

(No Model.)

H. ELLSWORTH.
UMBRELLA STAND AND LOCK.

No. 554,618.

Patented Feb. 11, 1896.

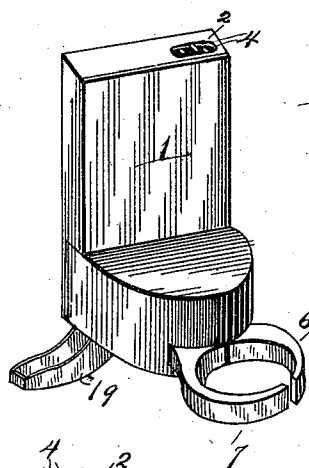


Fig. 1.

Fig. 2.

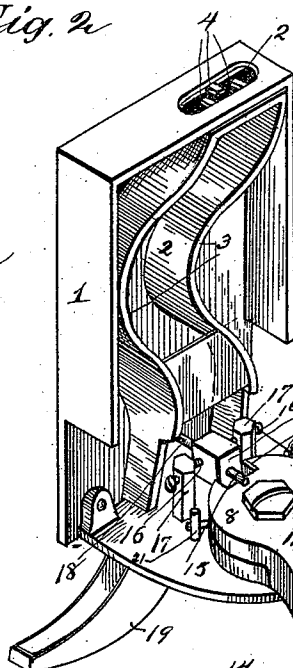


Fig. 8.

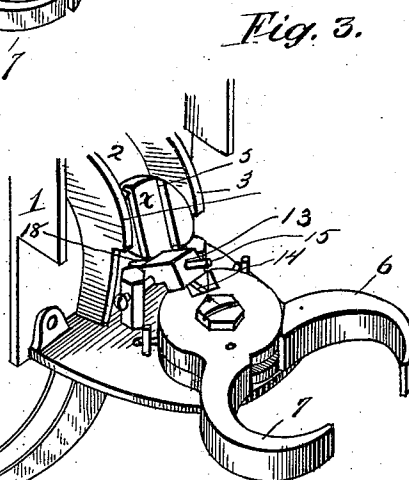


Fig. 3.

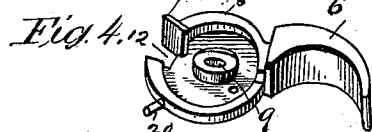


Fig. 4.

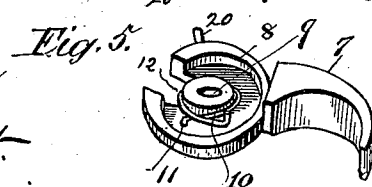


Fig. 5.

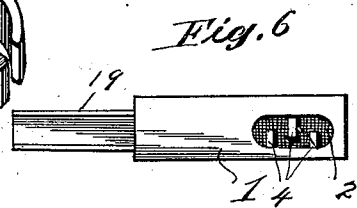


Fig. 6.

Fig. 7.



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UMBRELLA STAND AND LOCK.

SPECIFICATION forming part of Letters Patent No. 554,618, dated February 11, 1896.

Application filed April 22, 1895. Serial No. 546,588. (No model.)

To all whom it may concern:

Be it known that I, HERBERT ELLSWORTH, a citizen of Canada, and a resident of Cleveland, county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Umbrella Stands and Locks, of which I hereby declare the following to be a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in locking devices for umbrellas; and the object is to provide means for removably securing an umbrella or similar article to a stand so that it cannot be removed except by the consent of the owner.

My invention consists in the spring-actuated locking-arms and releasing mechanism, with the combination and arrangement of details and construction of the various parts, as hereinafter described, shown in the accompanying drawings, and more specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of the lock interior. Fig. 2 is an enlarged view of the same with the front cover-plate removed and the locking-arms closed. Fig. 3 is a view of the lower part of the lock with the locking-arms open. Figs. 4 and 5 are views of the arms detached. Fig. 6 is a plan of lock, showing the entrance to key-channel. Fig. 7 shows spring detached, and Fig. 8 shows the key in perspective.

In the views, 1 is the casing parted for convenience into two portions, front and back.

2 is a channel provided with curved or S-shaped walls 3 to prevent the insertion of any instrument to pick the lock, and with wards 4 at the entrance for the weighted key, which is correspondingly slotted at 5 to fit the opening.

6 and 7 are the locking-arms which are expanded into disk-like forms at 8, overlapping one another and centrally pivoted at 9 to the lock-case.

Between the disks is secured the coiled spring 10, having its extremities inserted in the two disks at 11 11, respectively, in such a manner as to rotate the disks and open the arms when released. Pins 20 inserted in the edges of these disks strike the posts 21 when the arms are sufficiently open. Each disk is

provided with a straight-sided opening 12 in the edge opposite the arms. These openings coincide when the arms are closed, as in Fig. 2, and a pivoted catch-block 13 rests in these openings, thus preventing the disks from turning. One of the vertical sides of the opening in the lower disk is extended at 14 so that the catch-block will engage this extension on the lower disk and the opposite side of the upper disk, since it is not desirable to have the catch-drop fall very deep into the opening, but to just engage therein so as to be easily released. A further fall is prevented by means of the stop-pin 15, the point of which rests upon the upper disk. This catch-block is pivoted at 16 in side posts 17 with the preponderance of weight toward the disks, and a pin 18 extends into the channel and is depressed by the weight of the key when it falls into the channel.

In operation, when the key falls upon this pin it raises the catch-block out of the openings in the disks, and the spring 10 will at once throw the arms apart. They are closed about the umbrella-handle by hand, and as soon as the openings in the disks coincide the catch-block falls into them and prevents their turning again until the key is again deposited in the channel. After the key has depressed the pin 18 it passes out of the case in the trough 19 and can be taken up and used again.

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

1. In an umbrella-lock the combination, with a casing, of projecting arms curved to inclose an umbrella-stem, disk-like expansions of said arms pivotally attached to one another and to the case, and provided with openings adapted to register when the arms are closed, a pivoted block adapted to automatically engage said openings when the arms are closed, and means for throwing the arms open when released, substantially as described.

2. In an umbrella-lock the combination with a hollow casing, of an irregularly or S shaped channel or passage adapted to receive a weighted key, a pivoted block at the lower extremity of the passage provided with a projection extending horizontally into said passage, projecting arms curved to inclose an

umbrella-stem and pivoted to said casing and provided with openings in their inner extremities adapted to register with each other and with the outer end of the pivoted block when the arms are closed, and spring mechanism for opening the arms when released, substantially as set forth.

3. In an umbrella-lock, the combination, with an inclosing case, an irregular passage and a pivoted block at the base of the passage, of locking-arms provided with disk expansions pivoted to each other and to the case, and openings adapted to register with

each other and with the projecting end of the pivoted block when the arms are closed, a stop on the pivoted block to limit its fall, a coil-spring between the disks adapted to throw the arms open when the block is withdrawn, and stops on the disks adapted to engage posts on the case and limit the extent of opening of the arms, substantially as described.

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Witnesses:

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