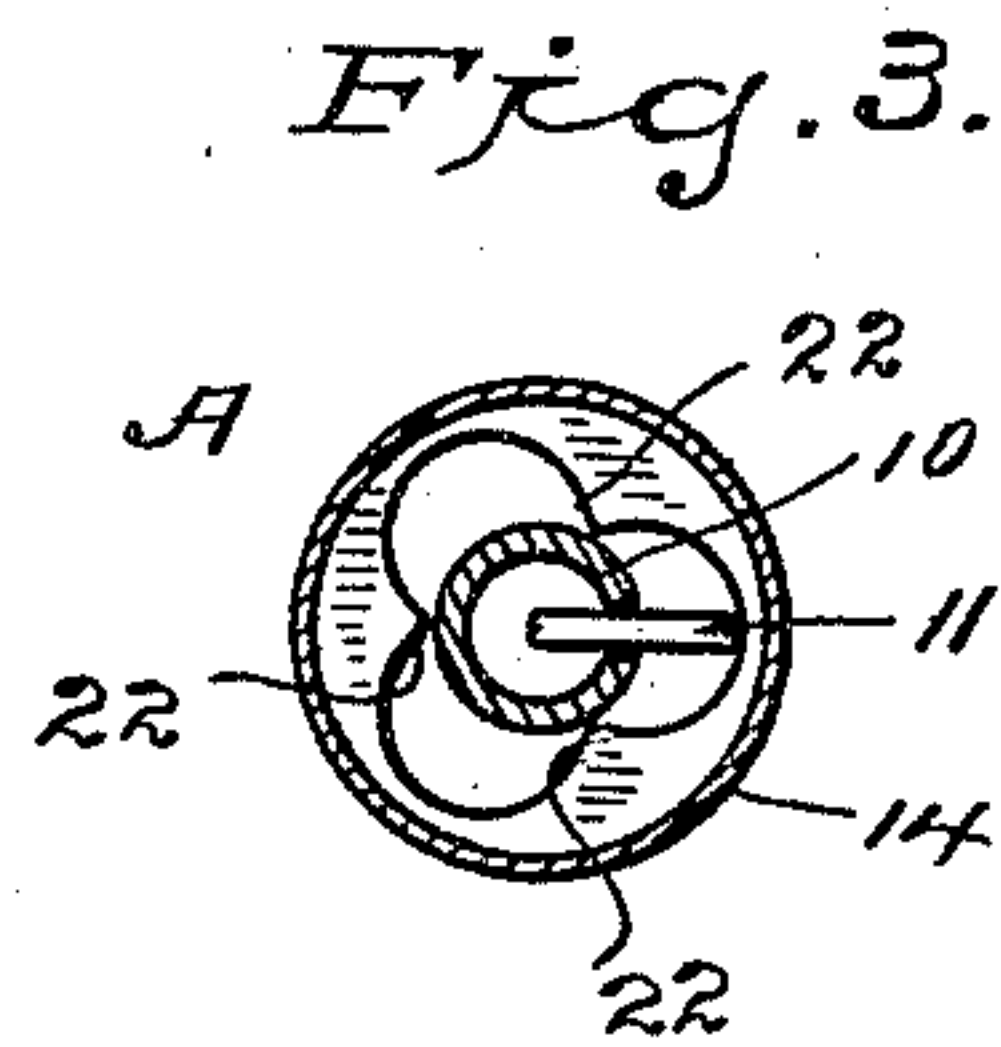
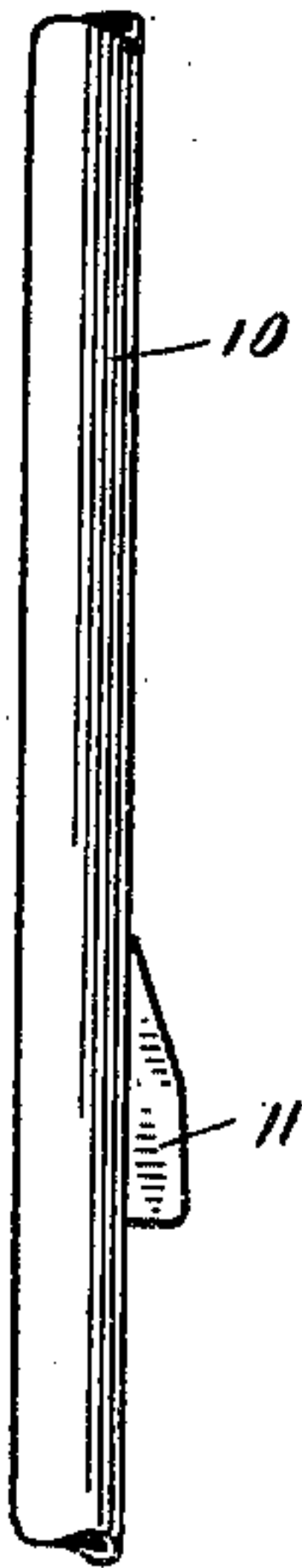
