

H. B. FOX.
Bill-Files.

No. 153,673.

Patented Aug. 4, 1874.

Fig. 1.

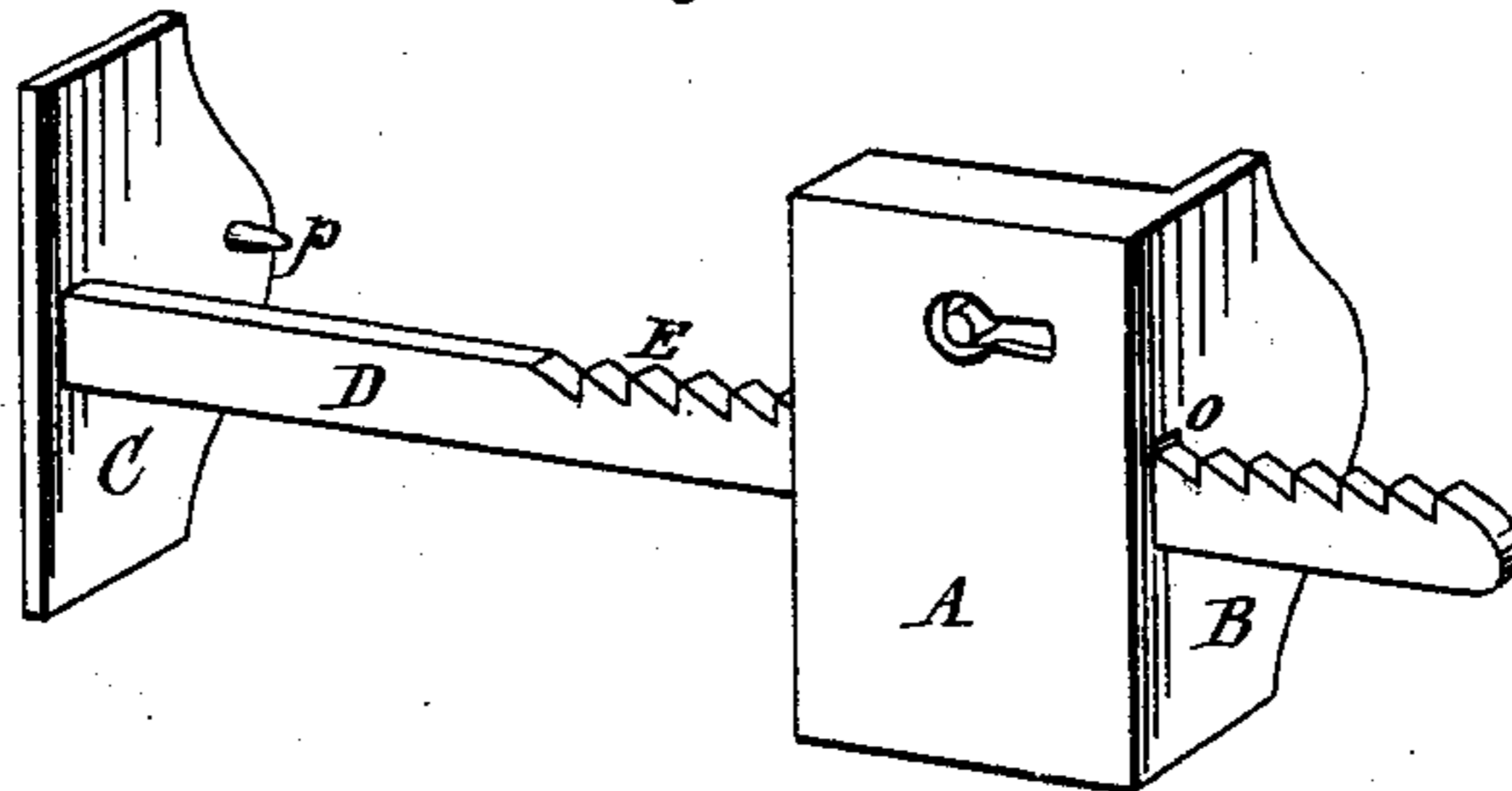


Fig. 2.

