

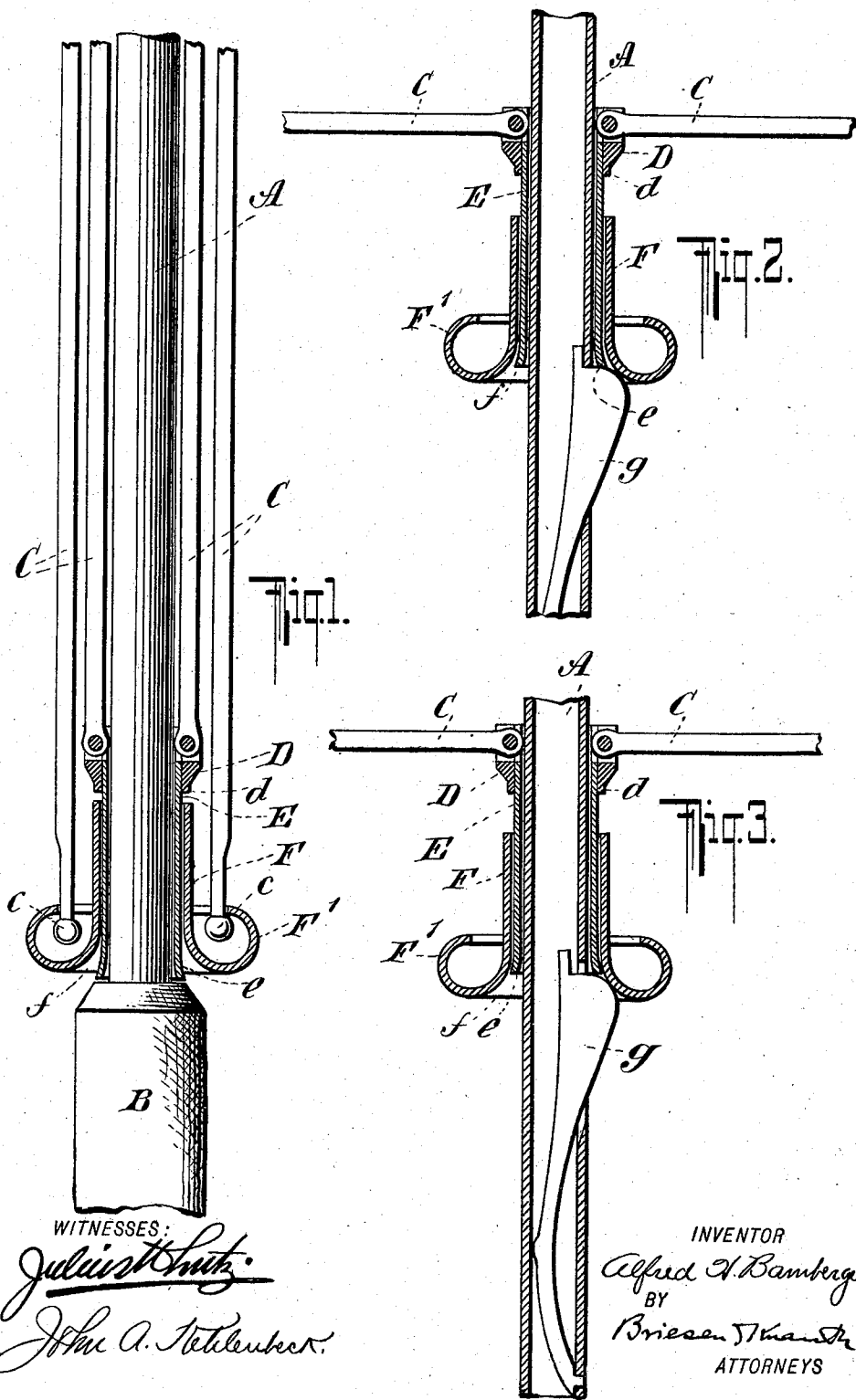
No. 867,227.

PATENTED OCT. 1, 1907.

A. H. BAMBERGER.

UMBRELLA.

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WITNESSES:  
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# UNITED STATES PATENT OFFICE.

ALFRED H. BAMBERGER, OF NEW YORK, N. Y.

## UMBRELLA.

No. 867,227.

Specification of Letters Patent.

Patented Oct. 1, 1907.

Application filed March 20, 1906, Serial No. 306,957.

