

(No Model.)

J. H. SPRAGUE.
UMBRELLA STICK.

No. 488,638.

Patented Dec. 27, 1892.

Fig. 1.

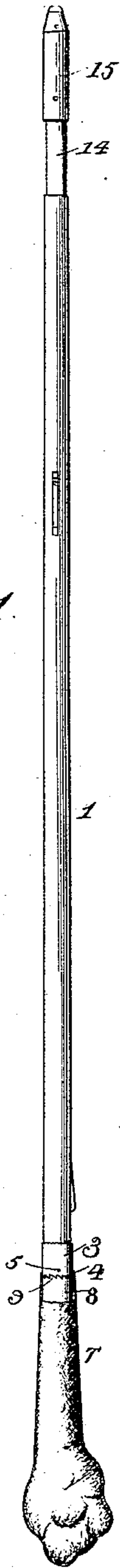


Fig. 2.

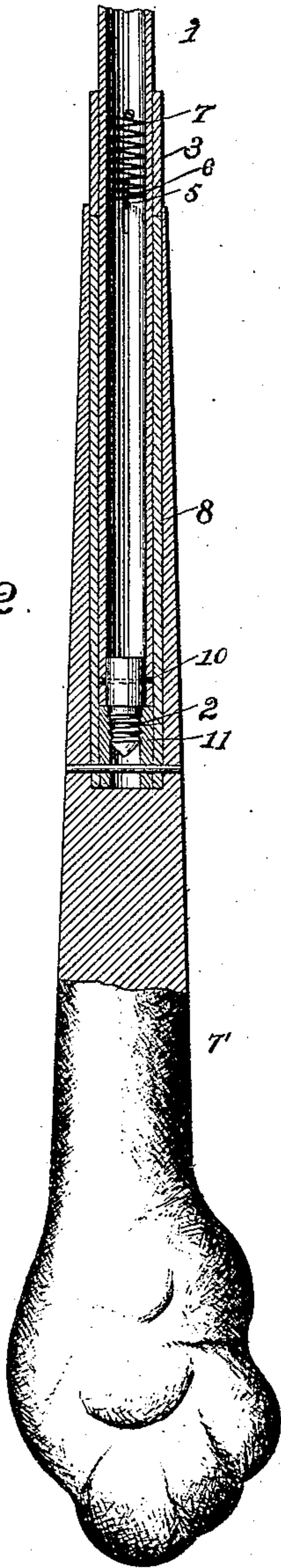
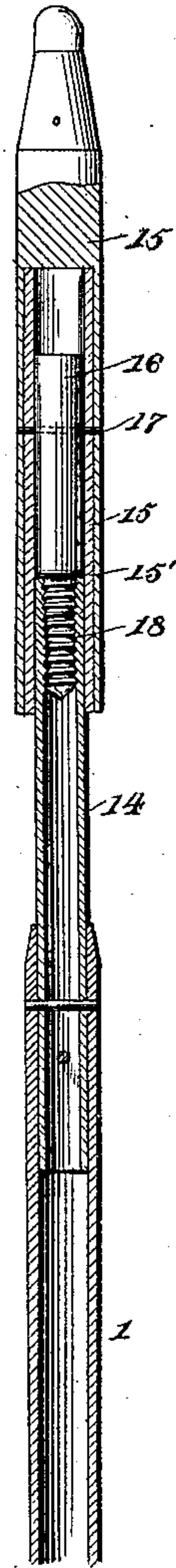


Fig. 3.



Witnesses

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Inventor

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UNITED STATES PATENT OFFICE.

JAMES H. SPRAGUE, OF NORWALK, OHIO.

UMBRELLA-STICK.

SPECIFICATION forming part of Letters Patent No. 488,638, dated December 27, 1892.

Application filed March 11, 1892. Serial No. 424,543. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. SPRAGUE, a citizen of the United States, residing at Norwalk, in the county of Huron and State of Ohio, have invented a new and useful Umbrella-Stick, of which the following is a specification.

This invention relates to improvements in umbrellas, and especially to the sticks thereof; the objects in view being to provide a stick that may be disjointed, whereby its length is reduced and the umbrella is capable of being placed in an ordinary trunk.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings:—Figure 1 is an elevation of a stick constructed in accordance with my invention. Fig. 2 is a detail in longitudinal section of the joint between the stick and handle. Fig. 3 is a similar view of the joint between the upper end of the stick and tip.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates a tubular metal stick, of suitable length, and the same is provided at its lower end with a threaded plug 2, the lower extremity of which is pointed or conical, as shown. Above the plug there is mounted for sliding longitudinally upon the stick a metal sleeve 3, the lower edge of which is provided with inclined teeth 4. A pin 5 passes through the sleeve and extends through a slot 6, formed in the stick, the pin permitting of a movement of the sleeve longitudinally upon the stick the length of the slot, which is slightly greater than the depth of the teeth before mentioned. A coiled spring 7 located in the stick, serves to normally press the sleeve toward the lower end of the stick, or so that the pin is at the lower end of the slot.