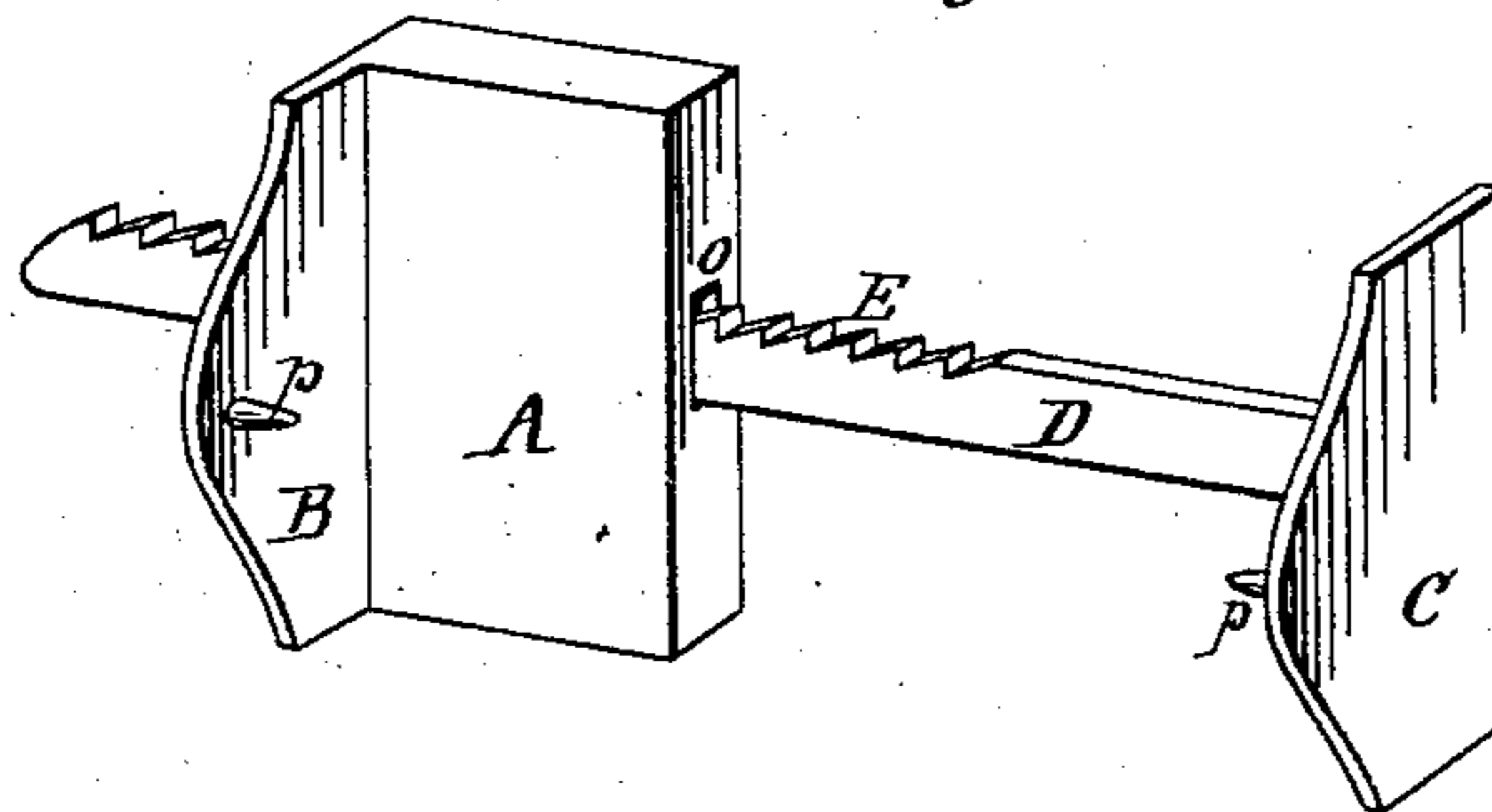
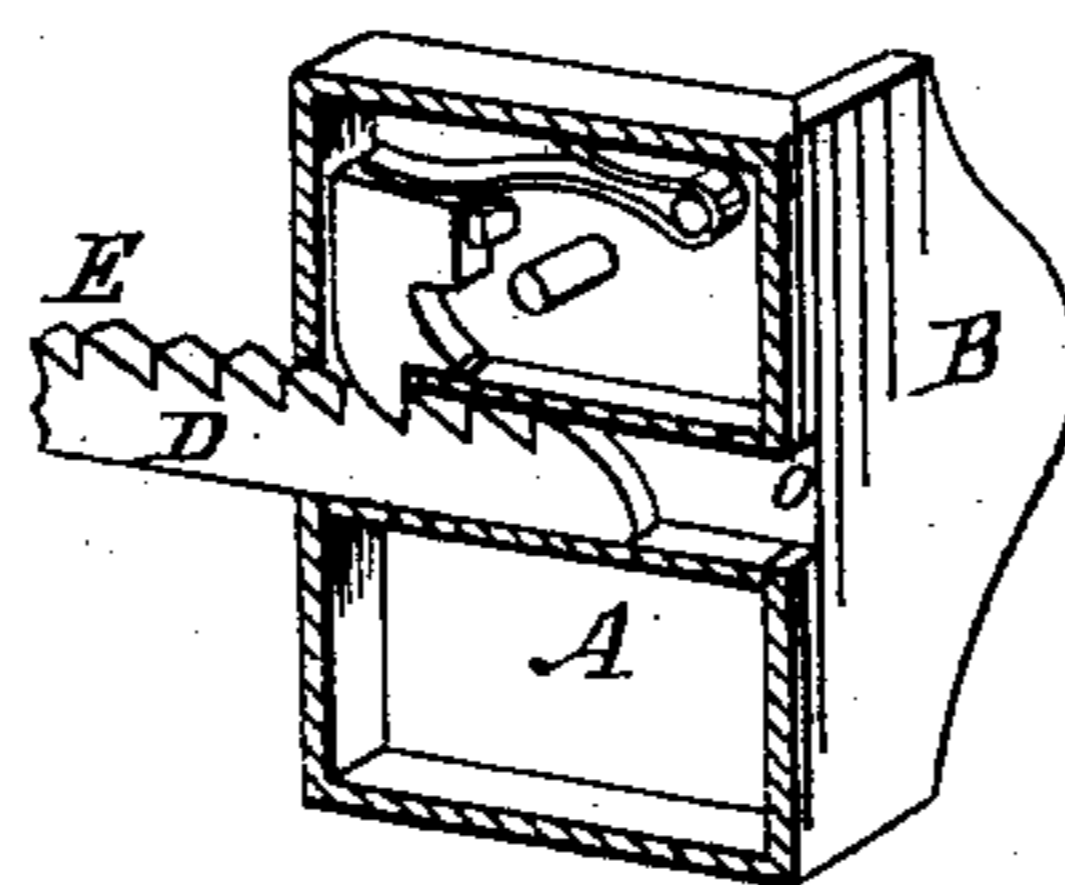


