

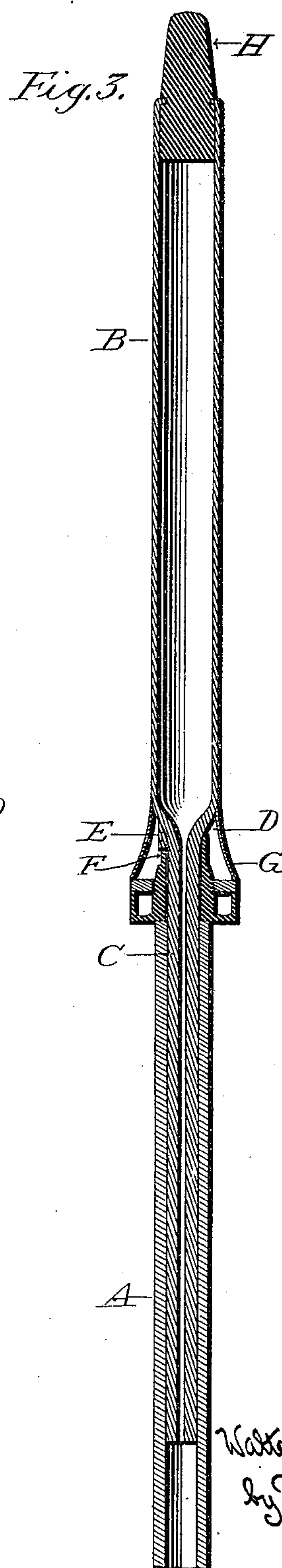
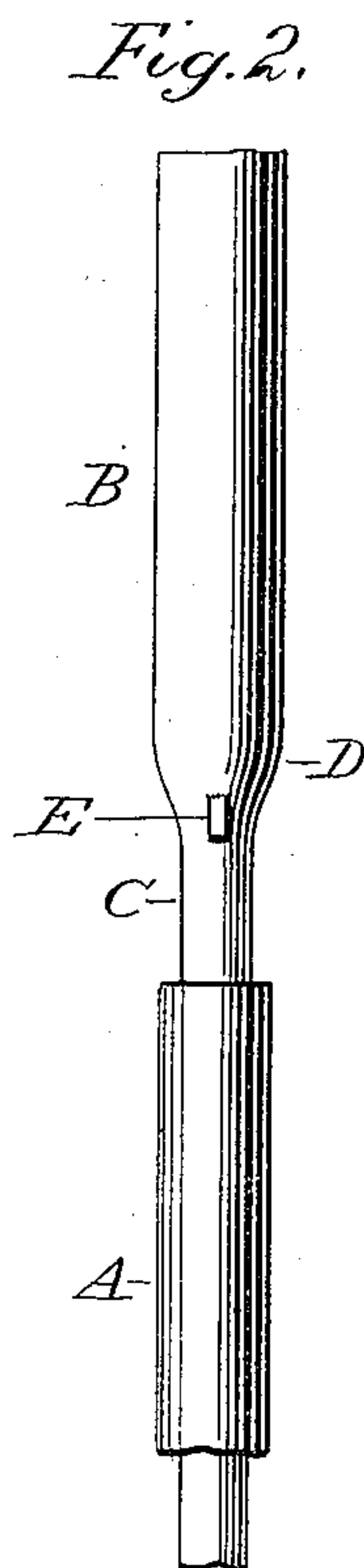
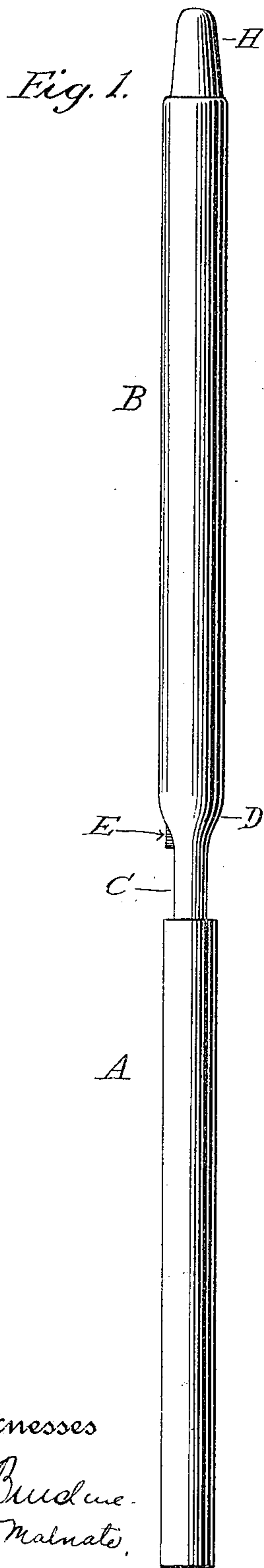
No. 667,721.

