R. C. Williams,

Umbrella.

No. 108,077. Patented Oct. 4, 1870.

Fig. 1.

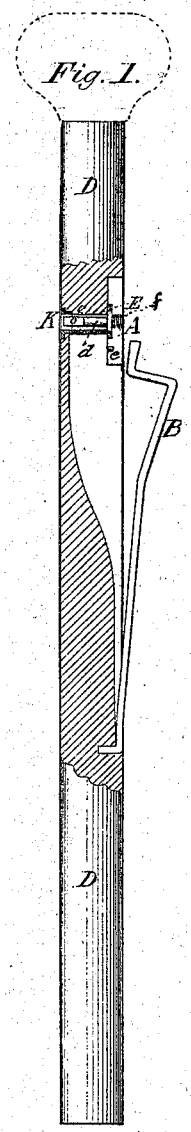


Fig. 2.

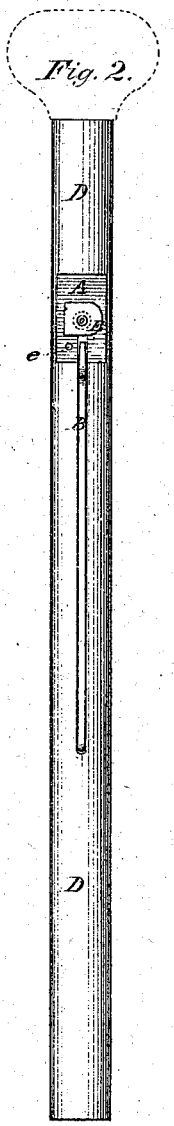
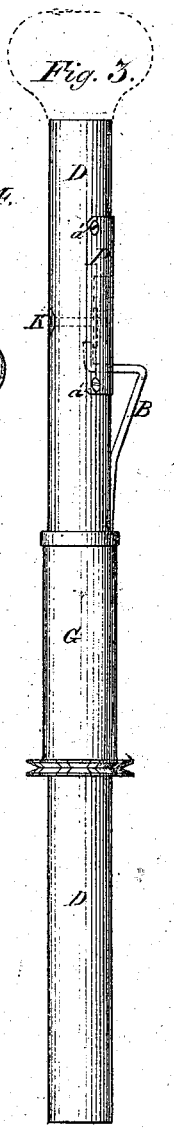


Fig. 4.

Fig. 3.



Witnesses:

J. C. Bowen.

H. N. Moffatt

Robert C. Williams

Inventor.

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his atty

UNITED STATES PATENT OFFICE.

ROBERT C. WILLIAMS, OF FRANKFORT, KENTUCKY.

IMPROVEMENT IN UMBRELLAS.

Specification forming part of Letters Patent No. **108,077**, dated October 4, 1870.

To all whom it may concern:

Be it known that I, ROBERT C. WILLIAMS, of Frankfort, in the county of Franklin and State of Kentucky, have invented certain Improvements in Locks for Umbrellas, of which the following is a specification.

The nature of my invention consists in a certain combination of devices, hereinafter described, for providing the staff or handle of an umbrella with a catch for the ordinary lower wire spring in umbrella-handles, and operating the same in such a manner with a suitable key that it may be turned under the upper end of such spring, so that it cannot be sprung down into the handle, as it is usually done, so that the runner to which the stretchers are attached can be passed up over it, and thus it will be locked, and the umbrella-top cannot be raised for use without the key with which to unlock it. The object of locking up an umbrella against promiscuous use is so obvious that further explanation is deemed unnecessary.

In the accompanying drawings, Figure 1 is a side elevation of a section of the handle, with a portion of the wood cut away in order to display more fully the operative parts of the lock. Fig. 2 is an elevation of a similar section with the lower spring in front of the staff or handle, displaying the notch made by cutting away the wood to afford space for the operation of the parts composing the lock. Fig. 3 is a side elevation of a section of the same with the cap-plate which covers the lock in position, and with the runner upon the staff. These sections all show the handle up and the top downward. Fig. 4 is an elevation of the key.

In Fig. 1, K is the key-hole, and *c* is a straight tube inclosing the shaft *d*, by means of which the catch E is turned. This tube serves as a guide for the key and as a sleeve for the shaft. The outer end of the shaft should be made square or three-sided, so that the key, with a corresponding interior formation and embracing it, will not be turned upon it, but will turn it. The shaft *d* should extend through the catch E, in which it is made fast, and it reaches the inner surface of the plate P, and over that portion of the shaft which is between the catch and that plate is coiled a spiral spring, *f*, the use of which is to press the catch E with a certain amount of force against the wood of the handle D, so that it will not turn without the instrumentality of the key. The catch E is simply a flat metal plate fixed upon the shaft, as before stated, and it should be oblong in form, so that when turned by the key across the handle the upper end of the spring B may be forced down into and up out of its recess in the handle without touching it; but when turned into a vertical position the lower end of it will be directly under the upper end of the spring B, and will prevent that spring from being forced down so as to allow the runner to pass over it and the umbrella to be raised for use. In order to restrict the movements of this catch, one or more metal studs—such as *e* in Fig. 2—may be driven into the wood to prevent its turning entirely around. The plate P not only holds the spiral spring *f* in position and protects the operative parts of the lock, but it also serves to strengthen the handle where the key-hole is bored, and where it is cut away to afford space for the lock.

I claim as my invention—

The shaft *d*, catch E, sleeve *c*, spring *f*, and plate P, pin *e*, and spring B, when constructed, arranged, and combined as and for the purpose described.

ROBERT C. WILLIAMS.

Witnesses:

THOS. TANNER,

GEO. H. EDWARDS.