

No. 847,673.

PATENTED MAR. 19, 1907.

J. C. LOWE.
DETACHABLE HANDLE.
APPLICATION FILED SEPT. 18, 1905.

Fig. 1.

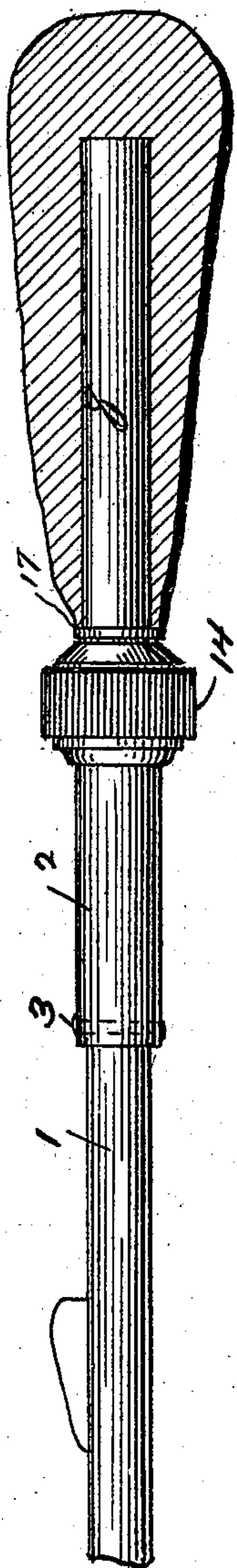


Fig. 2.

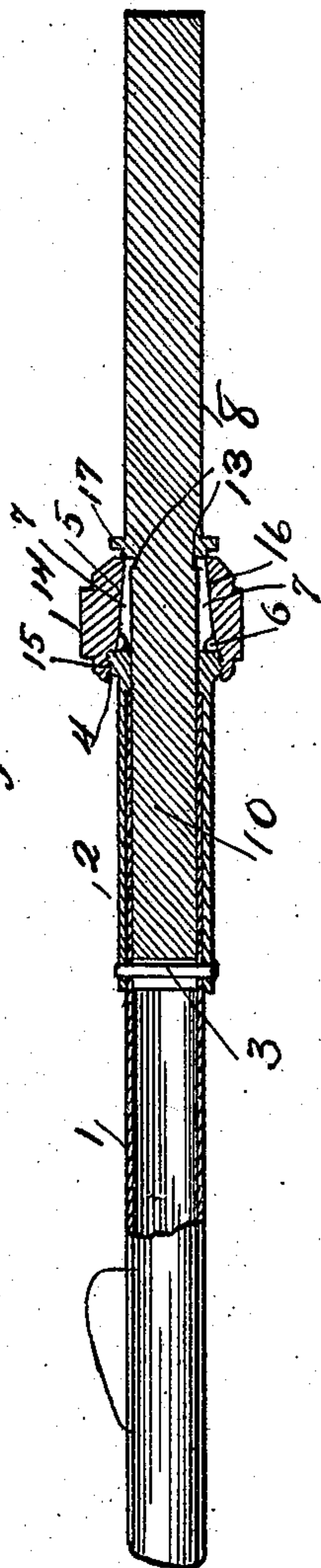


Fig. 3.

