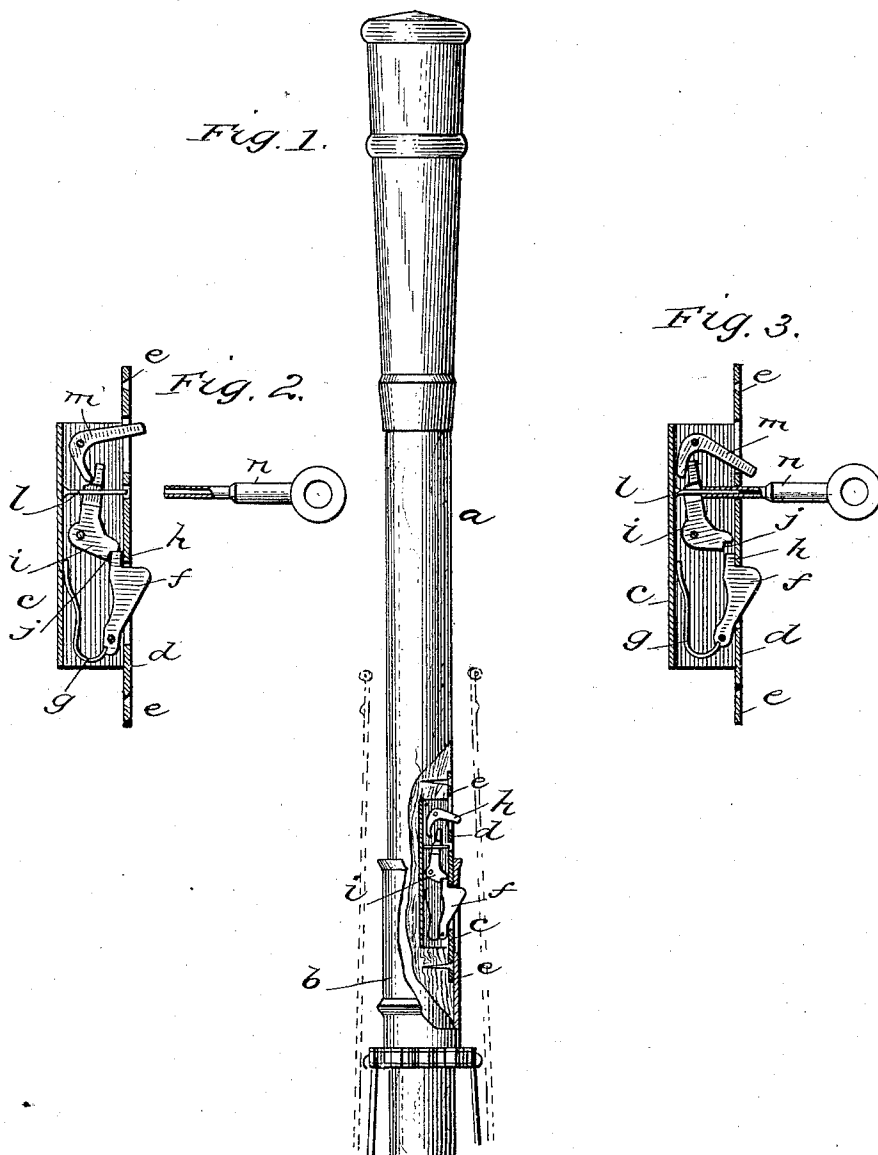


(No Model.)

D. M. WYATT.
UMBRELLA LOCK.

No. 475,736.

Patented May 24, 1892.



Witnesses

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UNITED STATES PATENT OFFICE.

DANIEL M. WYATT, OF COVINGTON, OHIO, ASSIGNOR OF ONE-HALF TO
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UMBRELLA-LOCK.

SPECIFICATION forming part of Letters Patent No. 475,736, dated May 24, 1892.

Application filed September 30, 1891. Serial No. 407,332. (No model.)

To all whom it may concern:

Be it known that I, DANIEL M. WYATT, a citizen of the United States, residing at Covington, in the county of Miami and State of Ohio, have invented certain new and useful Improvements in Umbrella-Locks, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention pertains to a new and improved umbrella-lock; and it relates more particularly to that class of umbrella-locks designed to prevent the operation of the spring or detent which holds the runner when the umbrella is closed.

15 The object of the invention is provide a simple and inexpensive lock which may be readily applied to the umbrella-stick, and which when locked will effectually prevent the opening of the umbrella by any one without the proper key; and it consists in the novel combination and arrangement of parts, as will be more fully hereinafter described, and particularly pointed out in the claims appended.

20 In the accompanying drawings, Figure 1 is a side elevation of a portion of an umbrella-stick, part being broken away to show the lock in sectional view. Fig. 2 is a longitudinal sectional view showing the device in a locked position, and Fig. 3 is a sectional view showing it in its unlocked position.

25 In the drawings, *a* designates an umbrella-stick, which is provided with the runner *b* in the usual or any suitable manner. The runner has secured to it in the usual manner the stretchers and is provided with the slot, in which operates the detent or pawl.

