(No Model.)

# N. B. WHITFIELD.

## UMBRELLA LOCK.

No. 524,923. Patented Aug. 21, 1894.

Fig. 1.

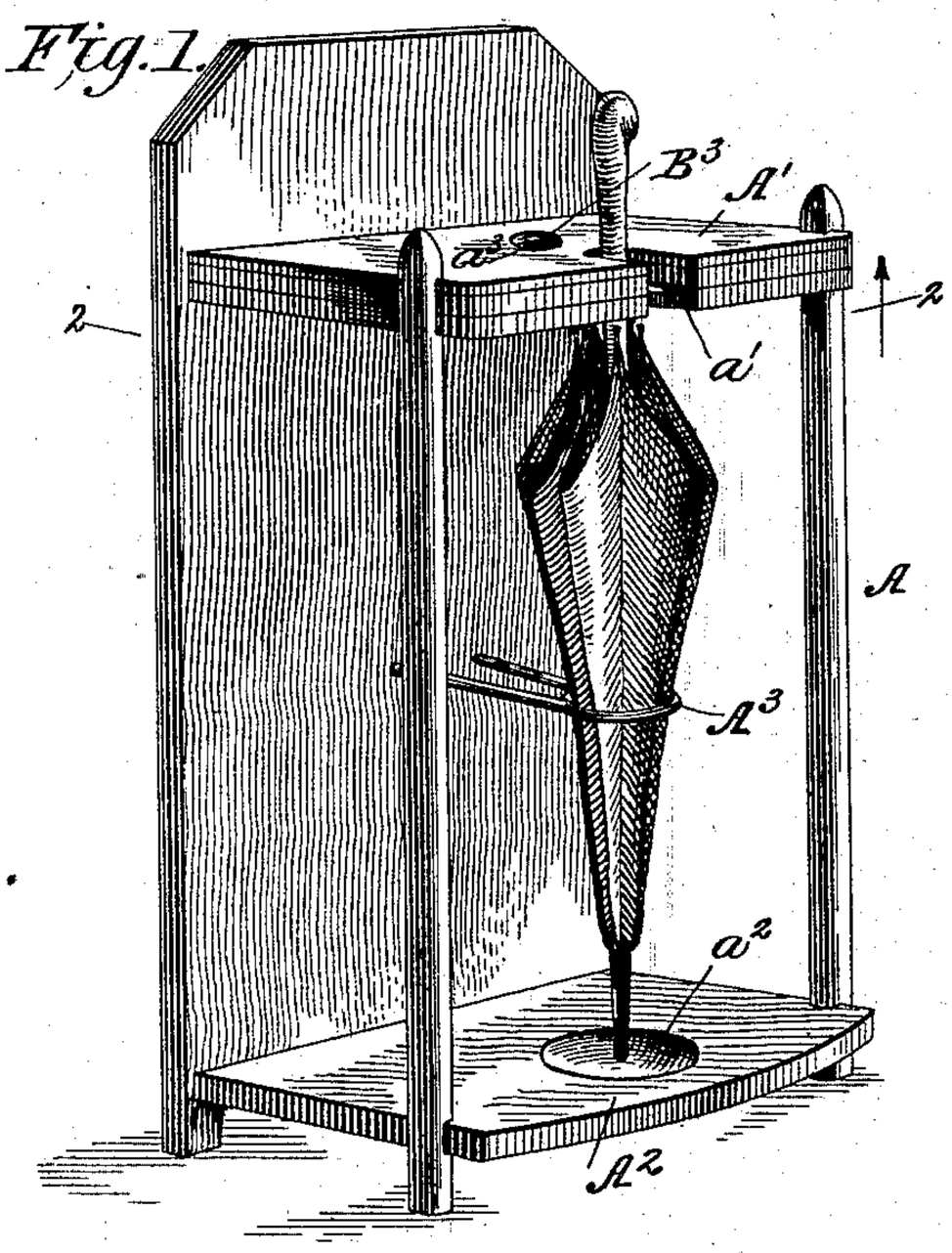
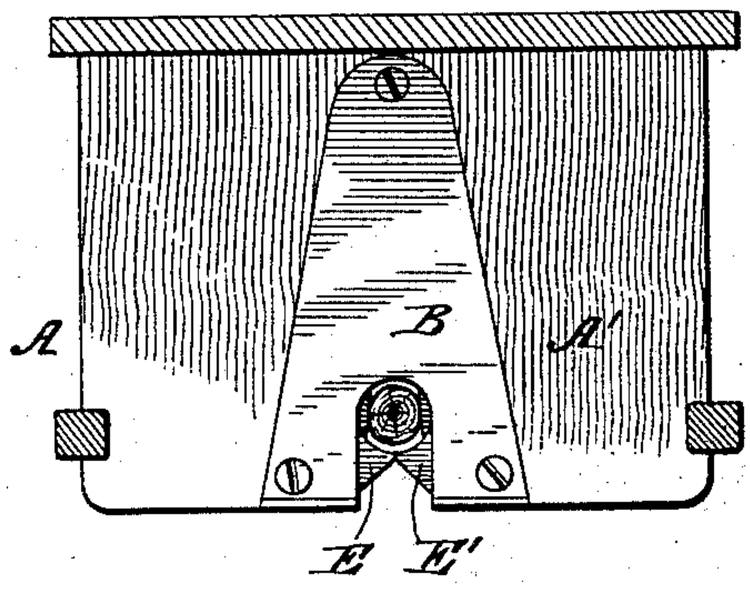