Fig. 3.



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HOWARD BUSBY FOX, OF LIVERPOOL, ENGLAND.

IMPROVEMENT IN BILL-FILES.

Specification forming part of Letters Patent No. **153,673**, dated August 4, 1874; application filed April 8, 1874.

To all whom it may concern:

Be it known that I, HOWARD BUSBY FOX, of Liverpool, England, in the Kingdom of Great Britain, have invented an Improvement in Bill-Files, of which the following is a specification:

This invention consists of an ordinary spring-lock (inclosed in any suitable case, and opened by a key in the ordinary manner) interposed between two offsets, the one stationary and forming one edge of the lock-case, and the other movable and adjustable in distance from the other offset by means of a serrated bar secured to the movable offset, which enters the lock-case through an opening in one edge of the case opposite to the stationary offset. The serrated edge of the bar engages with, and is held fast by, the spring-catch of the lock as the bar is pressed into the case, and the farther the bar is pressed into the case the less the distance becomes between the two offsets, until the movable offset abuts against the edge of the case opposite to the stationary offset, when the space between the offsets can be made no smaller.

These clamp-locks are made of different sizes, or the bars are made of different lengths, in order that the locks may embrace objects of a greater or less thickness. For articles of several inches thickness—as, for instance, a cigar-box—the bar must be correspondingly long; but if such lock be applied to embrace an object only one inch in thickness, then the bar will protrude some inches through the edge of the lock-case opposite to the one through which it entered. Therefore, for the sake of a neat appearance and convenience, the locks are made having longer or shorter bars for considerable extremes of use. Locks having the longer bars are not conveniently used for thin articles, and those having short bars are only capable of use for locking thin articles, such as books, albums, or files of papers or drawings.

The two offsets have sharp pins or points upon their inner sides, opposite or nearly opposite to each other, which are forced like teeth, by pressure, into the substance of the

articles embraced by these offsets, which offsets, thus acting like jaws, firmly clasp or clamp such articles, and prevent them from being opened or taken apart without rupture of their substance.

The edge of the bar is so serrated that it can be pressed into the lock-case past the catch somewhat like a rack passing a pawl in one direction; but the bar cannot be withdrawn without using the key to withdraw the catch, for the latter engages with the teeth of the bar like a pawl, and prevents the retraction of the bar while offering no opposition to its entrance.

In the drawing forming part of this specification, the Figures 1, 2, and 3 fully illustrate this invention.

In these figures, A is the lock-case; B, the stationary offset; C, the movable offset, provided with the bar D, having a serrated edge, E. *p p* are the pins upon the respective offsets, and *o o* are holes in the edges of the lock-case for the entrance and exit of the end of the bar.

This lock should be manipulated as follows: In placing it on a book or cigar-box the movable offset should be first so adjusted that the two offsets may embrace the front edge of the book or box, and then, upon pressing the offsets together, the pins or points *p p* will enter into the binding of the book, or into the wood of the box, and clamp the leaves and covers of the book or the top and bottom of the box, the spreading of the offsets being prevented, as already explained.

When the materials composing any articles which it is desired to secure by this clamp-lock are too hard to permit the pins to enter by ordinary pressure, it will be necessary to pierce suitable holes in the material for the entrance of the pins; or, in the case of books having very thick backs, eyelets may be inserted in which to enter the pins.

In the drawing but one pin is shown in each offset; but as many pins may be used as are considered suitable for the purposes of application intended for the clamp-lock.

Having now described the construction and

operation of my improved expanding lock, I claim as my invention—

As an article of manufacture, the above-described expansible and adjustable clamp-lock for locking books, boxes, and other similar articles, constructed with one stationary and one movable offset having pins or points thereon, and with a serrated bar attached to the

movable offset, all substantially as described, for the purposes set forth.

HOWARD BUSBY FOX. [L. S.]

In the presence of—

FREDERICK JOHN CHEESBROUGH,
JOHN HAMILTON REDMOND,

*Both of 15 Water Street,
Liverpool, England.*