

A. ACKERMANN.
 UMBRELLA FITTING.
 APPLICATION FILED MAY 8, 1907.

934,588.

Patented Sept. 21, 1909.

FIG. 5.

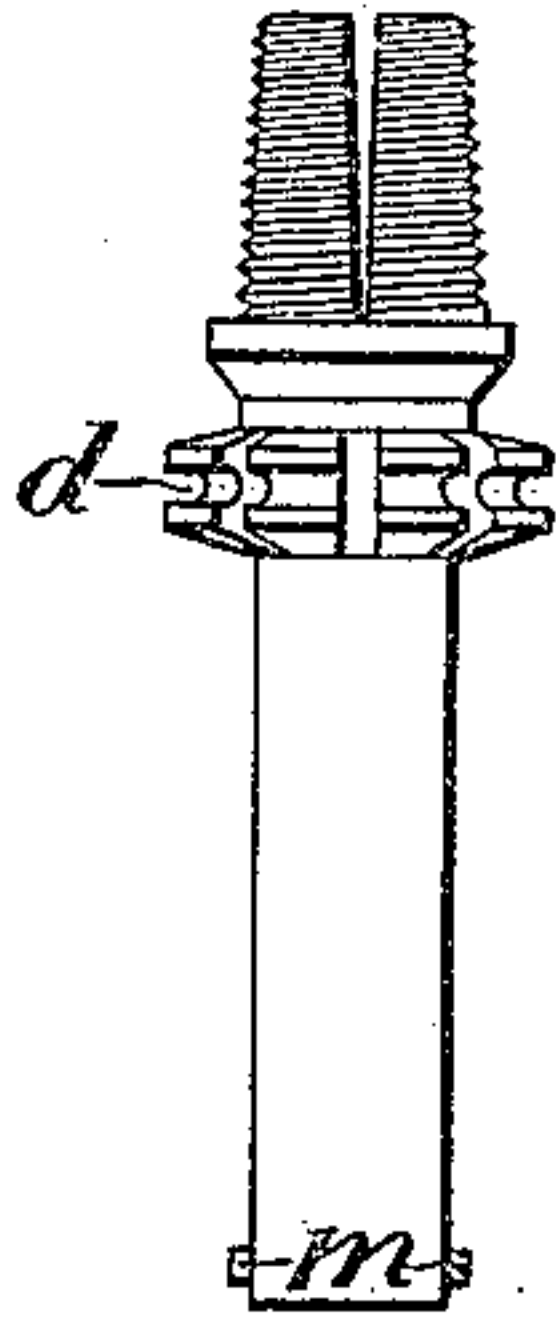
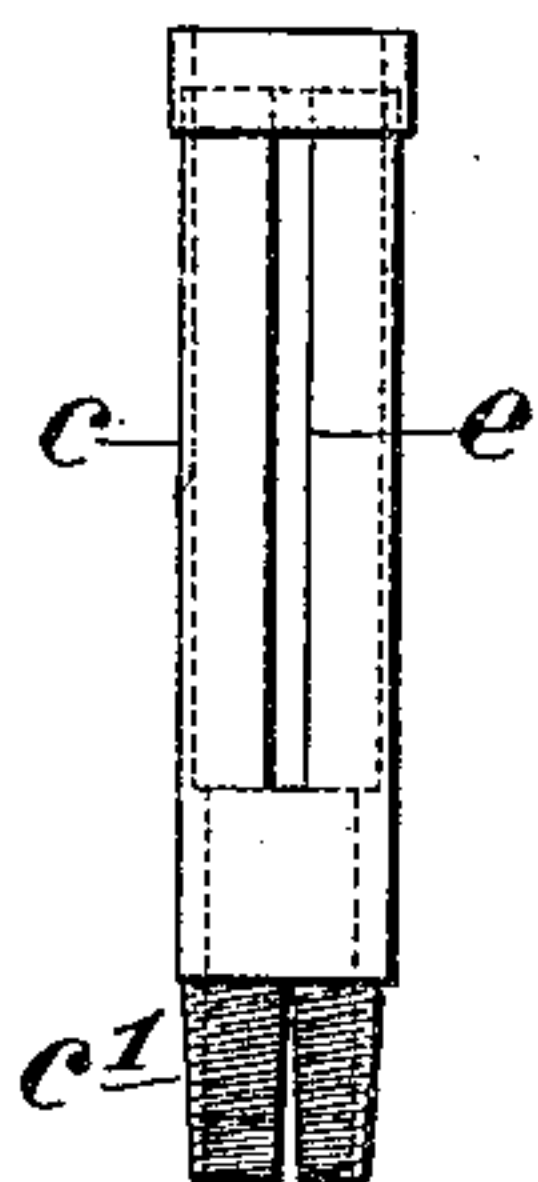


