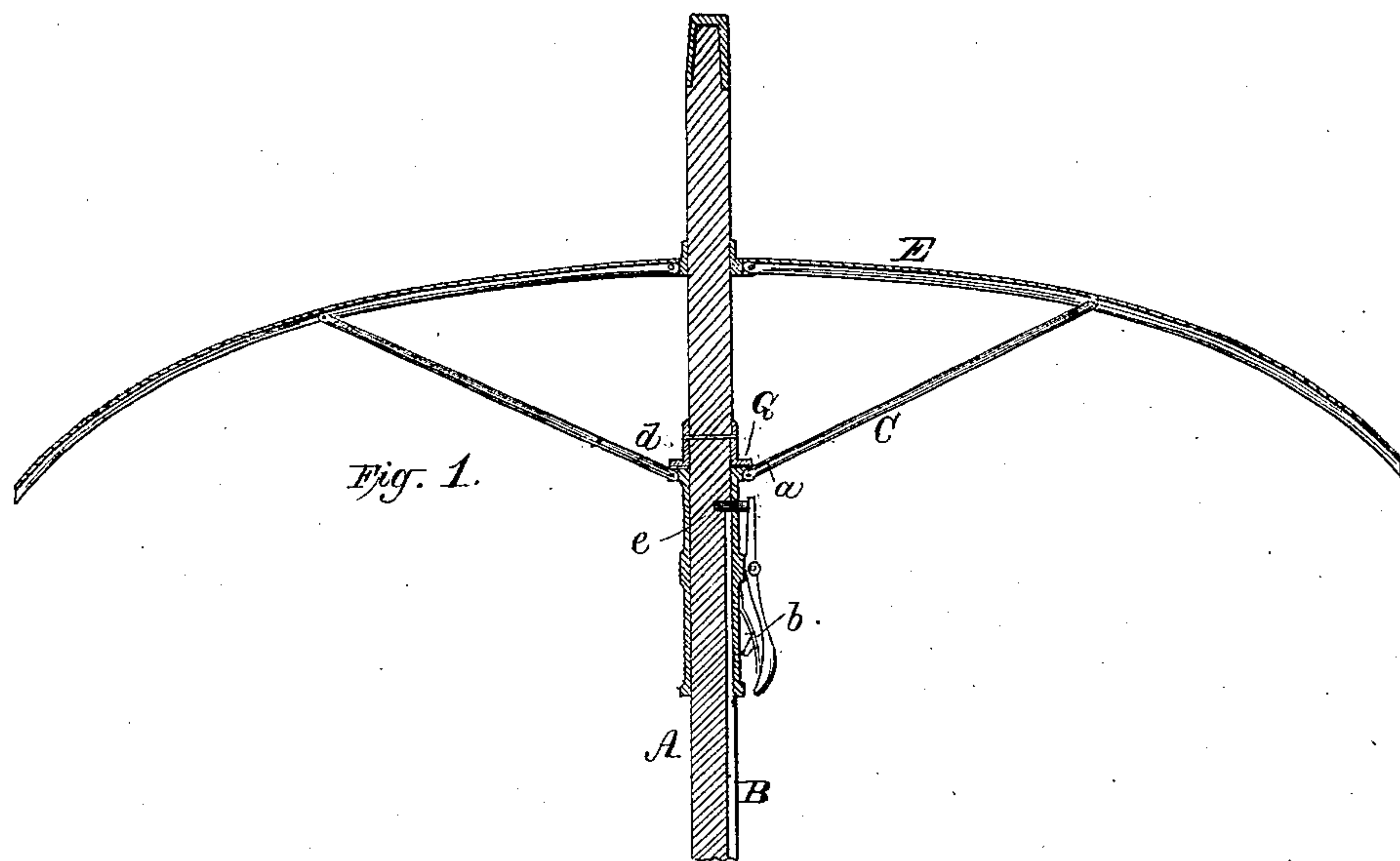


# PENICKS & HEFFLY,

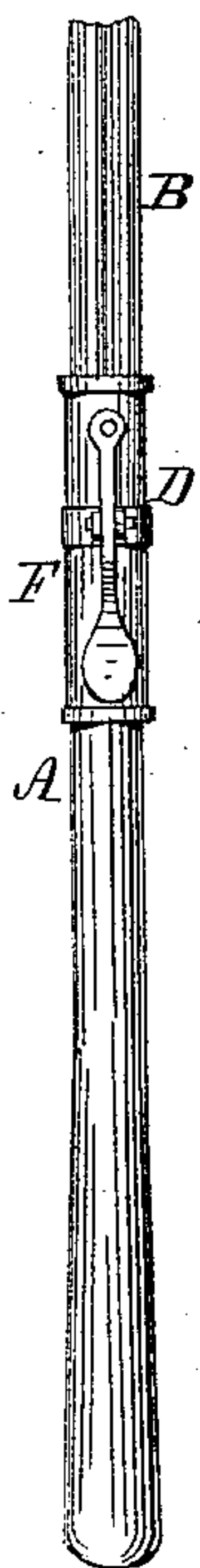
Umbrella.