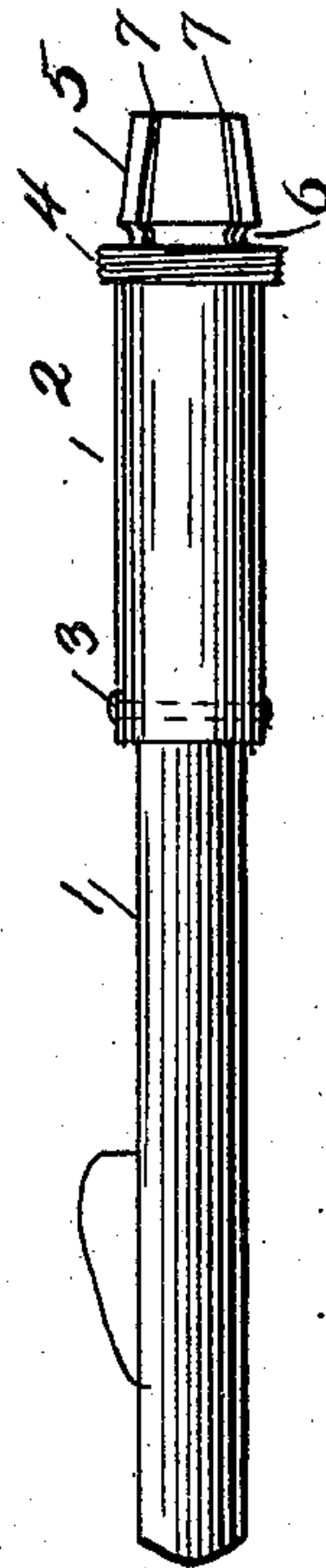


Fig. 4.

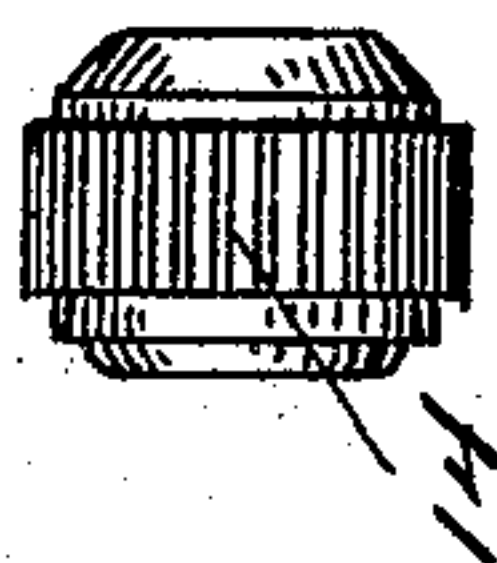
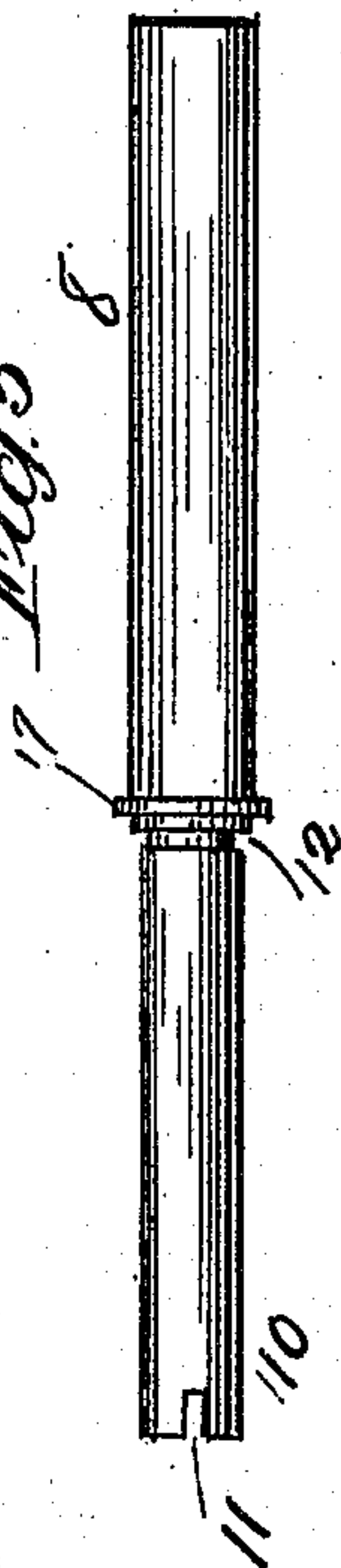


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

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DETACHABLE HANDLE.

No. 847,673.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed September 18, 1905. Serial No. 278,882.

To all whom it may concern:

Be it known that I, JOHN C. LOWE, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Detachable Handles, of which I hereby declare the following to be a full, clear, and exact description, such as will enable others skilled in the art to which it ap-
10 pertain to make and use the same.