FIG. 4. FIG. 3.

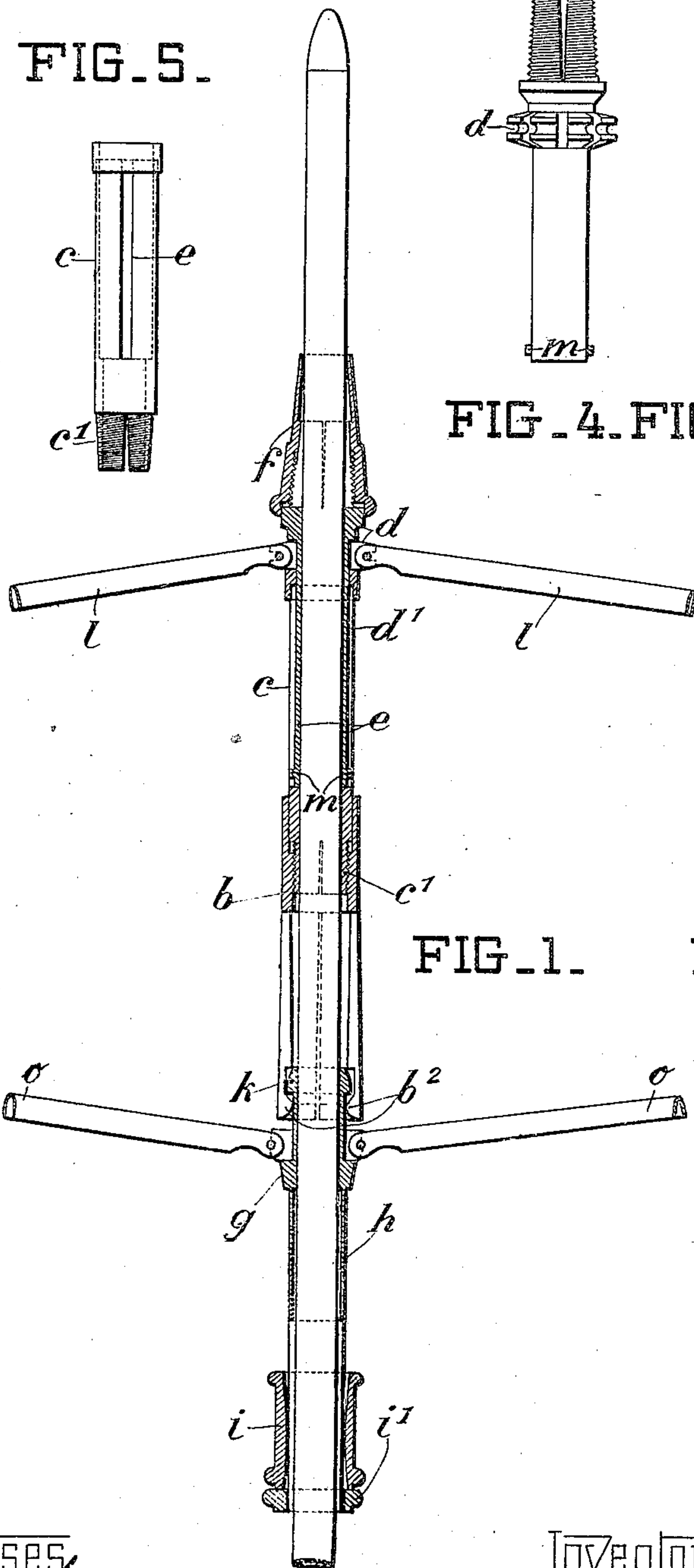
