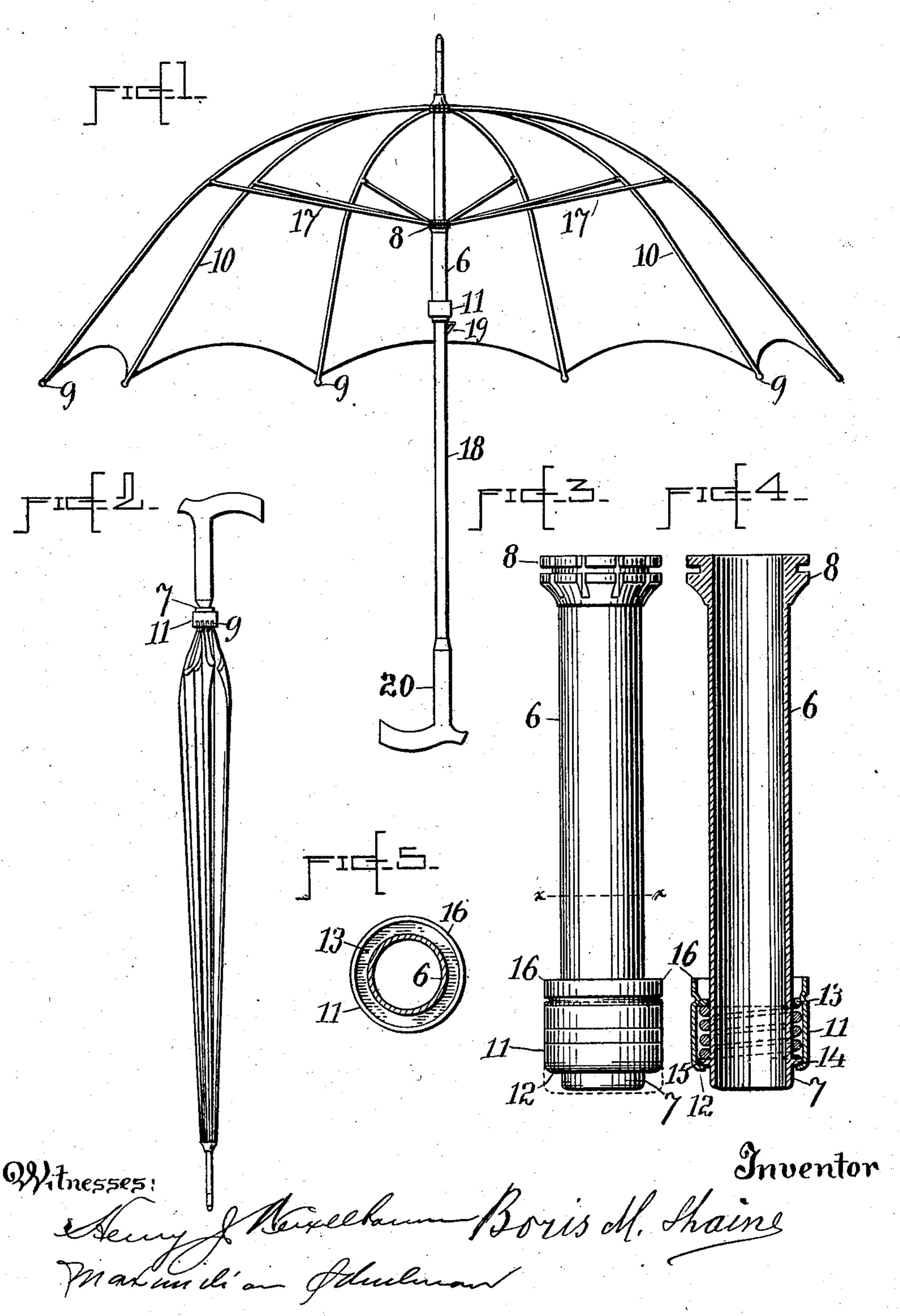
B. M. SHAINE.

UMBRELLA TIP RETAINER.

(Application filed Feb. 23, 1901.)

(No Model.)



United States Patent Office.

BORIS M. SHAINE, OF NEW YORK, N. Y.

UMBRELLA-TIP RETAINER.

SPECIFICATION forming part of Letters Patent No. 702,492, dated June 17, 1902.

Application filed February 23, 1901. Serial No. 48,579. (No model.)

