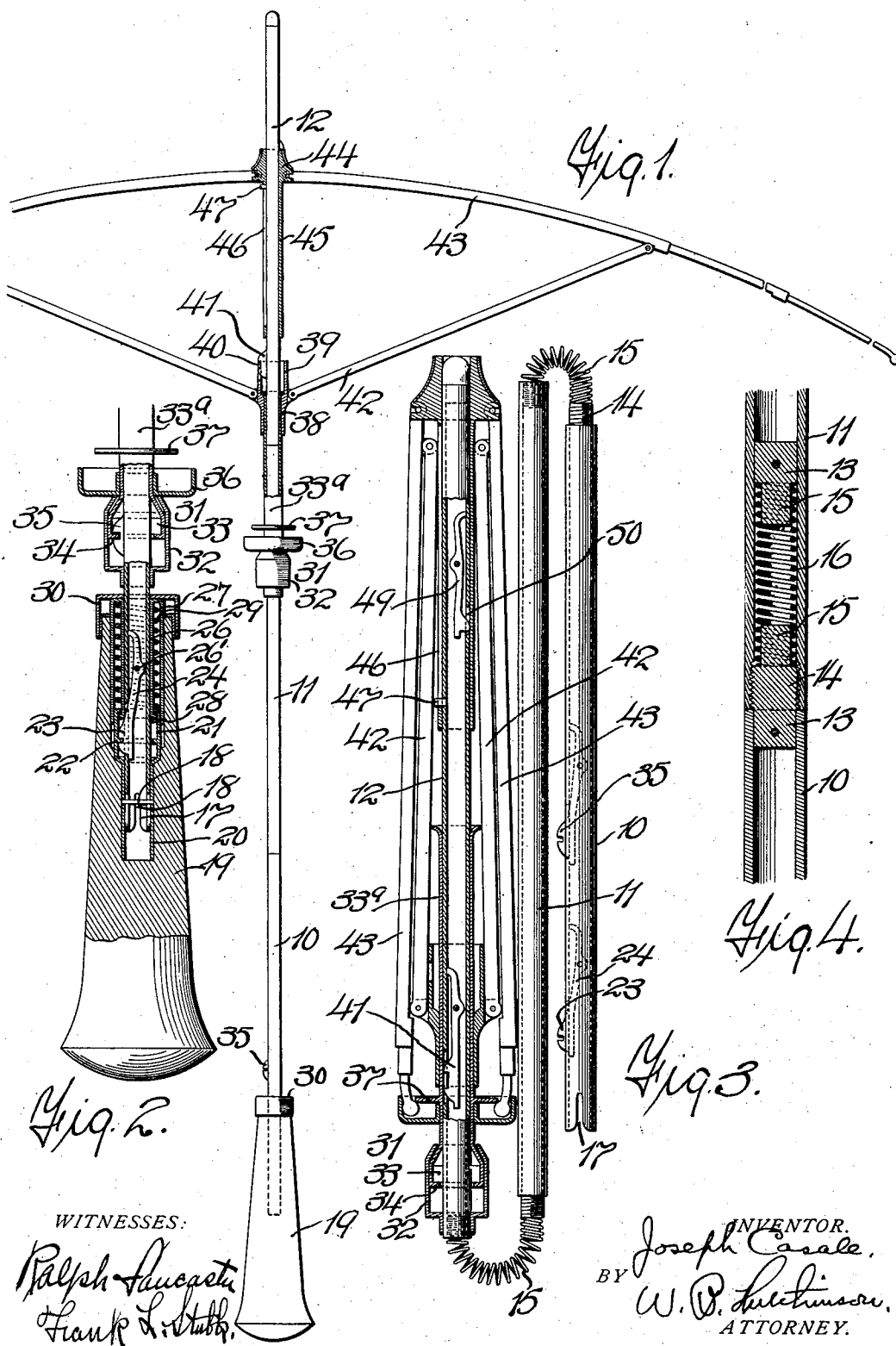


No. 888,468.

PATENTED MAY 26, 1908.

J. CASALE.
FOLDING UMBRELLA.
APPLICATION FILED JUNE 11, 1907.



UNITED STATES PATENT OFFICE.

