

No. 694,623.

Patented Mar. 4, 1902.

S. J. EVANS.
UMBRELLA RUNNER.

(Application filed June 1, 1901.)

(No Model.)

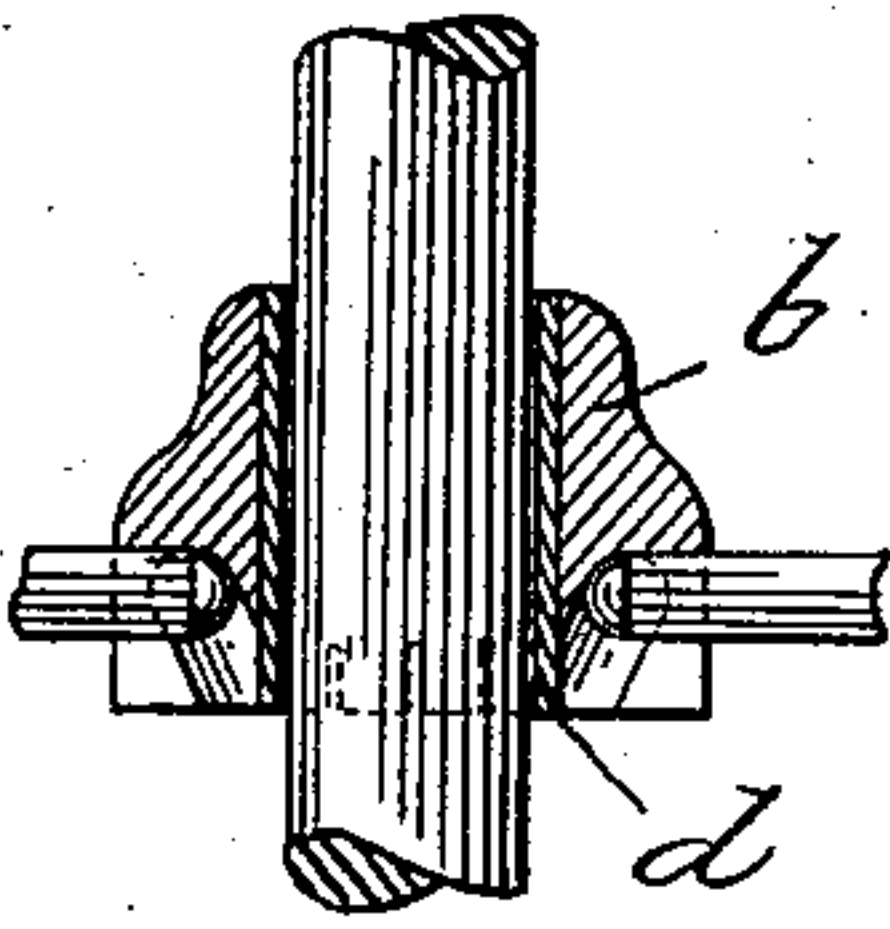


Fig. 1.

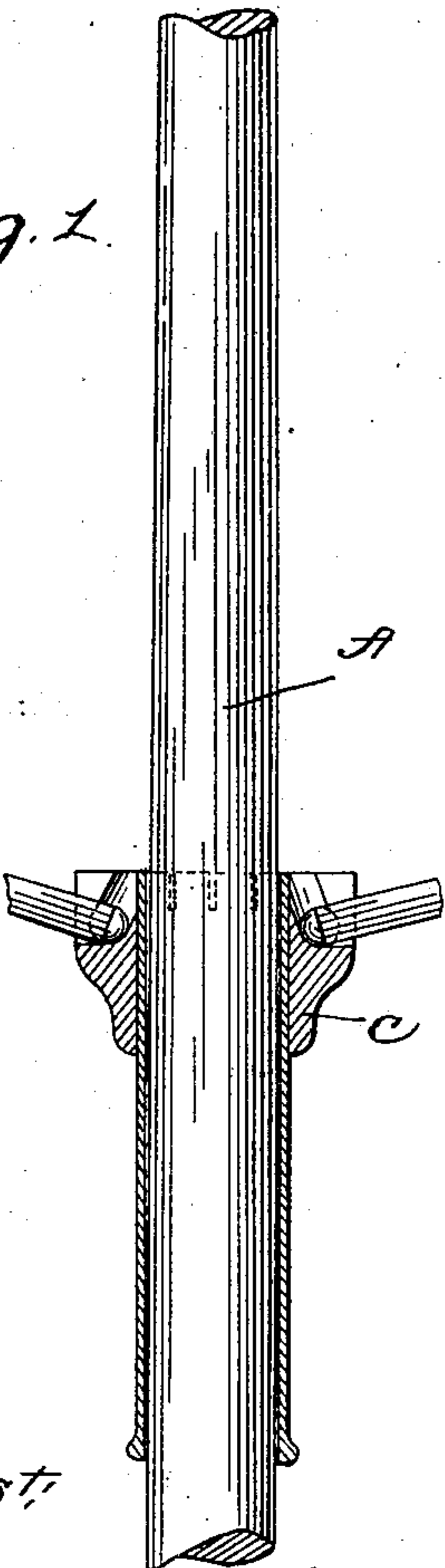


Fig. 3.