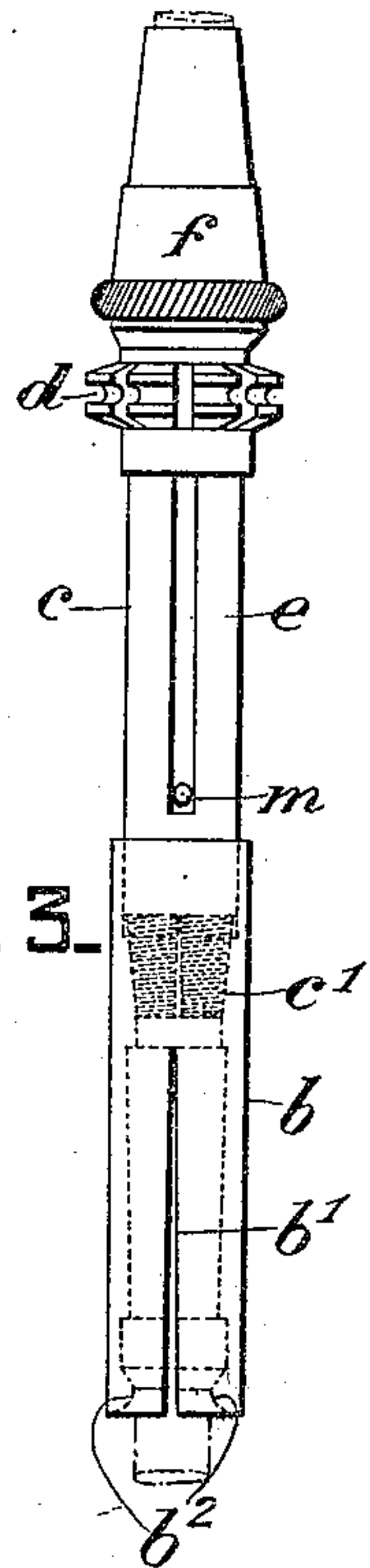
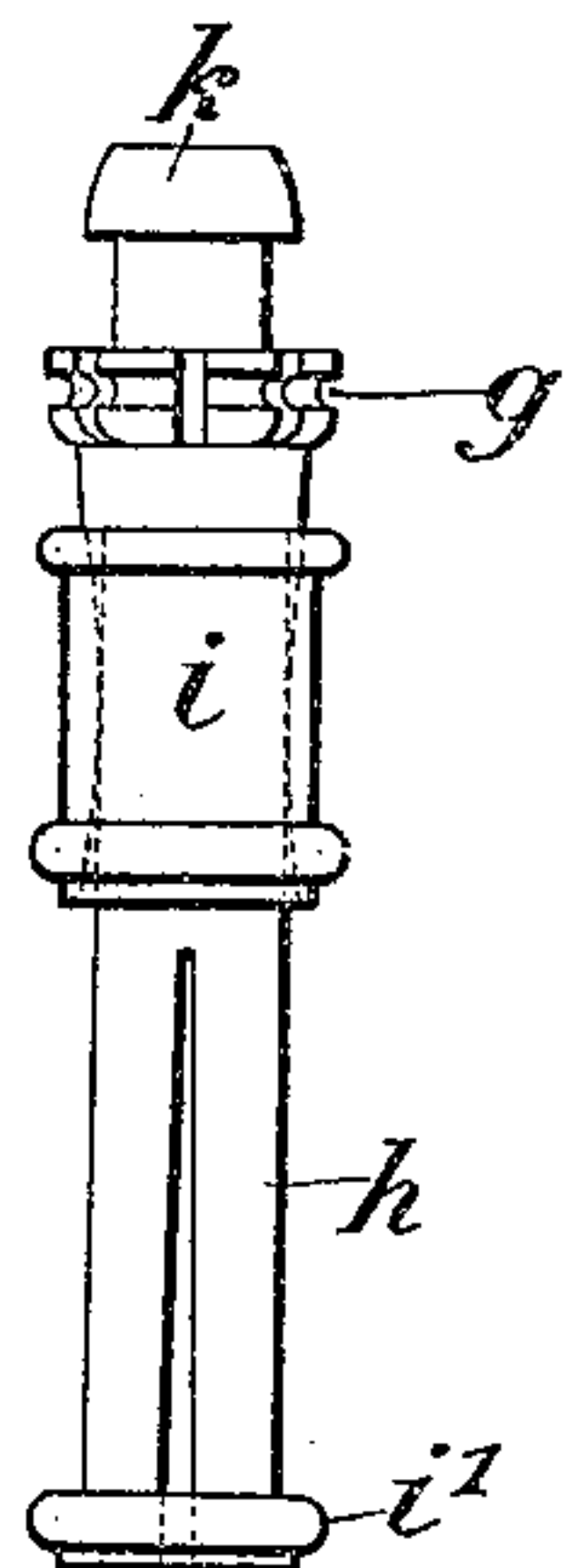


