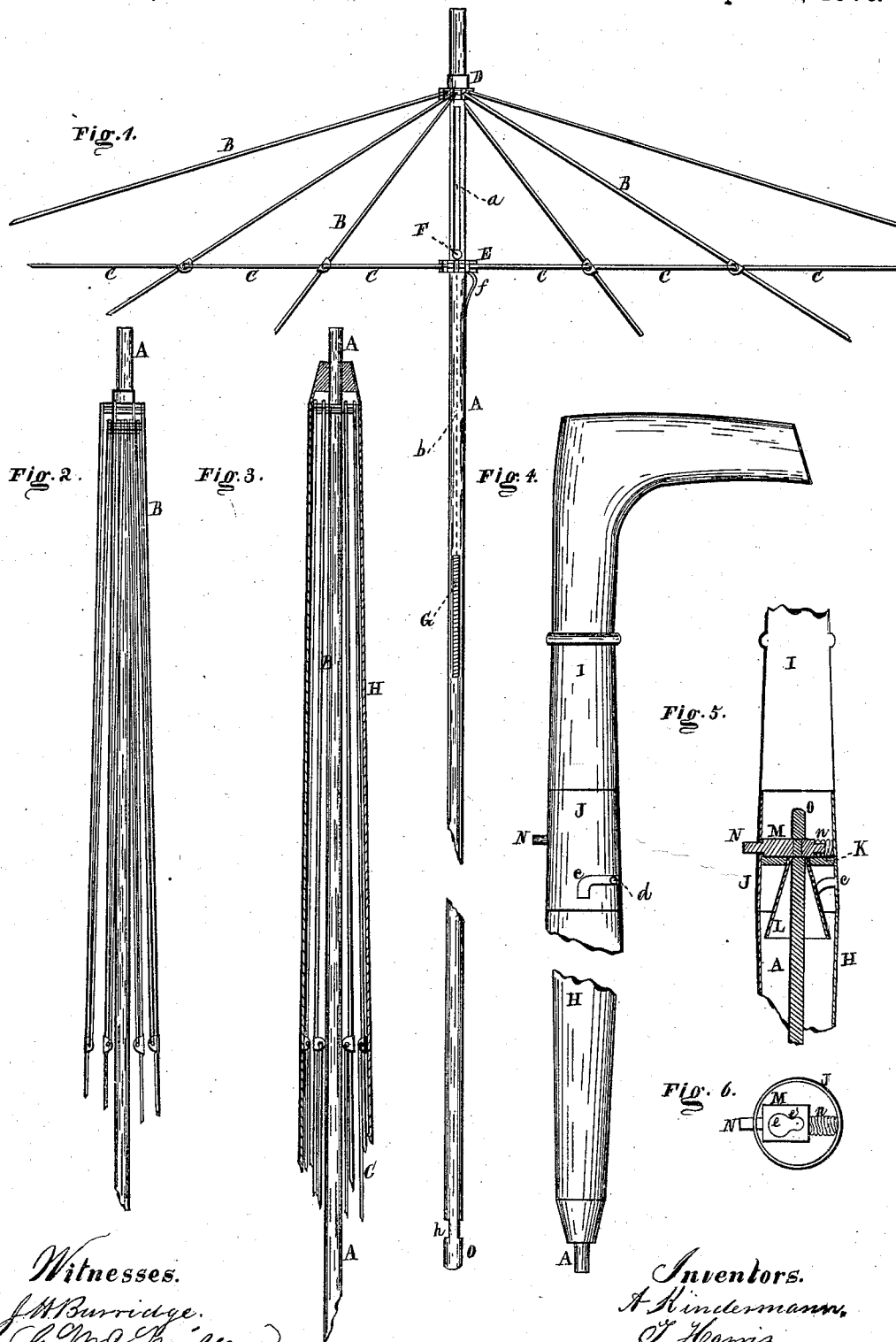


A. KINDERMANN & T. HARRIS.

CANE AND UMBRELLA COMBINED.

No. 182,025.

Patented Sept. 12, 1876.



Witnesses.
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UNITED STATES PATENT OFFICE.

AUGUST KINDERMANN AND THEODORE HARRIS, OF CLEVELAND, OHIO.

IMPROVEMENT IN CANE AND UMBRELLA COMBINED.

Specification forming part of Letters Patent No. 182,025, dated September 12, 1876; application filed July 12, 1876.

To all whom it may concern:

Be it known that we, AUGUST KINDERMANN and THEODORE HARRIS, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and Improved Umbrella and Cane Combined; and we do hereby declare that the following is a full, clear, and complete description thereof, reference being had to the accompanying drawings, making a part of the same.

Figure 1 is a view of the umbrella expanded. Fig. 2 is a view of the umbrella closed. Fig. 3 is a view of the umbrella closed and inserted in the cane. Fig. 4 is a view of the cane, with the umbrella supposed to be inside. Figs. 5 and 6 are detached sections.

Like letters of reference refer to like parts in the several views.