To all whom it may concern:

Be it known that I, Boris M. Shaine, a citizen of the United States of America, and a resident of New York, county and State of New York, have invented certain new and useful Improvements in Umbrellas, of which the following is a specification.

This invention relates particularly to the runners of umbrellas, parasols, &c., and has to for its object the construction of a runner which will more profitably facilitate the unfolding and folding of the umbrella and which will firmly and compactly retain the folded position when the umbrella is folded.

I accomplish the object above mentioned by means of the arrangements of parts illustrated in the accompanying drawings, forming part of this application and hereunto described.

partly in section, supplied with my invention. Fig. 2 illustrates the same when folded. Fig. 3 more particularly illustrates the runner constituting the subject of my invention.

Fig. 4 is a longitudinal, and Fig. 5 a horizontal section of the same.

Like numerals refer to similar parts throughout the several views.

One end of the runner 6 is provided with a notch 8 and the other end 7 with a cup 11, the diameter of the annular chamber of said cup 11 being smaller than that of the notch 8 and situated at such distance from the notch that the tips 9 of the ribs 10 may be gathered sufficiently close in opposition to the notch 8 for insertion into the cup 11.

In my invention it will readily be perceived that by reason of the smaller diameter of the annular chamber of the cup than that of the annular chamber of the cup than that of the notch the ribs 10 when the umbrella is folded will, unlike where the old-style combined runner and cup is used, press firmly against the notch 8 and the tips will be encompassed within a smaller space.

The cup 11 consists of a short tube having an internally-extending flange 12 and a ring 13, soldered or otherwise fixed within the tube, serving as an abutment for the pressure-spring 14, which plays between this ring 13 and another ring 15, fixed to the runner. The spring forces the cup 11 toward the

notch 8, but is limited in its motion by the flange 12 coming in contact with the ring 15. The cup is so placed along the runner that the play given it by the devices above described and indicated in dotted lines in Fig. 3 is sufficient to securely inclose the tips 9 when said tips are brought within the path of the angular edge 16.

It has been found that a cup attached to a 60 runner has a number of advantages.

First, it will more securely retain the umbrella in the folded position, since when the ribs are forced toward the unfolded position they will pull the cup farther down upon 65 themselves through the intermediary of the stretchers 17 and the runner, as can be readily understood.

Secondly, it dispenses with the spring used for retaining the umbrella in a folded position. 70

Thirdly, the shank 18 by reason of the dispensation of the spring above mentioned need not be channeled, thus adding strength to the shank.

Fourthly, a comparatively cheap and more 75 convenient means for unfolding the umbrella is furnished by the runner and cup, as the operation of unfolding consists merely in pulling the cup toward the handle, thereby relieving the tips 9, and then in shoving it 80 out to be caught by the spring 19.

Fifthly, when the umbrella is unfolded the cup is removed from the proximity of the umbrella-handle and will therefore not interfere with a free and unobstructed grasp on 85 the upper end of the umbrella-handle, which is often required in stormy weather.

Although my invention possesses all these desirable qualities, yet it not only disposes of the objectionable slack in the folds of the um- 90 brella resulting from the structure of the old combined runner and cup, but it also furnishes means whereby a more compact and firm folding is produced than in umbrellas heretofore used. Moreover, the runner constituting my invention by reason of the fact that when the umbrella is folded the notch is removed at the proper distance from the tips 9 finds a large and ready market, as it can be applied to the standard umbrellas, universally adapted by reason of its strength and style, wherein the stretchers are consid-

erably shorter than the distance between the tips of the ribs and the hinges which attach the stretchers to the ribs.

Having fully described my invention, what 5 I claim is—

In an umbrella the combination of an elongated runner 6, stretchers 17, secured to its upper end, and a ring 15 rigidly secured to said runner near its lower end, a sleeve 11, to carrying on its lower end an interiorly-extending flange 12, normally engaging the under face of said ring 15, a ring 13, formed integral with said sleeve near the upper end

thereof, a spiral spring 14 surrounding said runner, and interposed between said rings 13 15 and 15, a cup formed by the upper portion of said sleeve adapted to receive the end of ribs abutting against the upper face of said ring 13, when the umbrella is in a folded position, substantially as described.

Signed at New York this 7th day of Feb-

ruary, 1901.

BORIS M. SHAINE.

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Witnesses:

HENRY J. WEIXELBAUM, MAXIMILIAN SCHULMAR.