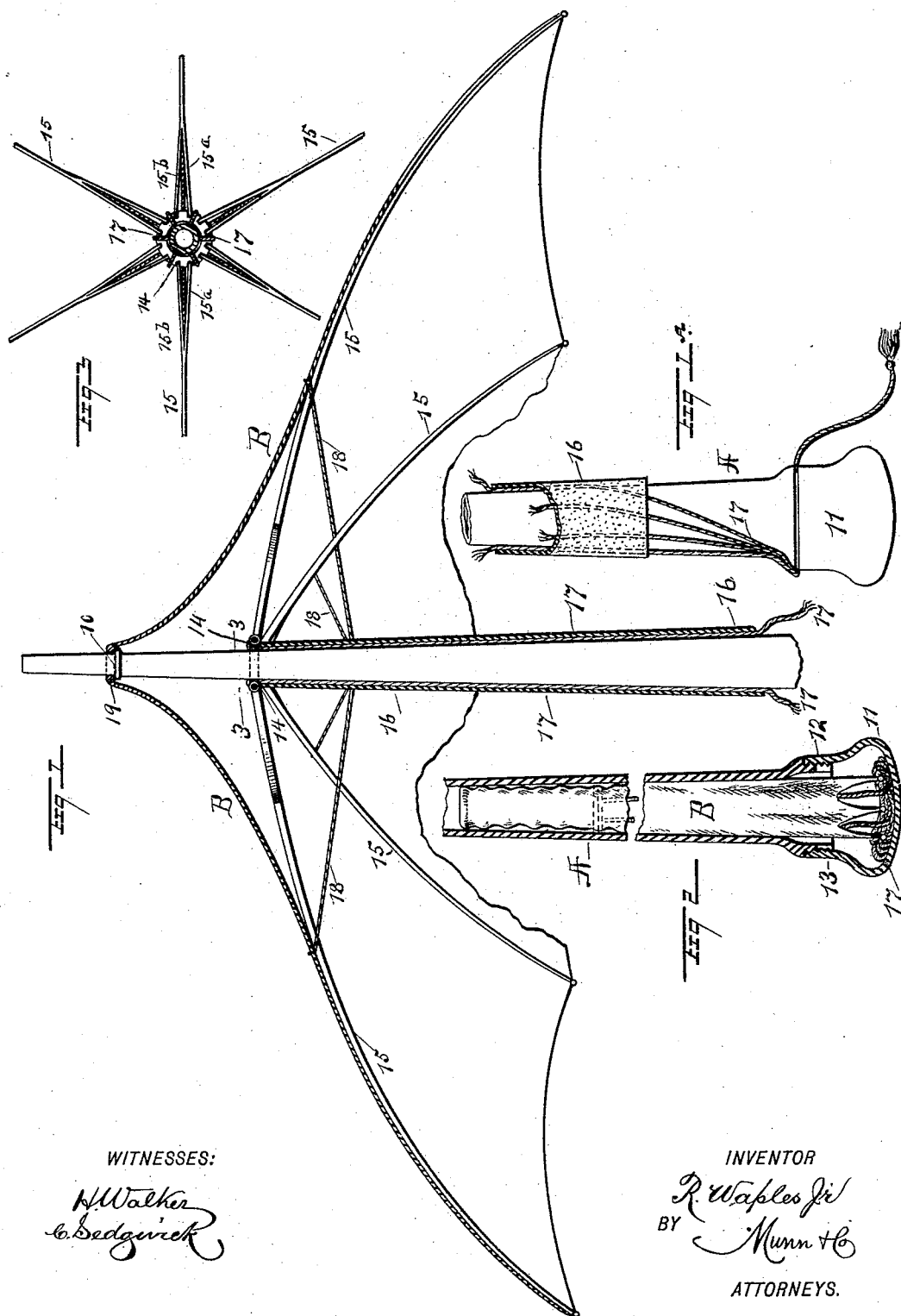


(No Model.)

R. WAPLES, Jr.
UMBRELLA CANE.

No. 489,351.

Patented Jan. 3, 1893.



WITNESSES:

H. Walker
C. Sedgwick

INVENTOR

R. Waples Jr.
BY *Munn & Co.*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

RUFUS WAPLES, JR., OF NEW YORK, N. Y.

UMBRELLA-CANE.

SPECIFICATION forming part of Letters Patent No. 489,351, dated January 3, 1893.

Application filed June 27, 1892. Serial No. 438,129. (No model.)

To all whom it may concern:

Be it known that I, RUFUS WAPLES, Jr., of New York city, in the county and State of New York, have invented a new and useful
5 Improvement in Umbrella-Canes, of which the following is a full, clear, and exact description.

My invention relates to an improvement in umbrella-canes, and has for its object to so
10 construct a cane and a canopy that the latter may be folded up, when not required for use, and concealed within the cane, and whereby when an umbrella is required the canopy may
15 be removed from the cane, expeditiously and conveniently mounted thereon, and spread to form the body portion of the umbrella.

It is another object of the invention to provide a means whereby the raising of the umbrella body or canopy may be effected from
20 the head portion of the cane, and further whereby at the head of the cane locking devices will be located, capable of maintaining the canopy in its spread position.

Another object of the invention is to provide an umbrella-cane which will be exceedingly light and durable and economic in its
25 construction.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth and pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the
35 views.

Figure 1 is a side elevation of a cane having mounted thereon a canopy, the whole constituting an umbrella, the canopy or body portion of the umbrella being in vertical section; Fig. 1^a shows that part of the cane absent from Fig. 1; Fig. 2 is a partial vertical section through the cane, illustrating the canopy as folded up therein, the canopy being in side
40 elevation; and Fig. 3 is a section taken horizontally upon the line 3—3 of Fig. 1.