Fig. 2.



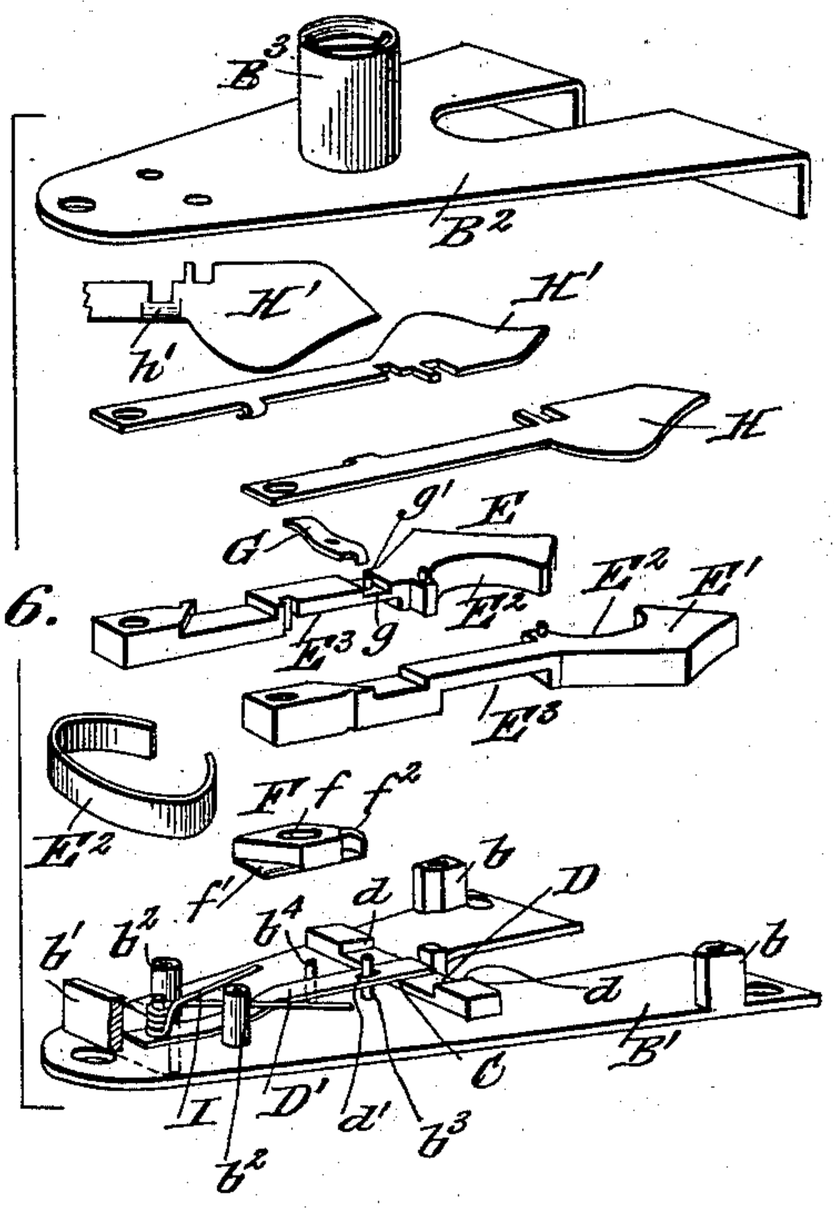




Fig. 3.

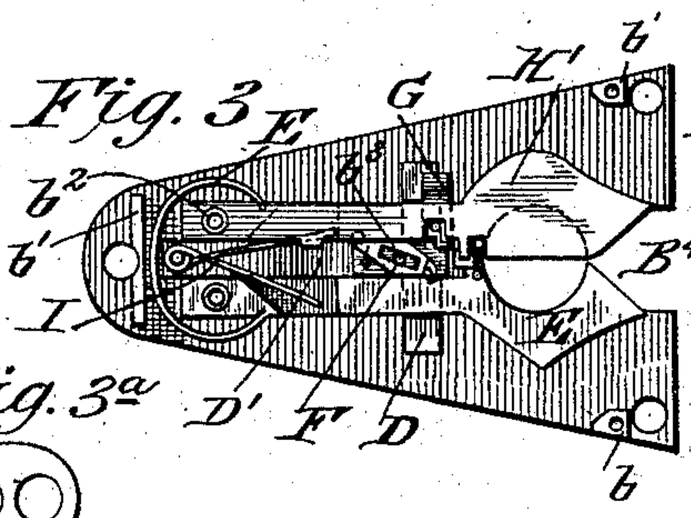



Fig. 3a

