

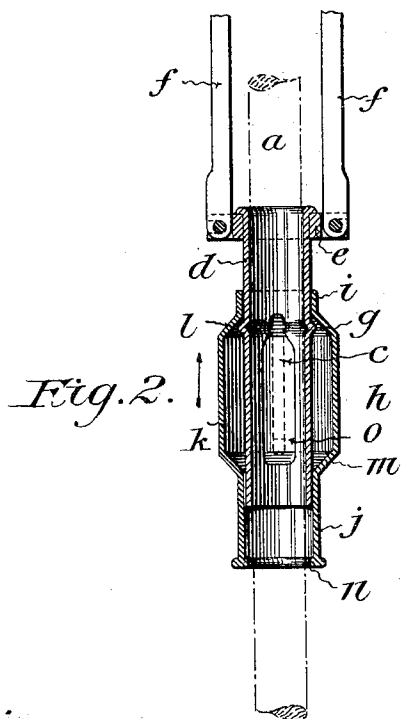
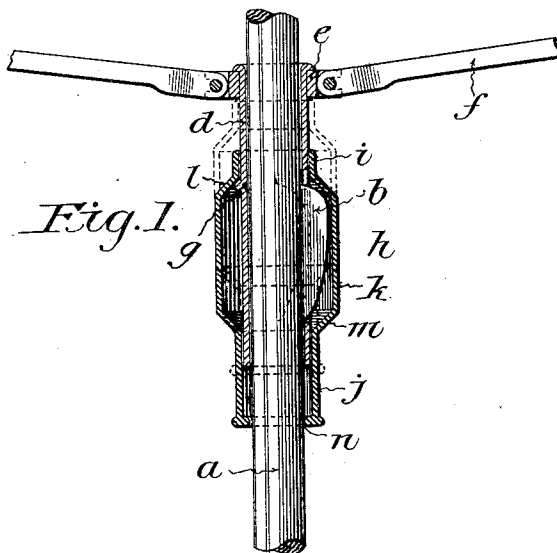
No. 674,005.

Patented May 14, 1901.

N. D. INGRAM.
UMBRELLA RUNNER.

(Application filed Dec. 18, 1900.)

(No Model.)



Witnesses:

A. M. Long.
E. A. Bunker.

Inventor:

Nathan D. Ingram.
by W. H. Finckel.

his Atty.

UNITED STATES PATENT OFFICE.

NATHAN D. INGRAM, OF BROOKLYN, NEW YORK.

UMBRELLA-RUNNER.

SPECIFICATION forming part of Letters Patent No. 674,005, dated May 14, 1901.

Application filed December 18, 1900. Serial No. 40,258. (No model.)

To all whom it may concern:

Be it known that I, NATHAN D. INGRAM, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Umbrella-Runners, of which the following is a full, clear, and exact description.

This invention is in the nature of an improvement upon the umbrella-runner forming the subject of my Patent No. 641,114, dated January 9, 1900; and the invention consists of a sliding tube encircling the runner-tube proper and adapted to engage the upper and lower catches to operate them, and comprising a cylindrical tubular portion projecting below the runner-tube and affording a finger-grasp for operating the sliding tube to raise and lower the runner-tube by effecting the engagement of the runner-tube with the upper and lower catches and its disengagement therefrom, the catches being concealed within the sliding tube when the runner-tube is in engagement with such catches. There is also provided what I designate a "bottle-shaped" slot formed in the runner-tube for engagement with the catches.

It is the experience of most umbrella-users that there is always greater or less necessity for moving the runner laterally somewhat, so as to make it engage with the catch when the umbrella is closed. In order to obviate this difficulty and at the same time secure the firm engagement of the runner-tube with the catch when the umbrella is closed, I increase the width of the slot on either side of a median line and continue the slot in the line of this median line for a width just sufficient to engage the catch, so that the runner-tube may readily engage the catch in the wider portion of its slot, and then by a further drawing of the tube toward the handle the catch enters the contracted portion of the slot. This slot is the bottle-shaped slot above referred to.

