

H. Clarke,

Umbrella.

No. 109,380.

Patented. Nov. 22, 1870.

Fig. 1

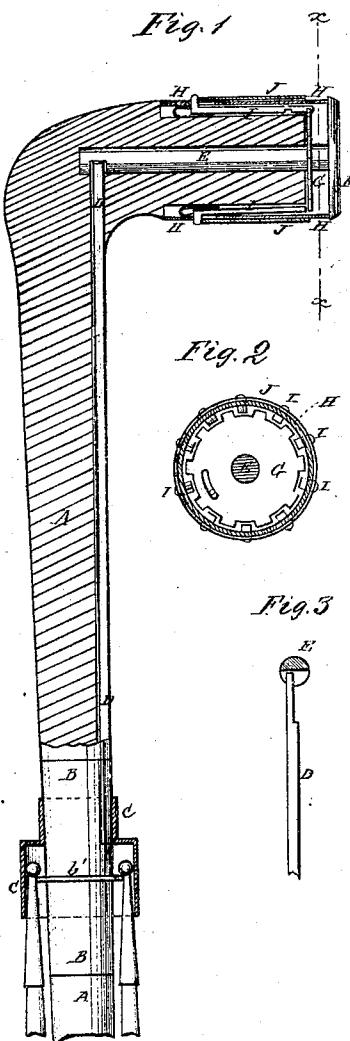


Fig. 2

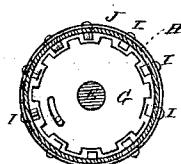
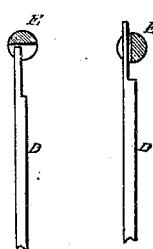


Fig. 3 Fig. 4



Witnesses:

A. W. Phillips
G. S. McCabe

Inventor:

H. Clarke
per Wm. J. D.
Attorneys

UNITED STATES PATENT OFFICE.

HENRY CLARKE, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN UMBRELLA-LOCKS.

Specification forming part of Letters Patent No. 109,386, dated November 22, 1870.

To all whom it may concern:

Be it known that I, HENRY CLARKE, of Baltimore, in the county of Baltimore and State of Maryland, have invented a new and useful Improvement in Umbrella-Lock; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a detail sectional view of a part of an umbrella-handle to which my improved device has been attached. Fig. 2 is a detail sectional view of the same, taken through the line *xx*, Fig. 1. Fig. 3 is a detail view, showing the relative positions of the slide and shaft when locked. Fig. 4 is the same view as Fig. 3, but showing the position of the slide and shaft when unlocked.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved device for attachment to umbrella-handles, which shall be so constructed and arranged that the ribs of the umbrella may be conveniently locked when closed, so that no one, except the owner or some one knowing the combination, can unlock and open the umbrella; and it consists in the construction and combination of various parts of the device, as hereinafter more fully described.

A represents the handle of an umbrella, which is represented as being formed with a bent hand-piece. *B* is a metallic band, having an outward-projecting flange or bead, *b'*, formed around its middle part, as shown in Fig. 1. The band *B* is placed upon and secured to the handle *A* in such a position that when the umbrella is closed the balls or bulbs formed upon the ends of its ribs may be just above the said flange or bead *b'*.

C is a band, the lower part of which fits upon the handle *A*, and its upper part is enlarged, as shown in Fig. 1, so as to pass over the ends of the ribs and the flange of the band *B*, so that when the band *C* is pushed up over the ends of the ribs they cannot be withdrawn until the said band *C* has been again pushed down. To the band *C* is attached one end of the slid-

ing bar *D*, which works in a groove, or in the hollow interior of the handle *A*. The upper end of the bar *D* enters and works in a hole or notch in the shaft *E* in such a way that when the said shaft is in one position, as shown in Fig. 4, the bar *D* and band *C* may be slid up and down freely to secure and release the ribs; and when the bar *D* and band *C* are pushed up and the shaft *E* partially rotated the side of the notch or recess in the said shaft *E*, in which the end of the bar *D* works, may come over the end of the bar *D*, as shown in Figs. 1 and 3, and thus prevent the bar *D* from being moved down to release the ribs until the shaft *E* is turned back into the position shown in Fig. 4.

The shaft *E* passes in through the bend or hand-piece of the handle *A*, and to its outer end is attached a disk or cap, *F*, and a disk, *G*, notched around its outer edge, and made of such a size as to enter the projecting end of the band *H*, placed upon and secured to the end of the handle *A*, while the disk or cap *F* fits upon and closes the projecting end of the said band *H*.

I are ten (more or less) slides or bolts placed in recesses in the outer surface of the handle *A*, beneath the band *H*, and which are provided with knobs or projections projecting through slots in the band *H*, for convenience in operating them, and with light springs to keep them securely in place when adjusted. One, two, three, or more of the bolts I are made of such a length that, when pushed fully in, their ends may still enter the notches of the disk *G*, and prevent the said disk, and with it the shaft *E*, from being turned, so as to hold the device either locked or unlocked. The other or false bolts are made of such a length that they will only enter the notches of the disk *G* when pushed out.

To turn the disk *G* and shaft *E* to lock or unlock the device, the false bolts must be drawn in and the true bolts pushed out, so as to bring the transverse notches or grooves formed in the inner sides of the said true bolts directly opposite the edge of the disk *G*, allowing the said disk and the shaft to which it is attached to be turned freely.

The relative order and number of the true

and false bolts may be varied indefinitely, so as to produce an indefinite number of combinations.

J is a band, which may be placed upon the band H to cover the slots in said band, and to enable all of the slides or bolts I to be pushed back at once.

The device may, if desired, be attached to a straight umbrella-handle, in which case the shaft E will be parallel with the bar D.

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

1. The combination of the flanged or beaded band B, sliding band C, sliding bar D, partially-rotating notched or recessed shaft E, cap or disk F, notched disk G, slotted band H, and true and false bolts I with each other, substantially as herein shown and described, and for the purpose set forth.

2. The combination of a partially-rotating shaft, E, with the sliding bar and band D C, for the purpose of locking and unlocking said sliding bar and band, substantially as herein shown and described, and for the purpose as set forth.

3. The combination of the slides or bolts I and notched disk G with the partially-rotating shaft E, to lock and unlock said shaft, substantially as herein shown and described, and for the purpose set forth.

The above specification of my invention signed by me this 23d day of July, 1870.

HENRY CLARKE.

Witnesses:

JAMES T. GRAHAM,
T. B. MOSHER.