Fig. 4.

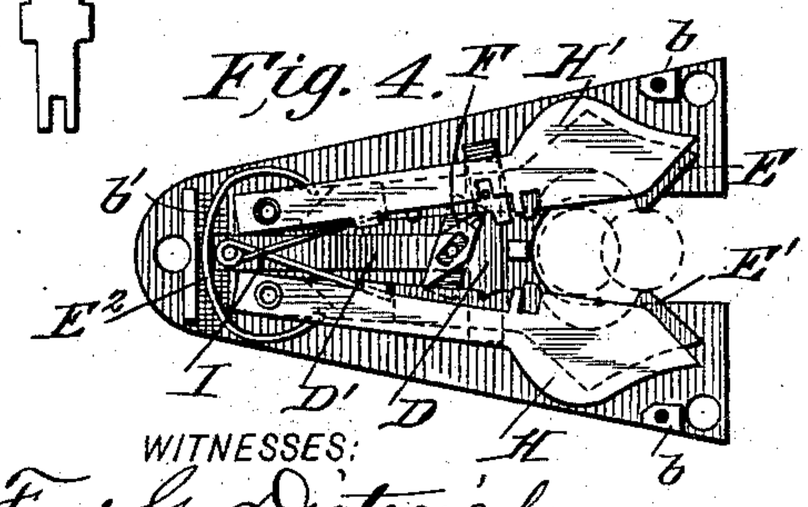



Fig. 5

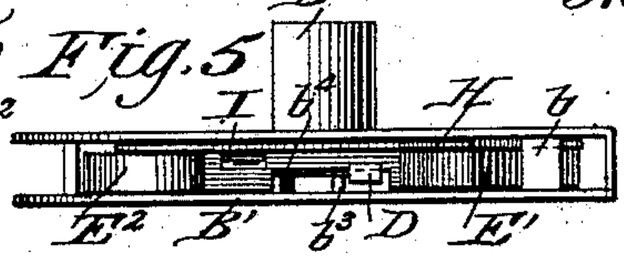



Fig. 6.