FIG. 1.

FIG. 2.



Witnesses

E. L. Thompson.
A. S. Kelly.

Inventor

August Ackermann.

By *Edward P. Thompson.*

UNITED STATES PATENT OFFICE.

AUGUST ACKERMANN, OF BASEL, SWITZERLAND, ASSIGNOR TO ALFRED SCHEIBLER,
OF AARAU, SWITZERLAND.

UMBRELLA-FITTING.

934,588.

Specification of Letters Patent. Patented Sept. 21, 1909.

Application filed May 8, 1907. Serial No. 372,602.

To all whom it may concern:

Be it known that I, AUGUST ACKERMANN, a subject of the Emperor of Austria-Hungary, residing at Basel, in the Republic of Switzerland, umbrella-maker, have invented a certain new and useful Umbrella-Stick Fitting; of which the following is a full, clear, and exact specification.

This invention relates to an improved umbrella stick fitting in which a slotted runner to which the stretchers are pivoted is on the one hand adapted to be firmly clamped on the umbrella stick by means of a displaceable ring, both in its lower as well as in its upper position, and on the other hand provided at its upper end with an uninterrupted annular shoulder which may be engaged, in the upper position of the runner corresponding to the opened umbrella, with spring hooks formed by a slotted tube connected with the notch to which the ribs are pivoted, so that the umbrella may be kept open both by the engagement of the runner with these hooks and also by being clamped on the umbrella stick.

A form of construction of the object of the invention is shown as an example in the accompanying drawings.

Figure 1 shows the umbrella stick fitting in the position corresponding to the open position of the umbrella frame. Fig. 2 is a separate view of the runner. Fig. 3 represents the tube provided with the spring hooks connected with the notch to which the ribs are to be pivoted. Figs. 4 and 5 are details of Fig. 3.

a is the umbrella stick on which the notch d , to which the ribs l are pivoted, is attached by means of a small cap f screwed on its upper conical and longitudinally slotted end, which cap secures the notch d firmly to the stick a . The notch d ends below in a tubular piece d^1 , over which a second tubular piece c is passed, which by means of two longitudinal slots e facing one another diametrically, in which slots projections m of the notch tubular piece d^1 engage, is longitudinally displaceably held on the tube d^1 . The tubular piece c ends below in a conical and longitudinally slotted threaded piece c^1 , on which the upper end of the tube b forming spring hooks is screwed and so holds fast the tubular piece c in any desired position relative to the part d on the umbrella stick. The upper end of the tube b is threaded, and

beneath this thread the tube has longitudinal slots b^1 and at its lower edge an internal shoulder forms the actual hooks b^2 .

