

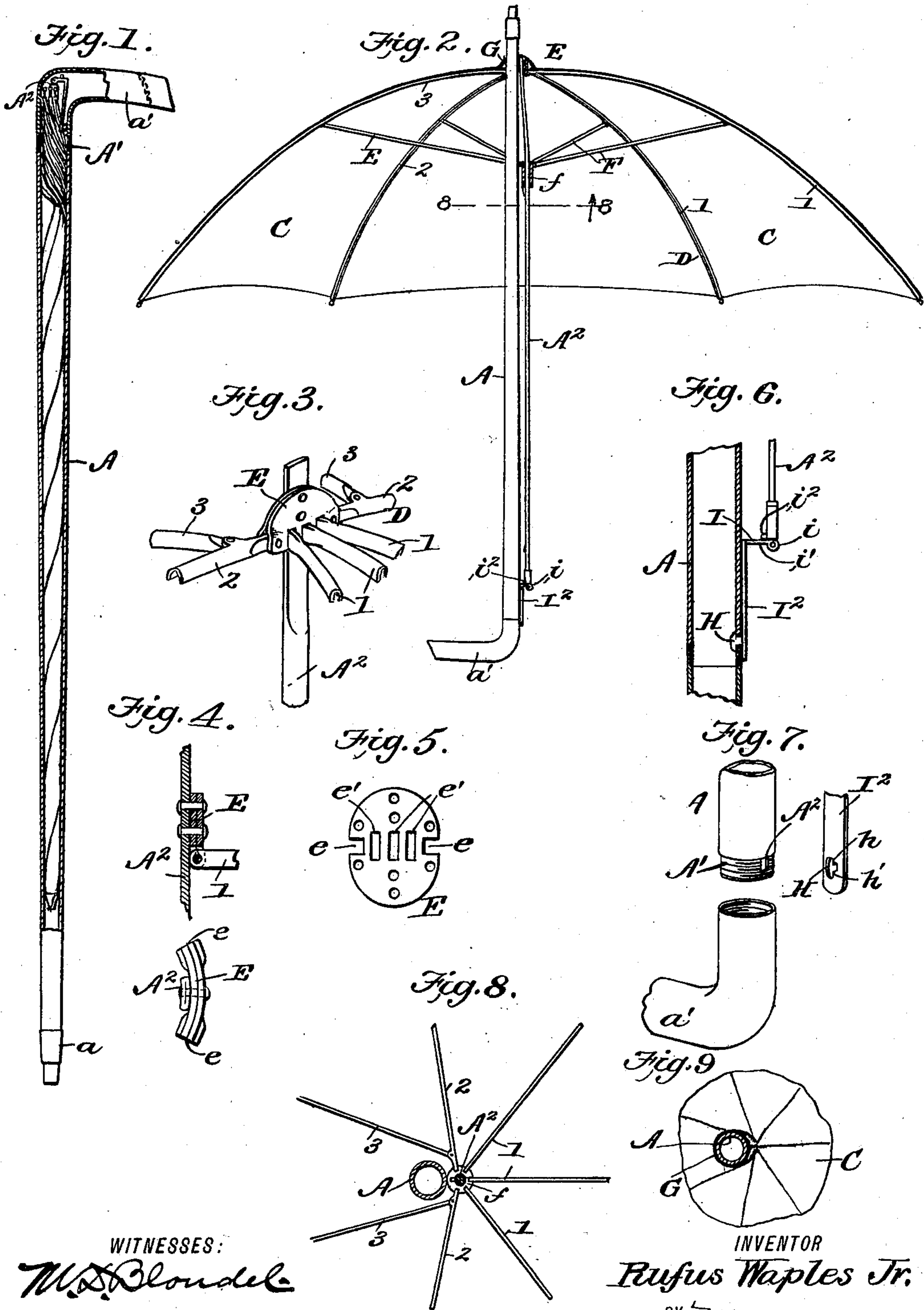
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Patented May 14, 1901.