7' designates an ordinary handle, the upper end of which is bored to receive a metal tube 8, of an internal diameter adapting it to fit and receive the stick 1. The upper end of the tube is flush with or may terminate short of the upper end of the handle, and is provided with a series of inclined teeth 9, disposed in a direction opposite to and adapted to interlock with those of the sleeve. The tube has fitted therein, and secured by a pin

10, solder or other means, an internally threaded bushing or nut 11, adapted to receive and have threaded thereon the threaded plug 2 of the stick. In applying the handle the same is inserted over the lower end of the stick, and turned to the right, the plug taking into the bushing, and when nearly completely inserted or seated the teeth of the sleeve and tube contact and ride over each other until the handle is in proper position, when it is prevented from retrograding by the sleeve, as will be evident. By moving the sleeve upwardly upon the stick, against the tension of its spring, its teeth are disengaged from those of the handle, and the latter may be rotated to the left and thus removed, whereby the stick is made shorter. It will be evident that in this manner a person may have several handles of various styles for one umbrella, and a merchant will not be forced to carry such an immense variety of umbrellas in order to meet the demands of his patrons for various styles of handles. For instance one patron may desire a twenty-six inch umbrella with a certain style of handle that he sees upon a thirty-inch umbrella; and if they be removable in accordance with my invention, the two handles may be readily exchanged.

The upper end of the stick, as shown in the drawings, is provided with an internal threaded tube 14, the same being fitted in said upper end and secured in position, by any suitable means. 15 designates a wooden tip, and the same has its lower end longitudinally bored to receive a metal tube 15'. In the upper end of the tube a plug 16 is secured, in this instance by a transverse pin 17 passing through the tip, tube and plug. This plug extends downwardly from the upper end of the tube, and has its lower portion or half reduced and externally threaded, as shown at 18. To apply this tip, it is simply necessary to introduce the lower end of the same over the upper end of the stick, the tube of the latter passing into the tube of the stick and receiving the lower threaded end of the plug of the tip-tube. By this means the tip becomes securely but removably secured upon the upper end of the stick.

It will be seen that by removing the tip and handle, the umbrella as a whole is greatly reduced in length, and is thus adapted espe-

cially for tourists and other travelers, in that it may be readily received by an ordinary trunk.

From the foregoing description, in connection with the accompanying drawings, it will be seen that I have provided an umbrella-stick, the handle and tip of which are removable and interchangeable with regard to other tips and handles, and that the same possesses many advantages arising from such construction will at once be apparent, in that, as stated before various tastes may be suited from a small stock of umbrellas and a purchaser may have several handles for a single umbrella, and finally the stick may be disjointed and reduced to a size adapting it to fit within a trunk of ordinary length whereby when traveling he is not encumbered by the umbrella.

Having described my invention, what I claim is:—

1. The herein-described improved umbrella-stick, consisting of a metal tube, a threaded plug fixedly secured in the lower end of the same, combined with a hollow handle, a metal tube let into the upper end of the same and receiving and fitting over the lower end of the stick and provided at its lower end with an interiorly threaded internally bushing adapted to fit the plug, substantially as specified.

2. The tubular umbrella-stick longitudinally slotted, the sleeve mounted for movement on the stick and having its lower end provided with inclined teeth, the transverse pin passed through the sleeve and the slot of the stick, the spring for pressing the sleeve toward the lower end of the stick, the threaded plug inserted in the lower end of the stick combined with the hollow handle, the tube fitted therein and having its upper end toothed contrary to that of the sleeve, and a bushing internally threaded and located in the lower end of the holder of the handle, and adapted

to receive and fit said threaded plug, substantially as specified.

3. The combination with the umbrella-stick, the upper end of which is internally bored and threaded, of the bored tip adapted to take over the upper bored end of the stick, the metal tube mounted in the tip and receiving the stick, and the metal stud secured within the tube and having its lower end reduced and externally threaded to take within and engage the threads of said stick.

4. The combination with the umbrella-stick and the internally-threaded smaller tube fitted in the upper bored end of the same, of the bored tip, the metal tube therein adapted to fit the tube of the stick, and the plug located in the tube of the tip and having its lower portion threaded exteriorly and adapted to be inserted in the tube at the upper end of the stick, substantially as specified.

5. The combination with the umbrella handle and stick one of which is threaded removably and inserted in the other, of annular series of teeth located at the upper end of the handle member, and a spring-pressed toothed locking-sleeve mounted for movement upon the stick and adapted to engage with the aforesaid tooth, substantially as specified.

6. The combination with the handle and stick-members of an umbrella, one of which is removably threaded into the other, and a non-rotatable reciprocating locking ring mounted on one of said members and adapted to engage the other and to prevent a retrograde movement between said members whereby a separation would occur, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JAS. H. SPRAGUE.

Witnesses:

F. A. YOUNG,
HORACE G. TILTON.