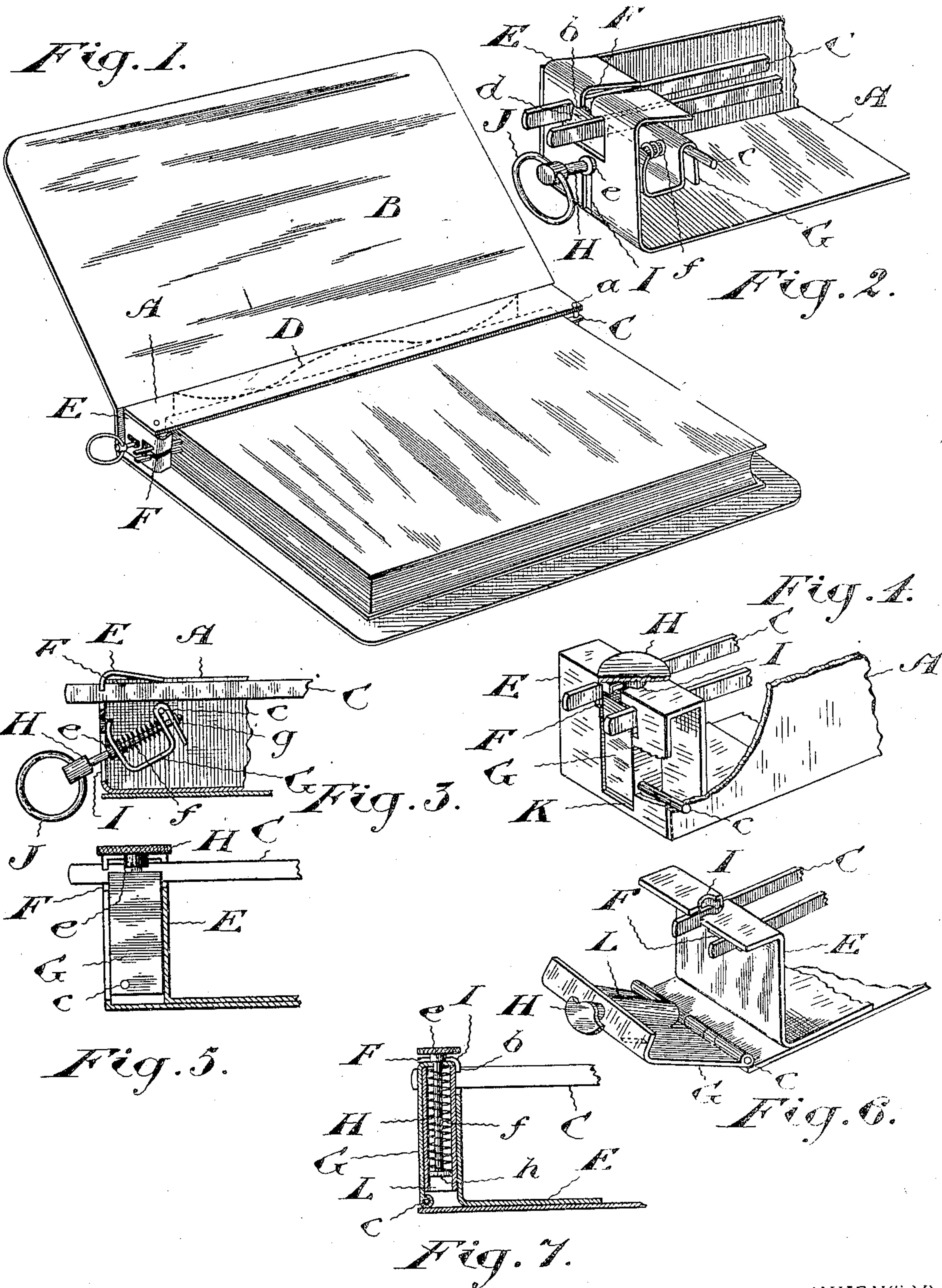


No. 808,793.

PATENTED JAN. 2, 1906.

C. WHETHAM.
TEMPORARY BINDER.
APPLICATION FILED OCT. 14, 1904.



WITNESSES:

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CHARLES WHETHAM, OF SHEFFIELD, CANADA.

TEMPORARY BINDER.