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# UNITED STATES PATENT OFFICE.

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## UMBRELLA-LOCK.

SPECIFICATION forming part of Letters Patent No. 524,923, dated August 21, 1894.

Application filed November 15, 1893. Serial No. 491,059. (No model.)

*To all whom it may concern:*

Be it known that I, NATHAN BRYAN WHITFIELD, a citizen of the United States, residing at Portland, in the county of Multnomah and State of Oregon, have invented an Umbrella-Lock, of which the following is a specification.

My invention is an improved umbrella lock stand and the invention consists in certain novel constructions and combinations of parts as will be hereinafter described and pointed out in the claims.

In the drawings—Figure 1 is a perspective view of a stand provided with my improvements and Fig. 2 is a sectional view on about line 2—2 of Fig. 1, looking in the direction of the arrow. Figs. 3 and 4 are top plan views of the lock the top plate being removed the said Figs. 3 and 4 showing the parts respectively locked and unlocked. In Fig. 3 one of the blanks is removed and is shown in detail immediately below the main portion of said figure. Fig. $3^a$ is a detail view of the key. Fig. 5 is a side view of the lock and Fig. 6 shows the several parts in detail.

The stand A may be in general of any suitable design and is provided with the top A′ and bottom $A^2$ connected as shown. Between this top and bottom is arranged a collar or ring $A^3$ secured to the stand A and operating to prevent the umbrella when held as shown in Fig. 1 from being twisted out of the stand as will be understood from said figure. In the bottom $A^2$ is supported a pan $a^2$ which receives the lower end of the umbrella handle and the drip from the umbrella. In the edge of the top A′ is formed a notch $a'$ and in rear of such notch is formed an opening $a^3$ for the key barrel of the lock presently described.

The lock B has its case formed with a base plate B′ and a cap plate $B^2$, the latter having the key barrel $B^3$ which has the key hub and contains stops and wards. The lock also has its case provided with an edge notch $B^4$ and is applied and secured to the under side of the top A′ with the key barrel in its opening $a^3$ and the notch $B^4$ in register with the notch $a'$ of said top as shown. The lock case is preferably recessed in the under side of the top A′ as shown. The top and base plate of the case B are held apart by suitable posts $b$ at their front ends and a back plate $b'$ at their rear ends and studs $b^2$ are mounted on the base plate and form pivots for the clamps and the blanks or wards presently described. On the base plate B′ I also provide pins $b^3$ and $b^4$ the former serving as a guide for the ward and a pivot for the tumbler, and the latter as a stop to prevent the tumbler from being turned in the wrong direction.

The ward C has a cross bar D formed on its upper side near its ends with inwardly facing shoulders $d$ forming abutments for the clamps and serving when engaged with said clamps to lock the same closed. This cross bar D is supported upon the free end of a spring bar D′ whose other end is secured to the lock case and which spring is secured between its ends is perforated at $d'$ and fits upon the guide pin $b^3$ as shown most clearly in Fig. 6. This spring D′ operates to press the cross bar D upward into contact with the clamps. The clamps E E′ are pivoted near their rear ends upon the studs $b^2$ and are actuated toward each other by means of a spring $E^2$ preferably a bowed plate spring as shown. These clamps when closed are held by the shoulders $d$ of the cross bar D resting up alongside the said clamp bars and may be released by depressing the said cross bar as will be more fully described.