To all whom it may concern:

Be it known that I, ALFRED H. BAMBERGER, a citizen of the United States, and a resident of New York city, county of New York, State of New York, have invented certain new and useful Improvements in Umbrellas, of which the following is a specification.

My invention relates to umbrellas and more particularly to a construction thereof by which one of the usual spring catches is dispensed with and the other spring catch is readily operated by a simple and effective means without requiring the manual handling of the spring catch.

My invention is illustrated in the accompanying drawings in which

Figure 1 represents a section of the umbrella when folded; Fig. 2 is a section of the umbrella in its open condition; Fig. 3 is a sectional view of the umbrella in the process of being closed.

A represents the umbrella stick and B the handle, C the ribs and stretchers, D the crown or notch to which the stretchers are attached in the usual manner.

E is the runner which forms part of the crown or notch.

F is a sleeve loosely mounted on the runner and limited in its motion by the projection *d* of the notch on the one side and by the flare *e* of the runner E on the other side. As shown in the drawings, the sleeve F is curled over at its lower end so as to form a cup F' to contain the tips of the umbrella ribs C. This cup F' has its edge bent inwardly toward the umbrella stick so as to get a grip on the knobs *c* which are located at the ends of each umbrella rib. The inner surface of the sleeve F is beveled or flared at the lower end so as to form an angle of about 45 degrees with the runner. This bevel is important, inasmuch as it is made use of to operate the spring catch *g*. The flare of the runner is located in the path of the inclined surface *f* of the cup F', so that the engagement of these two surfaces will cause the runner and the cup to move together after the position shown in Fig. 3 has been reached.

It will be readily seen that my invention is of extreme simplicity, a result for which I have striven in the manufacture of these goods for many years.

The operation of this structure is as follows: When the umbrella is in the closed position as shown in Fig. 1, it is held in its closed position by reason of the fact that the ribs are held in the cup F, as there is no lower spring. This is the only method of holding the umbrella in that position. The resiliency of the ribs tending to spread them open creates a secure lock between the inturned end of the cup F' and the knobs *c*. The inturned end or flange of the cup F' is preferably horizontal, thus more securely holding the knobs. When

in this position the runner is close to the handle and in the illustration forms an apparent continuation of the handle proper. This tends to create a handsome appearance and to obviate the presence of edges which may catch the garment of the user. In opening the umbrella the cup F' is first pulled toward the handle B so as to disengage the ribs C; thereupon the cup F' is pushed along the rod and by means of the contact between the sleeve and the projection *d* on the notch, the umbrella is opened. The umbrella is now in the position shown in Fig. 2. In this position the lower end *e* of the runner rests upon the upper edge of the spring *g*. When it is desired to close the umbrella the operator takes hold of the cup F', the edge of which being turned inwardly, will not tend to cut or annoy the operator. As this cup is drawn down its beveled face *f* engages the spring *g* and depresses it to the extent shown in Fig. 3. As this point is reached, the sleeve F has reached the limit of its motion on the runner E but the runner itself being slightly flared at *e*, will further depress the spring and permit the runner to be smoothly drawn down the stick, toward the position shown in Fig. 1.

In the drawing the size of the parts have been shown considerably enlarged and exaggerated so as to clearly show the invention. In practice, of course, the runner and the sleeve are made of very thin material and offer much less surface resistance than shown in the drawings. The umbrella stick too is much simpler than when made in the usual style.

It will be apparent that instead of the flaring end *e* of the runner, other means may be employed to compel the complete depression of the spring *g*. Various other modifications will readily suggest themselves to the practical umbrella builder.

I claim as my invention:

1. In an umbrella, the combination of the stick, the runner mounted to slide thereon and having a flaring portion to depress the umbrella spring, and the sleeve having a limited sliding movement on the runner and provided with a cup to receive the ends of the umbrella ribs, the said sleeve having an internal flare adapted to engage the umbrella spring, the flare of the runner being in the path of the flare of the sleeve so that the runner's flare will act as a stop for the flare of the sleeve.

2. In an umbrella, the combination of the stick, the runner mounted to slide thereon, and the sleeve having a limited sliding movement on the runner, and provided with a cup having an inturned horizontal flange or edge to hold the ends of the umbrella ribs.

In testimony whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

ALFRED H. BAMBERGER.

Witnesses:

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