30 In the longitudinal recess usually formed in the umbrella-stick for the reception of the spring-wire detent I secure a thin metal casing *c*, which contains the operating mechanism of my lock. The face-plate *d* of this casing is provided with the longitudinal perforated extensions *e*, by means of which and suitable screws or tacks it is secured in position on the umbrella-stick. The spring-actuated detent *f* is preferably formed of a triangular piece of metal projecting in the usual manner through a slot in the face-plate and

adapted to engage the usual slot in the runner, this detent being pivoted at its lower end within the lower end of casing *c*.

To the detent in a suitable position is secured one end of a leaf-spring *g*, the other end of this spring extending upwardly and bearing against the rear wall of the casing, so that it normally presses the detent outwardly. The upper inner end of the detent is provided with an upwardly-projecting lug or extension *h*, which normally bears against the inner side of the face-plate, limiting the outward movement of the detent through the slot formed in the face-plate.

35 In the casing, just above the spring-actuated detent, is pivoted the right-angle latch or locking-pawl *i*. This locking-pawl has formed in the outer end of its lower arm a notch or recess *j*, in which fits the extension *h* of the detent when the device is in a locked position, as shown in Fig. 2. In the upwardly-extending arm of the locking-pawl, near the upper end thereof, is formed a recess for the passage of the key pin or guide *k*. Above the upper end of the extension of the locking-pawl is pivoted another right-angle lever *m*, the depending arm of this lever bearing on the inner side of the upwardly-extending arm of the locking-pawl and its upper horizontal member extending outwardly through a slot in the face-plate a sufficient distance to be engaged by the finger or a key, if desired. The key-guide extends nearly through the face-plate in a perforation formed for the passage of the key *n*, said key consisting of a tube having a bore large enough to fit closely the key-guide and an external diameter large enough to engage the upper member of the right-angle locking-pawl when inserted to unlock the device, as shown in Fig. 3, and a thumb-piece secured to its outer end.

The operation of my device is as follows: When the umbrella is closed and it is desired to lock the same in its closed position, the projecting end of the right-angle lever is forced upwardly, which action forces its inner member, and with it the upper arm of the locking-pawl, outwardly, causing the locking-pawl to turn on its pivot and engage the upper end of the spring-detent *f*, thereby ef-

fectually locking the detent in its position, as clearly shown in Fig. 2. When it is desired to unlock the detent to permit of raising the umbrella, the key is inserted through the perforation and over the key-guide and forced inwardly, causing the locking-pawl to turn on its pivot sufficiently to release the detent and leaving it free to be pressed inwardly, as shown most clearly in Fig. 3.

It is manifest that many forms of locking-pawls and detents and operating-levers or their equivalents may be made without departing from the spirit of the invention, and I therefore desire it understood that I do not confine myself to the exact form described in the foregoing specification.

The form of the key and key-guide may be indefinitely varied, as is evident, so that to open any lock it will be necessary to possess the key specially designed for that particular lock.

It will be observed that this device is so constructed as to be capable of ready attachment to any of the various umbrellas now on the market without in the least changing or interfering with their general construction, (in which fact lies one of its chief advantages,) the casing inclosing the parts being sufficiently compact to enable it to be inserted in the slot formed in the umbrella stick for the reception of the usual spring-catch, as is evident. It will also be observed that when the umbrella is closed and locked the runner or sleeve embraces the greater portion of the lock-casing, and thereby prevents evil-disposed persons from removing the lock from the stick by prying or otherwise.

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

1. An umbrella-lock consisting of a detent for securing the runner, a locking-pawl adapted to engage said detent, a lever engaging said pawl to cause it to engage the detent, and means for disengaging said locking-pawl from the detent, substantially as described.

2. An umbrella-lock consisting of a detent for securing the runner, a locking-pawl for locking the detent in its outer position, a pivoted lever to close the locking-pawl to engage the detent, and a key adapted to engage the

locking-pawl to disengage it from the detent, substantially as described.

3. An umbrella-lock consisting of a detent for securing the runner, a locking-pawl adapted to engage said detent and lock it in its outer position, and means for engaging and disengaging the said pawl from the detent, in combination with a casing to contain said mechanism and adapted to be secured in a recess in the umbrella-stick, substantially as described.

4. An umbrella-lock consisting of a detent, a locking-pawl provided with a recess to receive a projection on the detent, and a pivoted lever to cause the locking-pawl to engage the detent, in combination with a key for disengaging the locking-pawl from the detent, substantially as described.

5. An umbrella-lock consisting of a detent, a right-angle locking-pawl, one arm of said pawl adapted to engage the detent, a pivoted lever adapted to engage the other arm of said pawl, and a key-guide arranged across the face of one arm of the locking-pawl, in combination with a key adapted to engage the said key-guide and one arm of the locking-pawl to release the detent, substantially as described, and for the purpose set forth.

6. In combination with an umbrella stick and runner, a lock secured to said stick and consisting of a suitable casing, a spring-actuated detent, a right-angle locking-pawl pivoted at its angle, one of its arms provided with a recess to receive a projection on the detent, a right-angle lever pivoted at its angle, one of its arms projecting to the inner side of one arm of the locking-pawl, its other arm projecting through a slot in the face-plate of the casing and slightly beyond the outer surface of the umbrella-stick, a key-guide arranged across the surface of one arm of the locking-pawl, and a key to engage said key-guide and adapted to bear on the outer edge of the locking-pawl, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

DANIEL M. WYATT.

Witnesses:

GEO. W. MILLER,
S. D. PALMER.