The cane A, which is to be the support or stick for the umbrella B when the device is used as an umbrella, is hollow, and near its
50 ferrule end is provided exteriorly with a flange or collar 10, and the head 11 of the cane is removable from the body. The two

parts are connected in any approved manner, but ordinarily the head is screwed upon the reduced or shouldered portion 12 of the body
55 of the cane, as shown in Fig 2; and this reduced or shouldered portion, when it is employed, has openings 13, cut therein, the openings being ordinarily diametrically opposite. The canopy or body of the umbrella B, may
60 be made of silk, waterproof material, or a fabric of any description, the lightest material practicable for such purposes being employed.

The canopy is cut and constructed in a
65 similar manner as is the cover of an ordinary umbrella or parasol; but the support for the fabric which may be properly denominated the cover, differs from that of the ordinary
70 umbrella or parasol; and it consists of the following parts:

What may be denominated a runner 14, is adapted to slide upon the body portion of the cane. This runner ordinarily consists of a
75 flexible leather, fabric or metal ring, as best shown in Fig. 3, and to this ring the ribs 15 of the canopy are pivotally attached at their inner ends, the ribs being secured to the cover of the canopy in any suitable or approved
80 manner. The ribs at their inner ends are forked, each being provided with two members 15^a and 15^b, in order that they may be more readily centered upon the runner, and also in order that they may have as great a
85 bearing as possible upon the runner and yet be exceedingly light; and the pivotal attachment between the ribs and the runner is effected through the medium of the members of the former. The ribs are not in any manner secured to the extreme upper portion of
90 the cover of the canopy; the ribs are attached to the cover only at their lower ends, and at a point between their centers and inner or upper extremities, as is best shown in Fig. 1, so that when the cover is expanded or opened a
95 considerable space is obtained between the upper inner portions of the ribs and the upper portion of the cover. The runner is securely attached to one end of a sleeve 16. This sleeve is usually made of a flexible and
100 light material, such as fabric, and is adapted to fit snugly to the body of the cane and extend downward or in direction of its head some distance, or as far as in practice may be

found desirable or advantageous. The runner has secured thereto a series of cords 17, and these cords are usually attached to the runner one between each two of the ribs, as is best shown in Fig. 3. The cords extend downward within the sleeve 16, and when the sleeve is upon the body of the cane the cords are located between the exterior of the cane body and the inner wall of the sleeve, as shown in Fig. 1.

Instead of the ordinary braces being employed to prevent the ribs from being forced outward too far by the action of the wind, for example, flexible braces 18, are substituted, these braces being usually made of cord, or the equivalent thereof, and they are attached at their outer ends to the ribs preferably at that point where the ribs are secured to the cover, while the inner ends of the cords are securely fastened to the sleeve 16, and when the canopy is expanded or opened out fully the cords 18 are straight and horizontally located, and the cords and braces taken in connection with the ribs, form what closely approximates a series of triangles, thereby insuring to the canopy a maximum of strength, while at the same time a maximum of lightness is obtained. The canopy is provided at its upper central sections with an opening usually encircled by the ring 19, and this ring is adapted to rest upon the flange 10 of the cane body when the cane and canopy are to be utilized as an umbrella. The sleeve 16, serves not only as a guide for the cords or draw strings 17, but it also serves as a guide for the cane when the latter is to be inserted through the runner and through the opening in the cover of the canopy, enabling the attachment between the canopy and the cane to be not only conveniently but expeditiously effected.

In operation, after the canopy has been placed upon the cane, the canopy is folded out for use as an umbrella by drawing down upon the cords 17, which lead to the head portion of the cane, and when the canopy has been sufficiently stretched it is held in that position by passing all of the cords through the openings 13 in the cane body, and then screwing upon the body the head 11, as is best shown in Figs. 1 and 2. By this means a secure and ready locking device is obtained, but other forms of locking devices may be substituted, if in practice it is found desirable, although that shown and just described is the one preferred. When the umbrella is

no longer needed the head of the cane is removed and the canopy is withdrawn from the body of the cane, folded up and entered into the interior of the body, as shown in Fig. 2, and after the head of the cane has been attached to the body thereof the cane may be used as a walking stick, and will be in every respect a cane, the canopy being entirely concealed.

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

1. An umbrella cane, the same consisting of a metal staff or stick provided at its ferule end with a collar 10 and a canopy adapted to be supported by or removed from the stick, the canopy consisting of a cover having a ring 19 to engage collar 10, a runner which receives the stick and slides freely thereon, ribs pivotally attached to the runner and connected with the cover, flexible braces connected with the ribs and with the runner below the pivotal points of said ribs, and draw strings or cords attached to the runner to draw it downwardly, as and for the purpose set forth.

2. The combination, with a stick or cane, of a canopy adapted to be supported by the stick or cane or removed therefrom, the said canopy comprising a cover, a runner, ribs pivoted to the runner and attached to the cover between their centers and their inner ends, a sleeve projected from the runner, flexible braces connecting the sleeve with the ribs, and draw strings attached to the canopy at the runner, as and for the purpose set forth.

3. The combination, with a hollow stick or cane provided with a removable head and a locking device at the head, of a canopy, the same consisting of a cover having an opening for the passage of the stick, a runner capable of free movement upon the stick, ribs pivoted to the runner and secured except at their inner extremities to the cover, the inner portions of the ribs being unattached to the cover, a flexible sleeve projected outward from the runner, flexible braces connecting the sleeve with the ribs, and draw strings connected with the runner and adapted for engagement with the locking device of the stick or cane as and for the purpose specified.

RUFUS WAPLES, JR.

Witnesses:

FRED ACKER,
C. SEDGWICK.