

(No Model.)

R. P. KNAPP.
UMBRELLA OR PARASOL.

No. 280,485.

Fig. 1. Patented July 3, 1883.

Fig. 2.

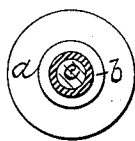
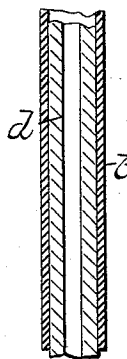
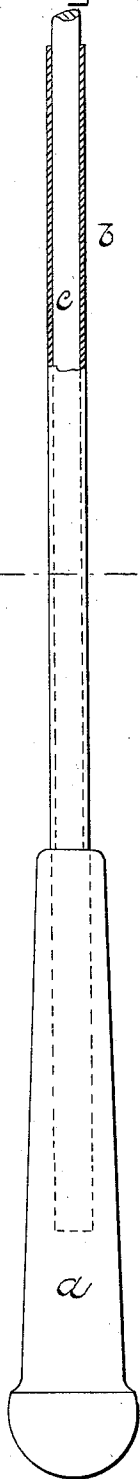
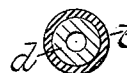


Fig. 3.



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WITNESSES:

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UNITED STATES PATENT OFFICE.

ROBERT P. KNAPP, OF NEW YORK, N. Y.

UMBRELLA OR PARASOL.

SPECIFICATION forming part of Letters Patent No. 280,485, dated July 3, 1883.

Application filed October 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, ROBERT P. KNAPP, a citizen of the United States, residing at New York, in the county and State of New York, have invented certain new and useful Improvements in Umbrellas or Parasols, of which the following is a specification.

My invention relates to certain improvements in the construction of the sticks or shanks of umbrellas or parasols; and the object of my improvement is to provide a stick or shank which possesses greater strength and durability, with a considerable decrease in size relatively than those heretofore in use.

In the accompanying drawings, which fully serve to illustrate my improvements, Figure 1 represents the long shank of an umbrella and partly in section in order to show its construction. Fig. 2 is a cross-section of the same; and Fig. 3 shows a section and cross-section of a modified construction, the parts being considerably enlarged.

In the ordinary construction of umbrellas and parasols the long stick or shank which supports the frame and springs is commonly made of wood, and the size of such stick or shank is relative to the size of the umbrella or parasol; but all have to be made of considerable diameter in cross-section, in order to obtain the requisite strength. But whatever the size of such stick or shank, when made simply of wood, there is the same tendency to split or break off at that point where the handle joins the shank, or where the tip or frame is riveted thereto, if the umbrella is dropped out of the hand or the tip is struck suddenly against a hard substance.

The main object of my improvement is to overcome this difficulty of the common splitting or breaking off of the shank under strain; and this I accomplish by combining wood and metal, whereby the same is strengthened, and a great reduction in size is also effected, all as will be hereinafter set forth.

In Fig. 1 is represented the shank of an ordinary-sized umbrella, the dimensions being about those required in use, and which is provided with a handle, *a*, and tip, (not shown,) attached thereto in the usual manner.

b represents a tube, made of thin metal, which

incloses an inner body or stick, *c*. In this instance shown as made of wood and solid. The metallic tubular covering or casing is continuous the whole length of the body *c*, and extends up into the handle and tip, thereby reinforcing and strengthening the entire shank, and particularly those points most subject to strain.

By the employment of a metal tube the inclosed wooden body can be made of a diameter less than one-half of the ordinary wooden shanks, and the shank or stick when complete will be only about one-half the size, and will possess double the amount of strength without any perceptible increase of weight.

The construction shown in Figs. 1 and 2 is particularly designed for the smaller and medium sized umbrellas; but in the largest sizes I prefer to employ the modification shown in Fig. 3, in which the inner or wood portion of the shank is likewise made tubular, (seen at *d*,) and the metal tube *b* incloses the wooden tube *d*, an increase of size thus being attained without an increase of weight.

The employment of a continuous metal tube, as here shown, produces a stick or shank capable of resisting a great amount of strain, and, its size being greatly lessened, enables the umbrella to be wound up in a neater and more compact manner than can possibly be done where the large wooden sticks or shanks are employed. Where the handle and tip are made integral with the frame-stick the enlarged tip and handle portion are recessed or formed with an annular groove, so that the metal tube may extend or project therein for a considerable distance in the same manner as where the tip and handle are attached to a shank.

What I claim as new, and desire to secure by Letters Patent, is—

The staff or stick of an umbrella, composed of a wooden tube and a metal tube, one arranged within the other, as shown, and for the purpose set forth.

ROBT. P. KNAPP.

Witnesses:

R. C. KILLIN,
E. N. SMITH.