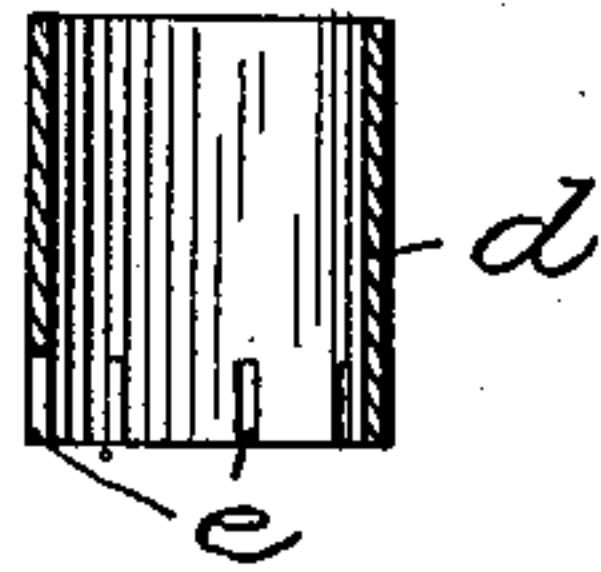


Fig. 2.

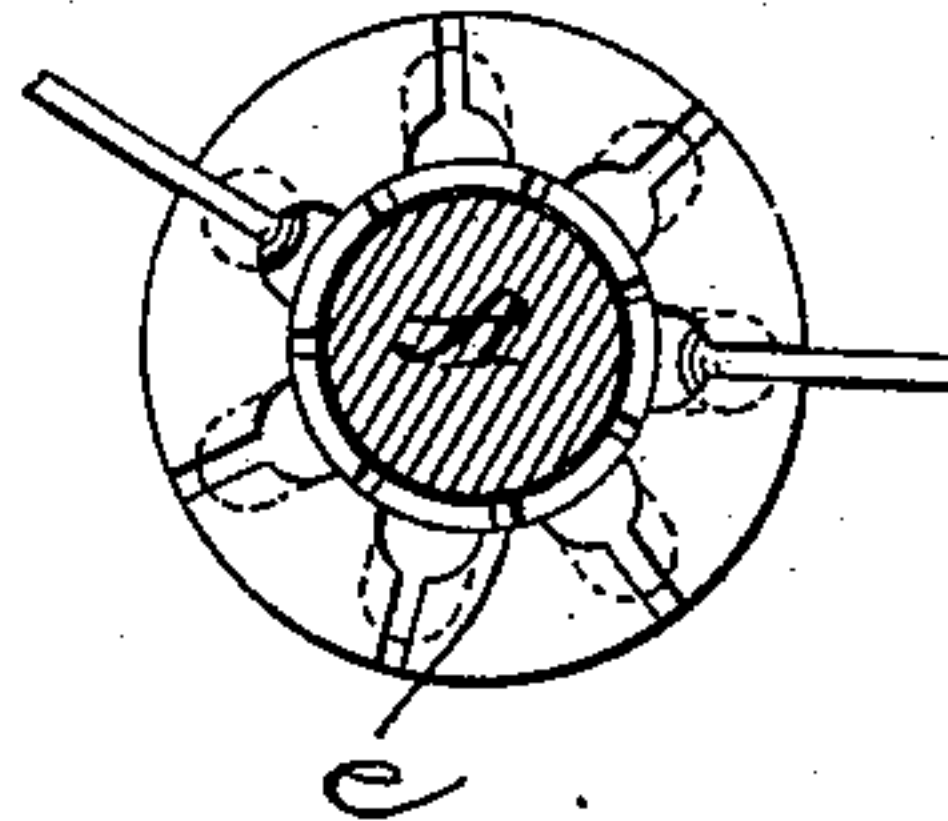
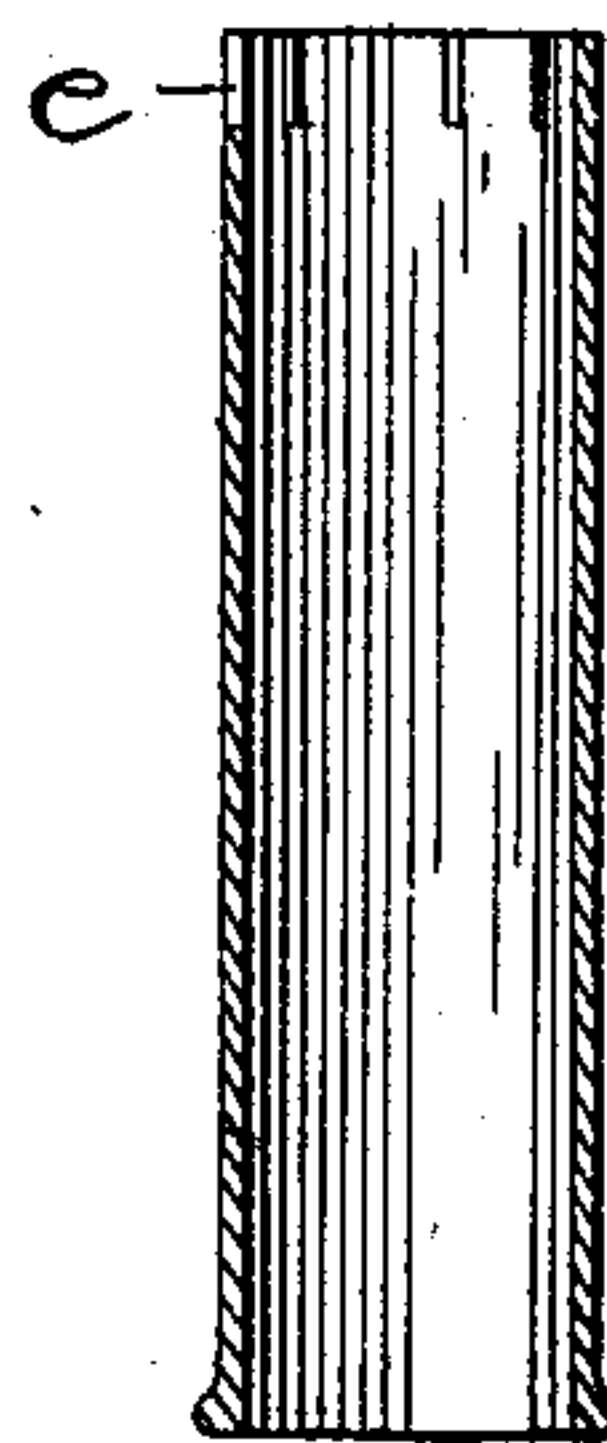