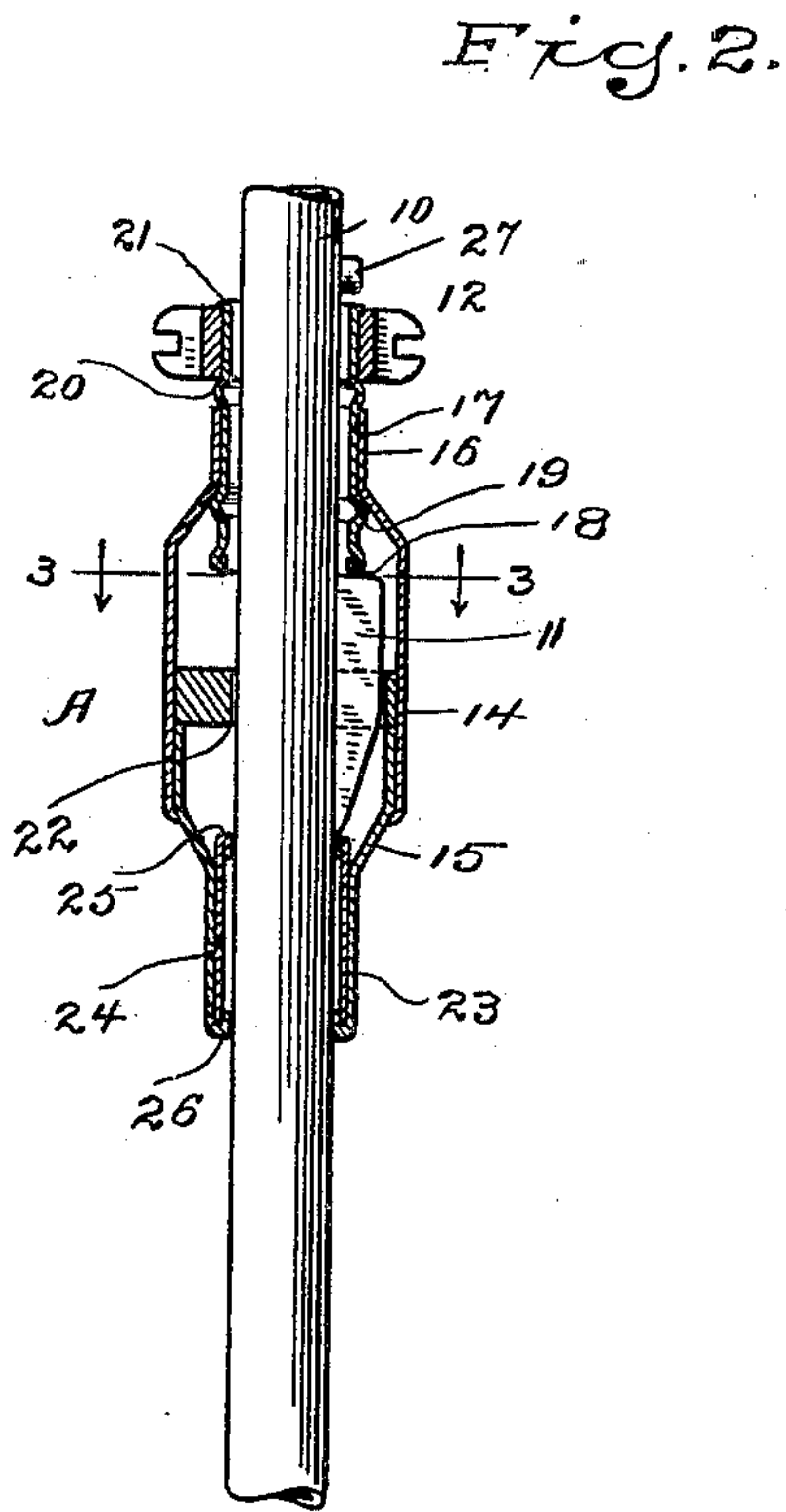
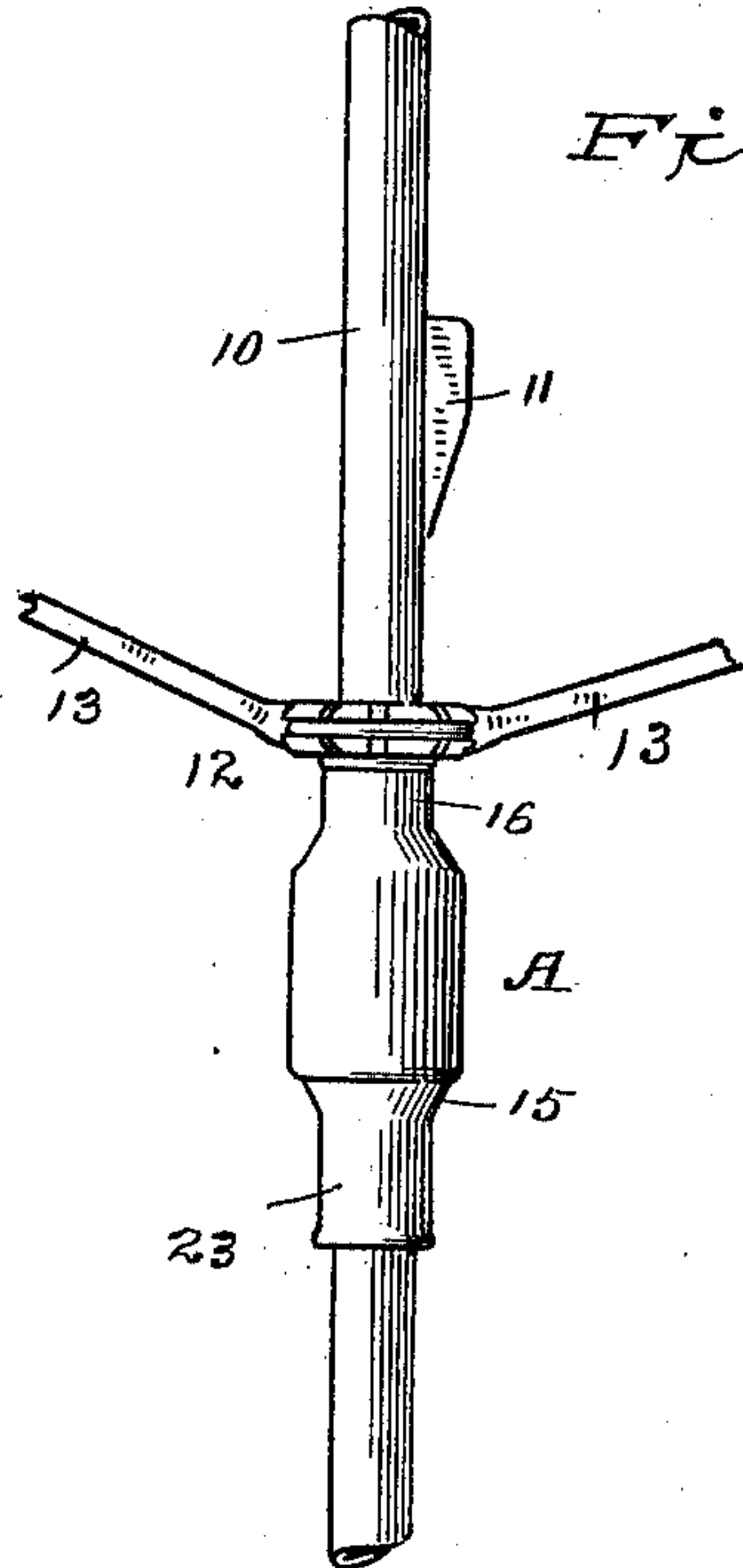