JOSEPH CASALE, OF NEW YORK, N. Y., ASSIGNOR TO CASALE POCKET UMBRELLA COMPANY,
OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

FOLDING UMBRELLA.

No. 888,468.

Specification of Letters Patent.

Patented May 26, 1908.

Application filed June 11, 1907. Serial No. 378,336.

To all whom it may concern:

Be it known that I, JOSEPH CASALE, of the city, county, and State of New York, have invented a new and useful Improvement in Folding Umbrellas, of which the following is a full, clear, and exact description.

My invention relates to improvements in folding umbrellas, and more particularly to the stick portion.

10 The object of my invention is to produce a simple structure which can be folded into small compass, or which can be quickly extended and made as substantial as the ordinary umbrella.

15 The parts which I have shown, as stated, relate more particularly to the stick, and this can be used to advantage in connection with the rib and brace structure shown in my application for Letters Patent filed May 20th, 1907, No. 374,555.

With these ends in view my invention consists of certain features of construction and combinations of parts which will be hereinafter described and claimed.

25 Reference is to be had to the accompanying drawing forming a part of this specification, in which similar reference characters indicate corresponding parts in all the views.

30 Figure 1 is a side elevation, partly in section, of the umbrella stick forming my invention, showing it in connection with the ribs and braces. Fig. 2 is an enlarged detail longitudinal section of the handle portion of the umbrella and its connection with the stick proper. Fig. 3 is a view partly in longitudinal section of the folded umbrella, and Fig. 4 is an enlarged detail sectional view of one of the stick joints.

40 The umbrella stick is made up of the tubular sections 10, 11 and 12, and there may be any desired number of these, but for ordinary purposes three are sufficient. The parts are connected together as follows. At the end of one section is a plug 13 which has a screw threaded portion 14 extending from the end of the said section and the reduced part 15, to fasten to a resilient spring 16 which is coiled in the adjacent section and secured to the reduced end 15 of the second plug 13. 50 When one section meets the other, as shown in Fig. 4, it screws to the part 14, and when

the sections are taken apart and tipped over parallel with each other as in Fig. 3, the action of the spring is first to serve as a connector and hold the parts together, and next its tension serves to bring the ends into proper relation as the stick is straightened out. The lower section 10 of the umbrella stick is slotted in opposite sides as shown at 17, so as to rest on the cross-pins 18, which are secured in the handle 19 of the umbrella. This handle may be of any usual kind and shape, but it has in the hollow portion a bushing 20, terminating in an enlarged part or socket 21, which has an internal flange 22 adapted to receive the slotted end 23 of the catch 24, which is pivoted as at 26' in the member 10 and is like an ordinary umbrella catch. The part 23 projects through the wall of the part 10, as shown in the drawings, so that when the part or member 10 is pushed into the handle, the catch will engage the flange 22, and lock the part together, while the cross pins 18 will prevent the stick from turning in the handle.

75 To provide for releasing the handle, the latter has a sliding sleeve 26 which has also an outer wall 27, and has its inner end flanged as shown at 28, to engage a corresponding flange on the part 21, so that the sleeve will not pull off the handle, but it is normally pressed out by a spring 29 which is coiled between the two walls 26 and 27. The top end of the handle is provided with a thimble 30, which gives a finish to the parts, and rests upon the upper end of the sleeve 26, and when the handle is to be released, this thimble 30 is pressed downward, thus forcing down the sleeve 26, and the latter engages and pushes in on the end 23 of the catch 24, thus releasing the catch and permitting the handle to be pulled off.

80 The stick is provided with a runner 31, substantially like that shown in my former application above referred to, but there are a few slight differences which will be noted. The runner has an outer sleeve or part 32, which is enlarged, and incloses a corresponding inner part or member 33, both of these parts having their upper ends tapered as shown in Fig. 2. The inner member 33 has a flange 34, which is adapted to engage the 95

catch 35 which projects through the wall of the member 10, and thus the umbrella is held in a closed position. The runner carries a flanged or cup like device 36, as shown in the former application, to receive the ends of the umbrella ribs, and these are held between the said part 36 and the disk 37 which is secured to the sleeve 33^a, which forms a part of the runner, and slides on the umbrella stick.