This invention is a combination of umbrella and walking-cane, producing an article that may be readily and easily converted from a walking-cane into an umbrella, or from an umbrella into a walking-cane, as the case may be, and whereof the following is a full and complete description.

The umbrella referred to consists of a tubular handle or rod, A, Fig. 1, of which B are the ribs, and C the braces. The ribs are secured to the rod by means of a collar, D, as are the ribs of umbrellas in ordinary use; so, also, are the braces attached to the ribs, and secured to the rod by a collar, E, in the usual way. The umbrella, in the drawing, is represented without a covering, it being omitted for convenience sake; but which, however, is made and secured to the frame, like those in common use.

In the handle or rod (between the collars D and E) is made a slot, *a*, wherein is fitted a pin, F. In the hollow of the rod is secured a spring, G, which is attached to the pin F referred to by a link, indicated by the dotted line *b*. The purpose of the spring, link, and pin will presently be shown.

The cane part of the invention consists of two sections, viz., a tubular shell, H, Figs. 4 and 5, and a handle, I. Said section H is attached to section I by a ferrule, J, into which it is inserted, and secured by a bayonet-joint or lock, consisting of a slot, *c*, and stud *d*, Fig. 4. In the ferrule J referred to (forming a part of

the handle I) is fitted a diaphragm, K, Fig. 5, in the center of which is a hole a trifle larger than the rod A of the umbrella. Around said hole is secured to the diaphragm the smaller end of a funnel-shaped conductor, L, the larger end of which projects beyond the end of the ferrule and into the end of section H of the cane, as will be seen in Fig. 5. The purpose of the conductor will hereinafter be shown. M, Fig. 5, is a slide, having a key-hole-shaped opening therein, as will be seen at *e*, Fig. 6. From one side of the slide projects a stud, N, through the side of the ferrule, whereby the slide is operated. On the opposite side or end of the slide is a spring, *n*, Figs. 5 and 6, whereby the slide is forced forward to the position shown in said Fig. 5.

The practical operation of the above-described invention is as follows: As aforesaid, Fig. 1 represents the umbrella as spread, in which position it is maintained by the spring *f*. In Fig. 2 the umbrella is represented as closed, which is done by pushing upward the sliding collar E, thereby bringing the ends of the braces attached to the rod to the end of the umbrella, to which the ribs are secured reversely from that of an ordinary umbrella, which is closed by pulling downward the collar E, as shown in Fig. 3.

The umbrella, when opened, is not carried by the tubular rod A, but said rod is inserted in the smaller end of section H of the cane, Fig. 4, until the end O of the rod, Fig. 1, reaches the slide M, which is now pushed in by the stud to allow the end to pass through the hole *e* until the neck *h* thereof is within the hole. The slide then moves forward by the reaction of the spring *n*, thereby bringing the neck *h* of the rod A into the smaller part *e'* of the hole, as shown in Fig. 5, which, as will be obvious, prevents the rod from being pulled out from the case or cane. The two sections, H and I, comprising the cane, form a handle for the umbrella, whereby it is carried by section I attached to section H, as shown in Figs. 4 and 5. The purpose of the conductor L referred to is to guide the end of the rod A into the slide for being secured therein, as above said.

In order to close the umbrella temporarily, and thus save the trouble of withdrawing the

rod A from the cane, the collar E is pushed upward, as shown in Fig. 2, thereby closing the ribs and the braces about the handle or cane, as they are shown closed about the rod A in said Fig. 2. It will be obvious that on pushing upward the collar E the spring G (indirectly connected therewith by the link *b* and pin F, as above described) will be extended; hence, when the umbrella is to be opened it is done by lowering the point of the cane. The weight of the ribs will ordinarily cause them to fall back from the handle or cane, and the tension of the spring will cause them to spread out, as shown in Fig. 1, by drawing down the collar. By this means is avoided the necessity of reaching the hand up to the collar in order to draw it down to spread out the umbrella.

When the umbrella is not needed it can be inclosed in the cane. To this end the rod A is withdrawn from the end of the cane by releasing it from the slide N for that purpose. For closing the umbrella to be inserted in the cane the collar E is drawn downward or toward the hand, as shown in Fig. 3, the same as an ordinary umbrella, whereas if closed, as shown in Fig. 2, too much bulk is formed to be easily inserted in the smaller end of the cane. Fig. 3 represents section H of the cane

inclosing the umbrella. The handle or section I, when attached thereto, is shown in Fig. 4, which represents a view of the cane with the umbrella supposed to be inclosed therein, and which may be used as an ordinary walking-cane.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. In combination with the tubular rod or handle A and collar E, the spring G, attached to a pin, F, by a link, *b*, arranged to operate for spreading the umbrella, substantially in the manner as herein set forth.

2. The slide M and spring *n*, in combination with the ferrule J, rod A, and sections I and H of the herein-described walking-cane, substantially as set forth, and for the purpose specified.

3. The combination of the tubular slotted rod A, spring G, pin F, collar E, slide M, spring *n*, and sections H and I of the walking-cane herein described, substantially in the manner as set forth, and for the purpose specified.

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