The runner g , integrally made with a notch to which the stretchers o are pivoted, consists of a sleeve h having an upper annular shoulder k and being slotted longitudinally at its lower part over which a displaceable ring i is passed which is held or retained on the sleeve h , by a ring i^1 , which is fixed on the sleeve h in such a manner that it does not impede the spring of its lower slotted part. (The ring i^1 is for this purpose fixed only to the sleeve part comprised between two consecutive slots of the sleeve h). The thickness of the sleeve h increases gradually from the top of its slots to the ring i^1 .

The ring or clamping sleeve i is, both when the umbrella is closed and opened, in the position indicated in Fig. 1, and thus secures the runner g to the umbrella stick, by clamping the said runner on the stick.

If the umbrella be closed and is to be opened, the ring i is first brought into the position shown in Fig. 2, in which it no longer secures or clamps the runner on the umbrella stick, after which the runner g and the ring i are pushed upward and thereby approach the notch d that is to say the umbrella may be opened. Now as soon as the annular shoulder k of the runner g has reached the spring hooks b^2 it slips under the latter, is engaged by them and thereby the runner g and consequently the umbrella frame is held in the position which corresponds to the open umbrella; the ring i is then pushed down toward the ring i^1 thereby securing the runner g to the umbrella stick as the thickness of the runner sleeve h increases gradually from the top of its slots to the ring i^1 .

Now if it be desired to again close the umbrella, the connection of the runner g with the umbrella stick must be first released and therefore the ring i on the runner sleeve h is pushed upward (as indicated in Fig. 2), then by taking hold of the runner sleeve h and drawing the same downward, the spring hooks b^2 are a little displaced outward by the annular shoulder k , of the runner g , so that the annular shoulder k can slip away beneath the said hooks. The runner g may thus be brought into a position corresponding to the closed condition of the umbrella

and then by displacing the ring *i* on the runner sleeve *h* the latter may be clamped to the umbrella stick, as shown in Fig. 1.

The same notch *d* may be employed for
5 umbrella frames of different sizes by simply increasing or reducing the distance between the hooks *b*² and the place at which the ribs are pivoted to the notch *d*, by simply moving
10 *c* and *d*¹ longitudinally apart (what is possible by the longitudinal slots *e* of the tubular piece *c* and the projections *m* of the notch tubular piece *d*¹).

In consequence of the attachment of the notch *d* and the intermediate tube *c* to the
15 umbrella stick by their being simply clamped on the same by means of the screw cap *f* and of the tube *b* with hooks *b*², screwed on the piece *c*¹, the entire umbrella fitting may be easily applied to and removed from the stick,
20 whereby any necessary repairs are substantially facilitated.

What I claim is:

1. In combination with an umbrella stick, a runner having at its upper end an annular
25 shoulder and at its lower part a split sleeve, the thickness of which increases gradually from the top of its slots to its lower end, a movable ring about said split sleeve adapted to clamp the runner to the stick and a tube
30 about said stick, connected to a notch and having hooks depending therefrom adapted to clamp said shoulder.

2. In combination with an umbrella stick, a runner having at its upper end an annular

shoulder and at its lower part a split sleeve, 35 the thickness of which increases gradually from the top of its slots to its lower end, a movable ring about said split sleeve adapted to clamp the runner to the stick, a tubular
40 piece about said stick having a threaded end and adjustably connected to a notch and a threaded tube engaging said threaded end and having hooks depending therefrom adapted to clamp said shoulder.

3. In combination with an umbrella stick, 45 a runner having at its upper end an annular shoulder and at its lower part a split sleeve, the thickness of which increases gradually from the top of its slots to its lower end, a movable ring about said split sleeve adapted
50 to clamp the runner to the stick, a notch about said stick and having a slotted threaded upper end, a threaded cap engaging said slotted threaded upper end of the notch, a tubular piece about said stick having a
55 threaded end and adjustably connected to the said notch and a threaded tube engaging said threaded end of the tubular piece and having hooks depending therefrom adapted
60 to clamp said shoulder.

In witness whereof, I have hereunto signed my name this 24 day of April 1907, in the presence of two subscribing witnesses.

AUGUST ACKERMANN.

Witnesses:

GEO. GIFFORD,
JACOB KÜHN.