10 This part 33^a is provided with an outer sleeve 38, which has a cylindrical part 39, having a rib 40 to engage the catch 41 (see Fig. 1) which is held in the member 12, and this holds the umbrella in open position.

15 The sleeve 38 is also pivoted to the braces 42, and these connect with the ribs 43, which in turn are pivoted to the crown piece 44, and the latter is fast on the sleeve 45 which slides on the member 12, its movement being limited by the pin 47 which slides in the slot 46 of the sleeve 45. The braces 42 and ribs 43 are substantially like those shown in my former application, and are not here shown or described in detail. It has been found in

20 practice that in an umbrella of this character better results are attained when a sliding movement is permitted the crown.

When the umbrella is to be opened, the runner 31 is pushed up, and just before the umbrella is fully opened the operator pushes up also on the sleeve 38, so as to prevent the sleeve 33^a from releasing the catch 41. When the umbrella is to be folded, the runner is pulled down, the ribs are telescoped and folded inward, the several sections 10, 11 and 12 are unscrewed and pulled apart so as to fold one upon the other as in Fig. 3, and the handle is removed as already described. The handle can then be placed along side of the stick members, and the whole inclosed in a small case or placed in the pocket. The umbrella can be fitted with any usual form of cover, either cloth or rubber.

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

1. In an umbrella, the combination with the stick and handle, of a member within the handle a catch within the stick to engage the member within the handle, and a sliding sleeve on the stick extending within the handle to engage and release the catch.

2. In an umbrella, the combination with the stick and handle, of a fixed member within the handle, a catch pivoted within the stick engaging the member within the handle, and a spring pressed sliding sleeve on the stick, said sleeve being so arranged that by movement in one direction it pushes in the catch and releases it.

3. In an umbrella, the combination with the handle and the stick, said handle having a recess, a fixed member within the recess of

the handle, a catch carried by the stick to engage the fixed member, a sleeve on the stick to engage and release the catch, means for imparting movement to the sleeve in one direction.

4. In an umbrella, the combination with the handle and the stick, said handle having a recess, a fixed member within the recess of the handle, a catch carried by the stick to engage the fixed member, a sleeve on the stick to engage and release the catch, means for imparting movement to the sleeve in one direction, and means for limiting the movement imparted to the sleeve.

5. In an umbrella, the combination with the handle and stick, a fixed member within the handle, a catch carried by the stick engaging the fixed member, a thimble movable on the stick and loosely engaging the handle, and means operated by a movement of the thimble for engaging and releasing the catch from the fixed member.

6. In an umbrella, the combination of a handle having a socket in one end, a bushing within the socket having an interior flange, a stick insertible within the bushing a catch carried by the stick engaging the flange of the bushing and means movable on the stick extending within the handle for releasing the catch.

7. In an umbrella, the combination of a handle having a socket, cross pins within the socket, a flange within the socket, a stick insertible within the socket, said stick being provided with slots to embrace the cross pins, a catch carried by the stick to engage the flange, and slidable means carried by the stick extending within the socket to engage the catch and release it from the flange.

8. In combination, a handle having a socket, a bushing within the socket, a flange within the bushing, a stick insertible in the bushing a catch carried by the stick engaging the flange of the bushing, a double walled sleeve movable on the stick and a portion of the bushing to engage and release the catch from the flange and a spring within the double walls of the sleeve for holding the sleeve normally free of the catch.

9. In an umbrella, a stick formed of a plurality of sections, each of said sections having a plug in one end projecting therebeyond, a portion of said plug being threaded, a plug immovably secured within the next succeeding section a coiled spring engaging the exterior portion of the plug and extending within the next succeeding section and secured to the plug therein, the adjacent end of the succeeding section being threaded to engage the threaded portion of the plug.

10. An umbrella comprising a stick having folding sections elastically connected together, means for fastening the sections to-

gether, end to end, a crown slidable on the
topmost section of the stick, means for con-
trolling the movement of the crown, ribs piv-
oted to the crown, a runner sliding on the
5 stick, braces pivoted to the runner and to the
ribs, means on one side of the runner for hold-
ing the umbrella open, and means on the op-

posite side of the runner for holding the um-
brella closed.

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Witnesses:

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