In the accompanying drawings illustrating my invention, in both figures of which like parts are similarly designated, Figure 1 is a vertical section of my improvement applied to the upper catch of an umbrella, and Fig. 2 is a similar view illustrating the bottle-shaped slot with the parts in position to engage the lower catch.

a may represent the handle, of metal, wood, or other material, supplied with an upper catch *b*, of any approved construction, and a lower catch *c*. In the preferred construction these two catches instead of being arranged at a distance of ninety degrees may be arranged in the same longitudinal plane. The runner-tube *d* is provided with a notch-ring *e*, having the spreaders *f*, as usual. This tube is provided with a circumferential bead *g*.

h is the sliding tube, having the cylindrical portions *i* and *j* of substantially the same diameter and fitting closely to the outer surface of the tube *d* and also having the cylindrical portion *k* of considerably greater diameter than the portions *i* and *j* and connected with the portions *i* and *j* by the beveled portions *l* and *m*, which beveled portions *l* and *m* constitute, in effect, cams for depressing the catches to release the runner-tube. The sliding tube *h* has its motion lengthwise of the tube *d* limited by the notch *e* and the circumferential bead *g*, or, if desired, the movement in one direction may be limited by its base flange or bead *n* coming in contact with the outer end of the runner-tube.

The runner-tube *d* is provided with the bottle-shaped slot *o*, the main portion of which is, for example, a little over three times the width of the catch, with a central portion only slightly wider than the width of the catch, this central portion forming what is herein referred to as the "contracted" portion of the slot. As already indicated, the wider portion of the slot is provided in order the more readily to find and engage the catch, especially in closing the umbrella, its contracted portion being entered by the catch when the limit of motion has been reached lengthwise of the stick, and thus the umbrella frame and cover are held from undue movement.

The construction and arrangement of the sliding tube, with its portion *j* projecting always beyond the runner-tube and its portion *h* always concealing or inclosing either the upper or the lower catch, enables me to operate the runner and both catches without at any time touching the catches with the hand. It will be understood that when it is desired to lower the umbrella the sliding tube *h* is moved into the dotted-line position, Fig. 1, so that its bevel *l* will engage the catch and depress

it, and so when the umbrella is in the closed position, as indicated in Fig. 2, and it is desired to open it the sliding tube is moved in the direction of the arrow by engaging the 5 portion *j* until its bevel *m* engages the catch *c* and depresses it, and thus permits the runner-tube to be passed over such catch.

In my patent referred to the part corresponding to what is herein designated the 10 "sliding tube" incloses the outer end of the runner-tube, and in another patent the upper and lower catches are inclosed within the sliding tube; but I am not aware that prior to my present invention a sliding tube is provided 15 with a portion which projects beyond the runner-tube and affords a hand-grasp for the operation of the runner and which sliding tube incloses the upper and lower catches and operates them.

20 What I claim is—

1. An umbrella-runner having a bottle-shaped slot, comprising a runner-tube, and a surrounding sliding tube having end portions fitted to engage the outer portion of the runner-tube, an intermediate portion of considerably greater diameter than the end portions and connected with the end portions by beveled portions forming catch-operating cams, the intermediate portion receiving and engaging both the upper and the lower catch, one 30 of the end portions extending beyond the

outer end of the runner-tube at a distance substantially equal to the maximum movement of the sliding tube necessary to place the same in operative engagement with the 35 upper and lower catches of an umbrella, substantially as described.

2. An umbrella-runner, comprising a runner-tube having a catch finding and engaging slot comprising a portion several times 40 wider than the catch and merging in a portion substantially the width of the catch, and a surrounding sliding tube having end portions fitted to the runner-tube and an intermediate portion of considerably greater diameter than the end portions and adapted to receive and conceal each of the catches when the runner-tube is in engagement with the 45 respective catches, the end portions being connected to the intermediate portion by beveled portions which form catch-operating cams, one of the end portions extending beyond the 50 outer end of the runner-tube and constituting a finger-grasp by which the runner may be operated, substantially as described. 55

In testimony whereof I have hereunto set my hand this 17th day of December, A. D. 1900.

NATHAN D. INGRAM.

Witnesses:

ALFRED H. BAMBERGER,
JULIUS ISAACS.

It is hereby certified that in Letters Patent No. 674,005, granted May 14, 1901, upon the application of Nathan D. Ingram, of Brooklyn, New York, for an improvement in "Umbrella-Runners," an error appears in the printed specification requiring correction, as follows: In lines 21-22, page 2, the words "having a bottle-shaped slot" should be stricken out and the same inserted after the words "runner-tube," line 22, same page; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 21st day of May, A. D., 1901.

[SEAL.]

F. L. CAMPBELL,
Assistant Secretary of the Interior.

Countersigned:

E. B. MOORE,
Acting Commissioner of Patents.