The unlocking tumbler F is pivoted centrally upon the pin $b^3$ and rests down against the spring D′ of the ward C which may be depressed by pushing said tumbler down by the key as presently described.

In the upper side of the tumbler F is a seat $f$ for the key and at its ends the said tumbler is provided with extensions $f\,f'$ which when the tumbler is depressed and turned project under the clamps and so operate to hold the ward down clear of engagement with the said clamps leaving the latter free to open and close. Thus it will be seen when the key is inserted and partially turned the ward will be released from the clamps and the latter will be free to open so that the umbrella handle may be pressed back into the notches $E^2$ of the clamps. Then when the key is withdrawn, (which cannot be accomplished until the key and the locking tumbler are adjusted back to the normal unlocked position shown in Fig. 3) the clamps will be locked by the ward C and the umbrella will be secured until

the key be again inserted and manipulated. Notches $E^3$ are formed in the under sides of the clamps E E′ to receive the ends of the locking tumbler and in the upper side of clamp E over the front end of its notch $E^3$ I provide a notch *g* in which is mounted a pin *g′* on which is pivoted the automatic ward G for locking and unlocking the key, such ward G being acted upon by the blank plates H H′ which are pivoted near their rear ends upon the studs $b^2$ and such plates H are pressed toward each other at their front ends by means of a spring I. The plate H′ which operates directly above the automatic ward G is provided on its under side with an inclined surface *h′* which acts upon said ward G in the operation of the device.

The automatic ward G has a curved end hook or downward projection which engages in a notch $f^2$ in the tumbler F. This prevents the tumbler F from turning and so holds the key in the lock when the umbrella is removed. When the blanks H H′ are closed, the under side surface *h′* passes over the ward G and permits the latter to drop in its place in the notch at $f^2$ thereby preventing the tumbler in the key barrel $B^3$ from turning and locking the key in such barrel until the blanks H H′ are pressed open by the umbrella. The blanks H H′ act upon the ward G lift the hook thereof from the notch $f^2$ and free the key.

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

1. In an apparatus substantially as described the combination with the clamps the ward locking said clamps and the tumbler by which to release said ward, such tumbler being provided with a notch or seat of the automatic ward having a hook like projection engaging in the said notch or seat substantially as set forth.

2. An umbrella securing holder which comprises the top or plate forming a stock and having an edge recess or notch and the lock provided with lock devices and also having an edge recess or notch and secured to the top with such recesses in register all substantially as set forth.

3. The combination with the clamps, their locking ward, the tumbler releasing said ward and having a notch or seat, of the automatic ward having a hook projection engaging in said notch and the blank plate arranged to free said hook projection from such engagement substantially as set forth.

4. In an umbrella securing holder a lock comprising the clamp bars the ward by which said clamp bars are locked closed, and the tumbler arranged to be depressed and turned by the key whereby to release the ward and open the clamps substantially as and for the purposes set forth.

5. In an apparatus substantially as described a lock having pivoted clamps a ward movable into position to lock said clamps and the pivoted tumbler arranged between said clamps and having at its ends extensions arranged to extend under the clamps when the tumbler is turned substantially as set forth.

6. In an apparatus substantially as described a lock comprising the clamps, the ward for locking the same, the tumbler by which to release said ward, the blank plates and the springs by which to actuate said blank plates and the clamps substantially as as set forth.

7. In an apparatus substantially as described a lock consisting of the case having an edge recess, the clamps arranged on opposite sides of and projecting into said recess, the ward for locking said clamps and the tumbler for releasing said ward and spreading the clamps all substantially as and for purposes set forth.

8. In an apparatus substantially as described a stand having its top provided with an edge recess and in rear thereof with an opening and the lock having an edge recess coinciding with that of the top—a key barrel to fit the opening of said top and provided with clamps by which to secure the umbrella handle all substantially as and for the purposes set forth.

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Witnesses:
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