R. WAPLES, JR.
COMBINED CANE AND UMBRELLA.

(Application filed Apr. 19, 1897.)

(No Model.)



WITNESSES:
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RUFUS WAPLES, JR., OF PHILADELPHIA, PENNSYLVANIA.

COMBINED CANE AND UMBRELLA.

SPECIFICATION forming part of Letters Patent No. 674,288, dated May 14, 1901.

Application filed April 19, 1897. Serial No. 632,825. (No model.)

To all whom it may concern:

Be it known that I, RUFUS WAPLES, Jr., residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have
5 invented a new and useful Improvement in Umbrellas, of which the following is a specification.

My invention is an improvement in umbrellas, and particularly in that class known
10 as "cane-umbrellas," wherein it is desirable to provide an article which may be adjusted for use as and to present the appearance of an ordinary cane and may be quickly adjusted to serve as an umbrella; and the in-
15 vention consists in certain features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a side view, part
20 in section, showing the umbrella rolled and incased in the cane. Fig. 2 is a side view, part in section, of the umbrella open for use. Fig. 3 is a detail perspective view illustrating the notch. Fig. 4 is a detail sectional view
25 illustrating the same feature. Fig. 5 is a detail view of the notch-blank. Figs. 6 and 7 show the connection between the cane and staff. Fig. 8 is a detail section on about line
8 8, Fig. 2; and Fig. 9 is a detail plan view.

30 The cane A is made hollow to receive the umbrella canopy, ribs, braces, and staff, is provided at one end with a ferrule *a*, and has at its opposite end a removable handle *a'*, which is made hollow and is threaded on the
35 cane at A', the cane being provided with an opening A³ for the hook-stud on the umbrella-staff, as presently described. I make the handle hollow, so the end of the umbrella may protrude from the body of the cane, so
40 it can be readily withdrawn when desired, and yet will be inclosed within the handle when desired.

The umbrella is provided with a cover or canopy C, held on the ribs D, which connect
45 at their inner ends with the notch E and are braced by the braces F, connecting said ribs with the runner *f*, which slides along the umbrella-staff A² in opening and closing the umbrella. This staff connects at its upper
50 end with the notch E, and alongside said notch I provide an opening G for the ferrule end of the cane, such opening being arranged

to one side of the notch E and eccentrically, as shown. The cane is formed at its ferrule end to pass through the opening G, and it will
55 be noticed is free of all shoulders, stops, and the like at its ferrule end, being preserved in the desired relation at its ferrule end with the canopy of the umbrella by the umbrella-staff, which is made practically rigid, and is
60 interlocked at its lower end with the handle, so that such staff holds the canopy in position on the cane against both upward and downward movement by the interlocking of such staff at its lower end with the
65 cane near the handle end of the latter. This interlocking is preferably effected through the aid of the removable handle of the cane and in the construction shown is effected by providing at the lower end of the staff a
70 stud H, which is interlocked with the cane. This stud is preferably arranged on a jointed extension I of the staff and formed with double hooks *h h'*, movable through the opening A² in the cane, the hook *h* being arranged
75 to engage the cane and a hook *h'* arranged for engagement by the handle, which handle as it is screwed on not only engages the hook *h'*, but also presses the hook *h* into engagement with the cane and holds it in
80 such engagement, as will be readily understood. Now it will be seen I establish a rigid connection between the notch of the umbrella and the handle end of the cane and so secure the cane in place without forming
85 thereon any unsightly shoulders or projections, which would detract from its appearance and consequent utility as a cane.