No. 684,511.

Patented Oct. 15 1901.

C. R. HOLT.
UMBRELLA RUNNER.
(Application filed May 18, 1901.)

(No Model.)



WITNESSES.

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UNITED STATES PATENT OFFICE.

CHARLES R. HOLT, OF WATERTOWN, CONNECTICUT, ASSIGNOR TO A. N. WOOLSON, OF SAME PLACE.

UMBRELLA-RUNNER.

SPECIFICATION forming part of Letters Patent No. 684,511, dated October 15, 1901.

Application filed May 18, 1901. Serial No. 60,862. (No model.)

To all whom it may concern:

Be it known that I, CHARLES R. HOLT, a citizen of the United States, residing at Watertown, county of Litchfield, State of Connecticut, have invented a new and useful Umbrella-Runner, of which the following is a specification.

My invention has for its object to provide a simple and inexpensive umbrella-runner that will do away with the necessity for placing the springs in line with each other, will do away with manual manipulation of the springs in opening and closing, and thus wholly avoid the pain and inconvenience of catching a fold of skin or a glove between the runner and the spring, and which will release at either the open or closed position by slight rotary movement in either direction, the runner wholly covering and inclosing the spring.

With these ends in view I have devised the simple and novel runner which I will now describe, referring to the accompanying drawing, forming part of this specification, and using reference characters to designate the several parts.

Figure 1 is an elevation illustrating a portion of the rod and the ribs of an umbrella with my novel runner at an intermediate position; Fig. 2, a longitudinal section, on an enlarged scale, of the runner in position to hold an umbrella open; and Fig. 3 is a section on line 3-3 in Fig. 2.

10 denotes the rod, 11 springs, 12 a notch, and 13 ribs, which may be of any ordinary or preferred construction.