No. 104,877.

Patented June 28, 1870.



*Fig. 2.*



Witnesses,

*L. Hailer.*  
*Phil & Dodge.*

Inventors,

*Thos B. Penick*  
*Lucretia Heffly*  
*By Dodge & Munroe*  
*his attys*

# United States Patent Office.

THOMAS B. PENICKS, OF PHILADELPHIA, PENNSYLVANIA, AND JOSEPH HEFFLY, OF WASHINGTON, DISTRICT OF COLUMBIA.

*Letters Patent No. 104,877, dated June 28, 1870.*

## IMPROVEMENT IN UMBRELLAS.

The Schedule referred to in these Letters Patent and making part of the same

*To all whom it may concern:*

Be it known that we, THOMAS B. PENICKS, of Philadelphia, Pennsylvania, and JOSEPH HEFFLY, of Washington, in the county of Washington and District of Columbia, have invented certain Improvements in Umbrellas, of which the following is a specification, reference being had to the accompanying drawing.

Our invention relates to umbrellas, and consists in the novel construction and arrangement of a spring catch for holding the frame open or closed, as desired, and also in the employment of a novel stop for limiting the upward movement of the runner to which the braces of the frame are pivoted.

In the drawing—

Figure 1 is a longitudinal section of the frame of the umbrella opened, showing the stop for limiting the upward movement of the slide and the device for holding it in position; and

Figure 2 is side elevation of a portion of the stick and handle.

As is well known, umbrella-sticks are usually provided with two wire springs, which enter a slot in the runner to which the braces of the frame are pivoted. One of these springs holds the frame closed when folded, and the other up when it is opened. When the runner is released from these springs it is free to turn, in a limited manner, about the stick, and, when turned in this way, strains and wears, and sometimes breaks its connection with the braces. It is also usual to provide a simple pin as a stop for the upward movement of the runner, but this does not furnish an even and entire bearing for the runner when pressed against it.

To remedy these difficulties or objections is the object of this invention; and

It is accomplished by providing the stick A with a straight longitudinal groove, B, as shown in both figures.

This groove extends over the whole distance that is travelled by the runner D, to which the braces C of the frame E are pivoted or connected in any suitable manner.

To the runner D is pivoted a thumb spring catch, F, near its center, and having a pin, a, projecting at

right angles to its length, connected to its top so as to pass through a hole in the runner, and enter the groove B, as clearly shown in fig. 1, and also having under its opposite end a spring, b, as clearly shown in the same figure.

At the upper and lower extremities or ends of the groove B there is a small hole or socket, c, of the proper size to admit the end of the pin a, so that, when the umbrella is closed, the pin will enter the lower one and keep it closed, or, when raised, it will enter the upper one and keep it raised or open.

The spring b, it will be seen, constantly holds the pin a in the groove B, and forces it into the holes or sockets in each end of the groove, so that the pin not only serves to hold the runner in place, but prevents its turning at all on the stick.

At the point where it is desired to limit the upward movement of the runner, a cylindrical stop or collar, G, with a flange, d, is securely attached, as shown in fig. 1, so arranged that the upper end of the runner and the flange of the stop may come evenly and closely together, in order that the runner may be held nearly motionless when fastened up by its catch, and the umbrella prevented from turning.

In this way, it will be seen that a convenient and simple device is provided for holding the frame of the umbrella in position when closed or open, and one which prevents any turning of the runner on the stick, and, also, that a stop is provided for limiting the upward movement of the runner, and which, at the same time, presents an even bearing around the stick for the runner to press or strike against, and serves, also, to prevent the umbrella from being turned inside out.

Having thus described our invention,

What we claim is—

In combination with the runner D, having the spring catch F provided with the pin a, the groove B with socket c in the handle, constructed substantially as and for the purpose set forth.

THOMAS B. PENICKS.  
JOSEPH HEFFLY.

Witnesses:

S. C. MILLS,  
D. McLAUGHLIN.