No. 808,793.

Specification of Letters Patent.

Patented Jan. 2, 1906.

Application filed October 14, 1904. Serial No. 228,431.

To all whom it may concern:

Be it known that I, CHARLES WHETHAM, of Sheffield, in the county of Wentworth, Province of Ontario, Canada, have invented certain new and useful Improvements in Temporary Binders, of which the following is a specification.

My invention relates to temporary binders of the type in which retaining-bars are employed to hold the back of the book in engagement with a suitable frame.

The object of my invention is to devise a simple and effective lock for the retaining-bars; and it consists, essentially, of a plate having a bayonet-slot cut therein to receive the end of the retaining-bar, in combination with a hinged locking-piece adapted to be moved up to retain the said end in engagement with the shoulder of the said bayonet-slot.

My invention further consists in the lock for releasably retaining the locking-piece in its locking position, which comprises a spring-actuated stem of two diameters connected with the locking-piece and of a stationary plate provided with a slot narrower than the widest part of the stem and having an enlargement therein to receive and retain the wider part of the stem until such times as the stem is moved endwise to bring the narrower part of the stem in line with the slot, substantially as hereinafter more specifically described and then definitely claimed.

Figure 1 is a perspective view showing a magazine inserted in my temporary binder. Fig. 2 is an enlarged perspective detail of the lock. Fig. 3 is a sectional side elevation of the same. Fig. 4 is an enlarged perspective detail showing a modification of the lock. Fig. 5 is a sectional side elevation of the same. Fig. 6 is an enlarged perspective detail of another modification of the lock. Fig. 7 is a side sectional elevation of the same.

In the drawings like letters of reference indicate corresponding parts in the different figures.

Referring particularly to Figs. 1 and 2, it will be seen that the binder comprises a metal trough A, secured to covers B. The book is held in place by means of retaining-bars C, hinged to the trough at *a* at one end. A flat spring D, secured to the trough, presses outwardly the back of the book, so that the retaining-bars find their position close down to the folds of the leaves. The present invention, however, relates particu-

larly to the means employed for locking the free ends of the retaining-bars. Suitably secured to the end of the trough is a metal plate E, and in this plate is cut a bayonet-slot F. This is shown as double—that is, a laterally-extending portion of the slot is cut at each side of the main portion of the slot, so that the one slot will receive two retaining-bars. Of course if only one retaining-bar be employed then the bayonet-slot will be made single. The shoulders *b* of the bayonet-slot are preferably notched, as shown. Thus when the retaining-bars are pressed down through the main part of the slot and then sidewise into the laterally-extending parts of the slot they may be engaged by these shoulders, and thus temporarily held in position until locked, as hereinafter described.

G is a locking-piece pivoted on the rivet *c* or in any other suitable manner. The front of this locking-piece is shaped to form a piece *d* to fit between the retaining-bars, and thus close the main part of the slot to hold the retaining-bars in contact with the shoulders of the slot. This piece *d* is preferably formed by notching the locking-piece; but of course the metal of the locking-piece outside these notches could be entirely cut away, if desired. In order to detachably retain the locking-piece in position, I provide the stem H, longitudinally movable in the locking-piece. This stem is provided with an enlargement *e*. About the stem and engaging the inner end of the enlargement and the rear part of the locking-piece I place a coil-spring *f*, tending normally to retain the stem pressed outwardly. A button *g* on the inner end of the stem engages the rear side of the locking-piece to prevent the stem being forced out too far by the spring. Below the bayonet-slot I cut a keyhole-slot I in the plate E. The enlargement of the stem will only fit the enlargement of the keyhole-slot, while the narrow portion of the stem will move freely through the narrow portion of the slot. Normally the stem is held extended by the coil-spring, with the enlargement *e* engaging the large portion of the slot. When it is desired to release the lock, the stem is pressed inward till its narrow portion comes in line with the narrow portion of the slot, when the whole locking-piece may be swung downward, as shown in Fig. 3. The locking-bars are now readily disengaged from the bayonet-slot and the book removed from the cover. The outer end of the stem H may be pro-

vided with the ring J, whereby the cover may be hung on a hook or nail.