A denotes my novel runner as a whole, which consists, essentially, of the usual sliding sleeve or runner 17, having a notch 12 for the stretchers attached thereto, and a tubular barrel B rotatably mounted on the sleeve 17 and of such dimensions as to wholly inclose one of the springs at the open or closed position and provided with one or more cams 22, which act to retract the springs when the barrel is rotated.

The mode of making and assembling the several parts of the runner which I have illustrated in the drawings is simple, inexpensive, and satisfactory, although it should be un-

derstood that my invention is not limited to any special mode of making and assembling said parts. The barrel B may be made in any ordinary or preferred manner and is fixed against longitudinal movement on sleeve 17 in any suitable manner, as by circumferential ribs 19 and 20, presently to be described. I have illustrated a barrel comprising two tubes 14 and 15, which may be secured together in any suitable manner. The upper end of tube 14 is reduced, as at 16, forming a portion which may be called for convenience a "neck" and fitting the sleeve 17, but permitting the barrel B to turn freely thereon. The lower end of sleeve 17 is upset, as at 18, to form a stop which is adapted to engage the upper spring in the open position of an umbrella, as in Fig. 2. The tube 15 is also reduced at one end, as at 23, forming another neck, and within said reduced end or neck is rigidly secured a tube or bushing 24, giving ample strength where it is required and at the same time permitting the parts to be made of relatively light metal. The end of tube 24 extends within the barrel and is upset, as at 25, to form a stop which is adapted to engage the lower spring in the closed position of an umbrella in the same manner that stop 18 is shown in Fig. 2 as engaging the upper spring in the open position of an umbrella. It will be noted additionally that the upset forming stop 25 also serves as a bearing of the sleeve upon the rod. The lower end of neck 23 is closed inward over the lower end of tube or bushing 24, as at 26, thereby forming another bearing on the rod and rigidly securing the tube in place in the neck 23. This upset or bearing 26 also acts to engage and depress the lower spring when the umbrella is being closed. Within the barrel B are rigidly secured one or more cams 22. In the present instance I have shown my novel runner as provided with three cams formed in one piece, which might be termed a "cam-ring" and which is rigidly secured to the inner side of the barrel. The upper end of tube 15 is made of the required size to just slide within tube 14, to which it is rigidly secured in any ordinary or preferred manner. 27 denotes an

abutment which stops further upward movement of the runner after the upper stop has passed the spring.

In assembling sleeve 17 is passed through neck 16 from below, the rib 19 on said sleeve engaging the inner side of tube 14 below the neck. Then another rib 20 is formed on the sleeve above the neck, as clearly shown in Fig. 2, thereby locking the barrel against all except rotary movement, when the latter is completed by securing the tubes 14 and 15 together.

The operation of my novel runner will be apparent from the foregoing description, it only being necessary to turn the barrel B when the umbrella is in either the open or closed position in order to depress the spring that locks it there and release the runner, so that it can be moved up or down on the rod in the usual manner. I have shown the notch 12 as secured to sleeve 17 by heading the end of the sleeve over, as at 21, so as to force the notch against the rib 20; but the notch may be secured in other ways without affecting the principle of the invention. It should be noted that the sleeve 17 and the notch 12 comprise what is ordinarily known in the art as a "runner;" but I prefer to call my complete device a "runner." It should furthermore be noted that my novel device is applicable to the runners now in common use.

Having thus described my invention, I claim—

1. An umbrella-runner comprising a sleeve and a barrel rotatably mounted thereon and provided with an internal cam adapted to depress a spring in an umbrella-rod.

2. The combination with a runner-sleeve

having a stop to hold an umbrella open, of a rotary barrel carrying internal cams.

3. The combination with a runner-sleeve of a rotary barrel carrying internal cams and provided with a stop for holding an umbrella shut.

4. The combination with a runner-sleeve provided with a stop 18 at its lower end, of a rotary barrel inclosing said stop and having internal cams and a stop 25.

5. The combination with a runner-sleeve, of a barrel having a neck 16 rotatably secured to said sleeve and having internal cams and a neck 23, and a tube in said neck having a stop 24.

6. The combination with a runner-sleeve having a stop for an umbrella-spring in the open position, of a barrel rotatably secured to said sleeve and carrying internal cams, the other end of said barrel being reduced to form a neck, and a tube or bushing secured in said neck and forming a stop for an umbrella-spring in the closed position and a bearing in a rod.

7. The combination with a rod having a spring and a runner-sleeve having a stop at its lower end, of a barrel one end of which is rotatably secured to said sleeve and which incloses said stop and spring and is provided with an internal cam which depresses the spring when rotated and with an internal stop for retaining an umbrella in the closed position.

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

CHARLES R. HOLT.

Witnesses:

B. H. MATTOON,
HENRY S. FROST.