Patented Feb. 12, 1901.

W. E. MOULTON.
UMBRELLA STICK.

(Application filed Oct. 25, 1899.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

WALTER E. MOULTON, OF SHELBY, OHIO.

UMBRELLA-STICK.

SPECIFICATION forming part of Letters Patent No. 667,721, dated February 12, 1901.

Application filed October 25, 1899. Serial No. 734,744. (No model.)

To all whom it may concern.

Be it known that I, WALTER E. MOULTON, a citizen of the United States, residing at Shelby, in the county of Richland and State of Ohio, have invented certain new and useful Improvements in Umbrellas, of which the following is a specification.

My present invention pertains to improvements in umbrellas, and relates more particularly to a novel construction of the stick.

The construction of the stick is shown in the annexed drawings, wherein—

Figure 1 is a perspective view of a portion of the stick; Fig. 2, a similar view, the parts being shown in a separated condition; and Fig. 3, a longitudinal sectional view, the top notch being illustrated in this view.

The object of my invention is to provide a strong light construction of the stick and one which will also clamp and hold the top notch in position. The stick is preferably made of metal tubing, the lower section A being a straight piece, while the upper or outer section B is formed with a reduced end C, formed by drawing or condensing the metal. This reduced end is of a diameter equal to the inner diameter of the lower section A and when the parts are assembled is passed therein. The metal of the reduced portion is not drawn in abruptly, so as to form an angular shoulder, but gradually, as shown, forming a curving or slanting face D. Upon this face there is formed, preferably in the process of making the reduced end, a lug or projection E, adapted and designed to fit within a corresponding recess formed in the top notch F. (See Fig. 3.) The internal diameter of the top notch is such as just to receive the reduced end C, and when the parts are assembled the under face of the top notch rests directly on the upper end of the lower section of the stick, as indicated in Fig. 3. When the parts are in position, as indicated in said figure, a slight heat is applied to that portion where the reduced section C and the tube A come together, the heat serving to soften the cementitious material with which the parts have been previously treated. When the rod cools, the parts will be found to be securely fastened together, the top notch be-

ing held firmly in place and prevented from turning.

A shed G may be passed down over the upper end of the stick after the cover is in place, and by slightly turning in the upper edge against the slanting face D it will be held against removal except upon the application of force when for any reason it be desired to take it off.

By retaining the true cylindrical form of the lower member A and reinforcing it by the reduced section C therein the stick is materially strengthened at this point.

A wearing point or end H is secured in the outer end of the section B, the connection between the parts being made by turning the end of the tube into a groove or channel formed around the wearing-point.

From the foregoing description it will be seen that the use of all pins, screws, and rivets is avoided, the parts being firmly secured together without their use.

Having thus described my invention, what I claim is—

1. An umbrella-stick comprising a lower tubular section A; an upper or outer section B provided with a reduced end passing into the lower section; a lug formed upon the reduced portion of the upper section; in combination with a top notch mounted upon the end of the upper section and provided with a recess or socket adapted to receive the lug as the members A and B are brought together, whereby said top notch is clamped to the parts and is prevented from rotating or moving endwise.

2. An umbrella-stick comprising a lower tubular section A, an upper section B provided with a reduced end C of a diameter equal to the interior diameter of the lower tubular section A; a lug formed upon the reduced portion of said upper section; a top notch provided with a central opening and a socket or recess adapted to receive the reduced portion and the lug respectively; and means for securing the two sections of the stick together.

3. An umbrella-stick comprising a lower tubular section and an upper tubular section, said upper section being provided with a

gradually-reduced lower end; an integrally-
formed lug upon said reduced end; and a top
notch mounted upon the reduced end of said
upper section, and provided with a recess or
5 socket adapted to receive the lug, substan-
tially as described.

In testimony whereof I have signed my

name to this specification in the presence of
two subscribing witnesses.

WALTER E. MOULTON.

Witnesses:

MAUDE MCGAW,
C. W. SIPE.