. The latch 15 is slotted to form a series of horizontal tongues 22 whose function is to engage with the hooks 14 on the ends of the binding posts 13 to lock the same in position temporarily or permanently. At its end farthest from the aperture 16, the latch 15 is provided with the projection 23 having one of its corners cut away to form the bevel 24, the projection 23 being adapted to abut against the L-shaped stop 25 (see Figs. 2 and 4). The tongues 22 are released from or drawn in engagement with the hooks 14 by means of the operation of the lever 17 during the process of filling the binder.

When the binder has been completely filled and it is desired to convert the binder with its contents into a permanent book, the latches 15 being thrown into the position indicated in Fig. 4, so that the binding posts 13 are locked in position by the tongues 22, a locking pin 26 is introduced longitudinally through the L-shaped stop 25, which is provided with the perforation 27 to receive it; the outer end of the opening being countersunk as indicated by the numeral 28, to accommodate the head of the pin 26, the pin being introduced through the hole or opening 27, which opening is parallel with the front and back edges of the housing. The extremity of the pin 26, upon striking the beveled edge 24 of the projection 23 on the latch 15, is deflected downwardly and bent over the inner edge of the L-shaped stop 25, as indicated by the numeral 29 in Fig. 4. When the locking pin 26 has thus been driven into position in each of the housings 7 and 8, the lever 17 being in the position illustrated in Fig. 4, is broken off along the line of the groove 21 so that its projecting arm 19 is permanently removed.

The head of the locking pin 26 may be hardened to resist any attempt to remove the pin by means of the application of any ordinary drill. Any attempt to soften the head of the locking pin 26, by the application of heat, to permit of its being penetrated by a drill, would result in the injury of the buckram, leather or other cover employed upon the binder.

Having thus fully described our inven-

tion, what we claim as new and desire to have secured to us by the grant of Letters Patent, is:

1. In a loose-leaf binder, a plurality of
5 binding posts; a housing apertured to receive the extremities of said binding posts; a latch mounted within the housing and adapted to engage with the extremities of the binding posts; a lever whereby said latch
10 is actuated; means for permanently locking said latch in engagement with the extremities of the binding posts, said lever being provided with a groove for the purpose of enabling the portion of the lever protruding
15 from the housing to be broken off when the latch has been permanently locked, substantially as described.

2. In a loose-leaf binder, the combination
of a front housing; a back housing; a plurality of binding posts whose extremities are
20 detachably mounted in the housings, latch mechanisms mounted in the respective housings, means for permanently locking said latch mechanism within said housings; a
25 lever mounted in each housing to actuate its latch, said lever being provided with a groove for the purpose of enabling the portion of the lever protruding from the hous-

ing to be broken off when the latch has been permanently locked, substantially as described.

3. In a loose-leaf binder, the combination
of a front housing; a back housing; a plurality of binding posts whose extremities
are detachably mounted in the housings; 35 latch mechanisms mounted in the respective housings; means for permanently locking said latch mechanisms within said housings; a lever mounted in each housing to actuate
its latch, said lever being provided with a 40 groove for the purpose of enabling the portion of the lever protruding from the housing to be broken off when the latch has been permanently locked; a hinge interposed between the rear edges of said housings, and
45 covers hingedly mounted at the front edges of said housings, substantially as described.

In testimony whereof, we have signed our names to this specification, in presence of two subscribing witnesses.

KARL J. SARLES.
THOMAS E. HEETER.

Witnesses:

ALFRED A. EICKS,
WALTER C. STEIN.