The staff extension I is jointed at *i* to the lower end of the staff proper and has an off-
90 set portion *i'*, which serves to hold the staff laterally to the cane, so the runner may operate up and down on the staff without marring the cane or being interfered with by such cane in its movement along the staff, and for
95 convenience it is preferred to secure this off-set by bending the extension I, it may be, at a right angle, as shown; or, if desired, it may be secured by suitably curving the extension portion or in some instances by bending the
100 end of the staff proper. On the extension I, I provide a stop *i''*, which engages the staff when the extension portion is folded out for use and renders such joint rigid as to motion

in one direction. The portion I² of the extension I laps alongside the handle portion of the cane and is flattened or otherwise conformed to the surface of the cane, so it may be readily inclosed by the hand grasping the umbrella as in use and will not be uncomfortable or injurious to the hand in such use.

In my umbrella the notch E is an important feature and is a radical departure from the notches ordinarily employed in umbrellas, which are commonly flattened in a plane at right angles to the axis of the umbrella and to the umbrella-staff. Such form of notch is objectionable in my improved umbrella because it forms an unsightly projection to one side of the ferrule end of the cane, both when the umbrella is folded and when it is unfolded and in use. My improved notch is flattened in the direction of the axis of the umbrella and is curved in cross-section into concavo-convex form and is arranged to receive the cane in its hollow side, so the notch will not form any perceptible projection on the handle when the umbrella is applied for use. In specifically describing the improved notch, constructed as shown, it may be said that it is formed from a blank, as shown in Fig. 5, such blank consisting of a plate of metal which is provided midway between its ends with transverse slots *e*, extending inward from the opposite edges of the blank, and with longitudinal slots *e'*, extending side by side between the edge slots *e*. This blank is folded at its middle, as will be understood from Fig. 3, and the ribs 1 are pivoted within the slots *e'* and the ribs 2 within the edge slots *e*, such ribs 2 or one of them being usually provided with a sub-rib 3, as shown. The notch is riveted or otherwise secured to the umbrella-staff, and the cover forming the canopy is secured thereon at its middle in any desired manner, such cover being provided with the opening for the ferrule end of the cane, as before described, which opening may be reinforced in any desired manner at this point.

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

1. An umbrella substantially as described, comprising the canopy having an opening for the passage of the cane-point, the cane, the notch, and a rigid connection independent of the cane and serving to tie the canopy to the cane and extending from the notch to a point adjacent to the head of the cane and a locking device for securing said connection at the head of the cane, substantially as described.

2. An umbrella comprising the canopy, the notch, the cane passed through the canopy, and the canopy-staff extended from the notch to a point adjacent to the head of the cane and secured at the latter point, said staff being practically rigid and forming a guide for the runner, and operating as a means for securing the canopy upon the cane without the aid of any flange or stop on or near the ferrule of the cane substantially as described.

3. An umbrella substantially as described, comprising the cane, the canopy, and the staff, having at its end a hinged extension for connection with the cane, said extension being adapted to lengthen the staff in the use of the umbrella and to shorten said staff when it is desired to incase the same, substantially as described.

4. In an umbrella the combination of the canopy, the cane, and the canopy-staff secured at one end to the canopy, having at its other end a portion to fit against the cane and offset above the said portion to set the staff laterally away from the cane to permit the sliding of the runner on said staff, substantially as described.

5. In an umbrella, substantially as described, the combination of the cane, the canopy, and the staff provided at its lower end with a portion conforming to and lying close against the cane forming therewith a smooth handhold substantially as described.

6. In an umbrella, the combination of the canopy, the cane, and the staff secured at one end to the canopy and having at its other end an extension jointed to the staff and having an offset portion by which to hold the staff lateral to the cane, substantially as described.

7. The combination of the canopy and the rigid canopy-staff constituting an umbrella, the cane and the cane-handle provided with means by which to secure the umbrella by means of the lower end of the rigid canopy-staff, substantially as described.

8. An umbrella comprising the cane, the canopy having an opening for the cane and the practically rigid canopy-staff constituting with the canopy an umbrella and having its lower end interlocked with the cane substantially as described.