The objects of the invention are to provide an umbrella with a detachable handle, whereby the umbrella can be packed in a valise or trunk, and a large assortment of handles separate from the umbrellas can be kept in
15 stock, so that any purchaser can have his own selection or preference in form or design to attach to his umbrella purchase.

The invention consists in the form of coupling device for the tubular metal umbrella-stick with the metal stem to which the handle is secured and a tapered locking-clutch by means of which true alinement and a perfect rigidity of parts is obtained, and in the
20 details of construction and combination and arrangements of parts, as hereinafter described, shown in the accompanying drawings, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of the device, showing the outer end of the umbrella-stick and the exterior of the coupling device. Fig. 2 is a central longitudinal section thereof. Fig. 3 is a
35 side elevation of the end of the stick and the portion of the coupling device attached thereto. Fig. 4 is a view of coupling-sleeve. Fig. 5 is an exterior view of the stem which is attached to the handle.

In the views, 1 is the tubular umbrella-stick. 2 is a sleeve attached thereto by means of the transverse pin 3 near the inner end of the sleeve. On the outer end of the sleeve is shown a screw-threaded enlarged portion 4,
45 and extending beyond this is the conically-tapered extremity 5, which is made spring-acting when compressed by means of the annular groove 6 at its base, and sawed slots 7, which separate it radially and longitudinally
50 into a plural number of equal parts.

8 is a stem, one end of which is inserted in the handle and the other end 10 is inserted in the tubular umbrella-stick and sleeve 2. A transverse slot 11 in the inner end of the stem

receives the transverse pin 3 and prevents
the stem and handle from turning. 55

At 12 is shown an annular groove, in the stem in which when the stem is forced down into the sleeve will fall radially-extending lugs or keepers 13 upon the extremities of the
60 spring-acting segments 5, thus securing the parts together. To make this connection rigid, so that the parts cannot be separated, the coupling-sleeve 14 is employed. This sleeve is internally screw-threaded at 15 for
65 adjustment upon the screw-threaded portion of the sleeve 2 and is tapered on the inner surface at 16 to correspond with the taper of the spring-keepers within.

It will readily be seen that the act of
70 screwing the coupling-sleeve down upon the conical keepers will lock them immovably upon the stem. A shoulder 17 upon the stem serves to prevent inserting the stem too far into the umbrella-stick, and the handle 18
75 is forced down against it. By means of this coupling-sleeve and keepers and the transverse pin before mentioned rigidity from all movements of the parts is obtained.

Having described the invention, what I
80 claim as new, and desire to secure by Letters Patent, is—

1. In a coupling device for a detachable umbrella-handle the combination with the umbrella-stick and a metallic stem to which
85 the handle is secured, of a sleeve upon the stick having a screw-threaded portion, and a conical outer extension separated by radial and longitudinal grooves into a series of spring-keepers, an annular groove in the
90 said stem which said keepers engage when the stem is inserted into the sleeve, and a locking-sleeve having an inner screw-threaded portion adapted to engage the screw-threaded portion of the first-mentioned
95 sleeve, and also having a tapered inner surface corresponding with the tapered surface of the said conical extension of the sleeve.

2. The combination with a metal stick, a sleeve upon the outer extremity thereof, a
100 transverse pin securing the parts together, a screw-threaded portion on the exterior of said sleeve, a conically-extending outer end to said sleeve separated into spring-acting
105 keepers by longitudinal slots, each portion having a radially-extending lug, of a stem provided with a forked extremity, and an annular groove on its periphery with which

said lugs engage when the stem is inserted in
said sleeve, and a coupling-sleeve screw-
threaded to engage the screw-threaded por-
tion of the aforesaid sleeve, and internally
5 tapered to correspond with the conical taper
of the spring-acting keepers, substantially as
described.

In testimony whereof I hereunto set my
hand this 14th day of September, 1905.

JOHN C. LOWE.

In presence of—

WM. T. ARNOS,

WM. M. MONROE.