Fig. 4.



Attest:

Edw. L. Reed.
L. B. Middleton

Inventor:
Samuel J. Evans.

by Wm. Spear.

Atty.

UNITED STATES PATENT OFFICE.

SAMUEL J. EVANS, OF ROANOKE, VIRGINIA.

UMBRELLA-RUNNER.

SPECIFICATION forming part of Letters Patent No. 694,623, dated March 4, 1902.

Application filed June 1, 1901. Serial No. 62,765. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL J. EVANS, a citizen of the United States, residing at Roanoke, Roanoke county, Virginia, have invented certain new and useful Improvements in Umbrellas, of which the following is a specification.

My invention relates to umbrellas, and is designed to make more effective the construction disclosed in an application filed by me January 23, 1901, Serial No. 44,423. In my former invention a notch is provided with a socket adapted to receive the headed end of a rib, the head being of varying areas and holding such a relation to the socket as will permit the insertion or removal of the rib-head when the frame is open, but prevent such insertion or removal in other positions of the frame.

I have aimed to make the connection between the heads of the ribs and stretchers and the notch and runner more secure, and to this end I make the entrance to the sockets capable of being expanded or distended, thus providing a spring action which allows the headed ends of the ribs to slip by when inserted or removed, but holds them against accidental displacement.

In the accompanying drawings, Figure 1 shows a stick with the notch and runner in section. Figs. 2, 3, and 4 show details.

The stick is shown at A and may be of any ordinary or approved construction. It carries the notch *b* and a runner *c*. The notch has an interior sleeve *d*, and with this exception is preferably identical in construction with the notch shown in my application referred to. This sleeve is tubular and forms the inner wall of the socket in the notch which is adapted to receive the headed ends of the ribs. The mouth of the socket is contracted,

as described in my application above mentioned, and the heads being of varying areas pass through the contracted mouth, and after entering the socket the closing movement has the effect of turning the heads in the sockets, so as to prevent the removal of the heads by reason of the difference between the width of the mouth and the widest area of the head. In order to make still further secure this action, the sleeve *d* is provided, forming the inner wall of the mouth to the socket, and to give a spring action the sleeve is split, as at *e*, by a series of slots, leaving a series of projecting tongues which have a sufficient spring action under exerted pressure to temporarily expand or enlarge the opening to the socket in the passage of the heads, but to immediately contract the same as soon as the pressure is released. The construction for the runner is precisely the same, and the action is in all respects the same.

What I claim is—

1. In an umbrella, a notch, a headed rib fitted to a socket therein, said socket having a contracted mouth, one wall of said mouth being capable of movement under pressure of the rib to enlarge the opening temporarily, the said wall returning automatically to its normal position, substantially as described.

2. In an umbrella, a notch having a socket, a rib having a headed end adapted thereto, a spring integral with the socket and forming an expansible mouth thereto, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL J. EVANS.

Witnesses:

HENRY E. COOPER,
JAMES M. SPEAR.