9. In an umbrella, the combination of the cane having a removable handle and provided near its handle end with an opening or socket, the canopy, the practically rigid canopy-staff constituting with the canopy an umbrella and having at its lower end a stud or projection held by the removable cane-handle, substantially as described.

10. The combination of the canopy having a staff at its center and provided at one side of its center with an opening, the cane passed through such opening and means connecting the cane and staff, substantially as described.

11. An umbrella provided with a notch flattened in the direction of the axis of the umbrella and the ribs connected with said notch, substantially as described.

12. An umbrella comprising a staff a canopy, ribs and a notch flattened in the direction of length of the staff substantially as described.

13. An umbrella provided with a notch flattened in the direction of the axis of the umbrella and curved in cross-section in concavo-convex form substantially as described.

14. The combination of the umbrella having its notch flattened in the direction of the

axis of the umbrella and its cover provided with an opening adjacent to said notch, the cane passed through said opening and fitting alongside said notch and connecting means, substantially as described.

15. The combination in an umbrella, of the notch flattened in the direction of the axis of the umbrella and curved in cross-section, the cane lying in the hollow of said notch and connecting means, substantially as described.

16. An umbrella having a notch flattened in the direction of the axis of the umbrella and provided alongside said notch with an opening for the cane, the cane fitted at its ferrule end in said opening and the practically rigid cane-staff connected at one end with the notch and secured at its other end to the handle end of the cane, substantially as described.

17. The combination, substantially as described, of the canopy, the cane provided near its handle end with an opening, the staff connected at one end with the canopy, provided at its other end with a jointed extension provided with a hook-stud fitting in the opening in the cane and the removable cane-handle engaging the said stud and securing the same in engagement with the cane, substantially as described.

18. In an umbrella, the combination of the canopy comprising covering, ribs and braces; a canopy-staff which is traversed by a runner to which the braces are attached; and a hollow auxiliary staff capable of forming a receptacle and means by which the canopy-staff may be secured along the outer side of the auxiliary staff, substantially as described.

19. In an umbrella, the combination of the canopy comprising covering, ribs and braces; a canopy-staff which is traversed by a runner to which the braces are attached; and an auxiliary staff and means by which the auxiliary staff may be attached to the canopy-staff at both the upper and lower ends of the latter, substantially as described.

20. In an umbrella, the combination of the canopy comprising covering, ribs and braces; a canopy-staff which is traversed by a runner to which the braces are attached; and an auxiliary staff passing through a suitable hole

in the canopy immediately alongside of its center; whereby it is attached at its upper end alongside of the canopy-staff; and means for attaching the said staff to the canopy-staff at the lower end of the latter, substantially as described.

21. In an umbrella, the combination of the canopy comprising covering, ribs and braces; a canopy-staff which is traversed by a runner to which the braces are attached; and an auxiliary staff attached to the canopy-staff at each end, the entire intermediate portion of the canopy-staff being free to permit the traverse of the runner, substantially as described.

22. In an umbrella, the combination of the canopy comprising covering, ribs and braces; a canopy-staff which is traversed by a runner to which the braces are attached; and an auxiliary staff attached to said canopy-staff at both ends, the lower means of attachment being provided with an offset whereby sufficient space is maintained between the two staffs to permit the free traverse of the runner, substantially as described.

23. In an umbrella, the combination of the canopy comprising covering, ribs and braces, a canopy-staff, a notch and a runner to which the inner ends of all the ribs and braces are respectively attached except the inner ends of two adjacent and corresponding ribs and braces which are hinged to the next adjacent ribs and braces, substantially as described.

24. In an umbrella, the combination of the canopy comprising covering, ribs and braces; a canopy-staff; a notch, and a runner to which the inner ends of all the ribs and braces are respectively attached except the inner ends of two adjacent and corresponding ribs and braces which are hinged to the next adjacent ribs and braces, in combination with a hollow auxiliary staff capable of being fastened at either extremity to the canopy-staff on the side provided for it by the separation of the ribs and braces above described.

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Witnesses:

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