The plate E is shown in the first three figures as simply extending a short distance rearwardly from its outside. For strengthening purposes it may, however, be carried down in a Z shape, as shown in Figs. 4 and 5. In this case of course the inner face of the plate must be slotted, as well as the outer, to receive the retaining-bars, though it is not essential that the shoulders of the slots be notched.

As a modification the locking-piece G may be pivoted vertically. (See Figs. 4 and 5.) As the stem H is then also vertical, the keyhole-slot I must be formed in the top of the plate E instead of in the front face and a sufficient opening K cut in the outer face of the plate to permit of the locking-piece being swung outwardly. The operation of the locking-piece in this case, it will be seen, is exactly the same as in the form shown in Figs. 1, 2, and 3.

As a variation of the solid vertical locking-piece (shown in Figs. 4 and 5) I may employ an L-shaped plate, such as shown in Figs. 6 and 7, a tube L to receive the stem H being soldered thereto. The upper end of the plate will be notched, as in Fig. 2, to embrace the retaining-bars. This form of locking-piece lends itself readily to the employment of more than two retaining-bars, one notch being employed for each bar up to the capacity of the width of the plate. (See also Fig. 2.)

The arrangement of the stem H in the forms shown in Figs. 4 to 7 is a little different from that shown in Figs. 2 and 3. The lower end of the stem has a button *h* formed on or secured thereto, and against this the coil-spring *f* bears, its other end bearing against a shoulder formed within the locking-piece. The spring thus tends to maintain the stem retracted. The enlargement *e* is made at the end of the stem. Thus to release the stem H in this modification the stem must be pulled outwardly by means of the button on its outer end.

In all the forms described it will be seen that I retain the same essential principle of construction—namely, the use of the bayonet-slot to receive the retaining-bars, the use of the hinged locking-piece to close the main portion of the slot and retain the bars in position, and the use with the pivoted locking-piece of a longitudinally-movable stem with an enlargement thereon adapted to work in combination with a keyhole-slot.

What I claim as my invention is—

1. In a binder, provided with a retaining-bar, a lock for the said bar, comprising a plate having a bayonet-slot formed therein; and a locking-piece hinged on a stationary part and adapted to close the main part of the slot and releasably retain the end of the

retaining-bar in engagement with the shoulder of the slot, whereby the bar is held down by engagement with the said shoulder and not by the locking-piece substantially as described.

2. In a binder, provided with a retaining-bar, a lock for the said bar, comprising a plate having a bayonet-slot formed therein, with a downwardly-facing notch in its shoulder; and a locking-piece hinged on a stationary part and adapted to releasably retain the end of the retaining-bar in engagement with the shoulder, whereby the bar is held down by engagement with the said shoulder and not by the locking-piece substantially as described.

3. In a binder, provided with a retaining-bar, a lock for the said bar, comprising a plate having a bayonet-slot formed therein; and a locking-piece hinged on a stationary part and adapted to close the main part of the slot; a stem longitudinally movable in the locking-piece, and having an enlargement thereon; a spring tending to maintain the stem in its normal position, the plate having a slot cut therein for the passage of the stem and an enlargement of the slot to receive and engage the enlargement of the stem when the locking-piece is in its locking position, substantially as described.

4. In a binder, provided with a retaining-bar, a lock for the said bar, comprising a plate having a bayonet-slot formed therein and a keyhole-slot below the bayonet-slot; a locking-piece pivoted behind the plate and shaped to close the vertical part of the bayonet-slot; a stem longitudinally movable in the locking-piece and having an enlargement near its outer end; and a spring tending to maintain the stem with its enlargement in position to engage the enlargement of the keyhole-slot when the locking-piece is swung to close the bayonet-slot, substantially as described.

5. In a binder, provided with a retaining-bar, a lock for the said bar, comprising a plate having a bayonet-slot formed therein and a keyhole-slot below the bayonet-slot; a locking-piece pivoted behind the plate and shaped to close the vertical part of the bayonet-slot; a stem longitudinally movable in the locking-piece and having an enlargement near its outer end; a spring tending to maintain the stem extended with its enlargement in position to engage the enlargement of the keyhole-slot when the locking-piece is swung to close the bayonet-slot; and a ring secured to the end of the stem, substantially as described.

Sheffield, October 7, 1904.

CHARLES WHETHAM.

In presence of—

J. B. LOBB,
A. C. FERGUSON.