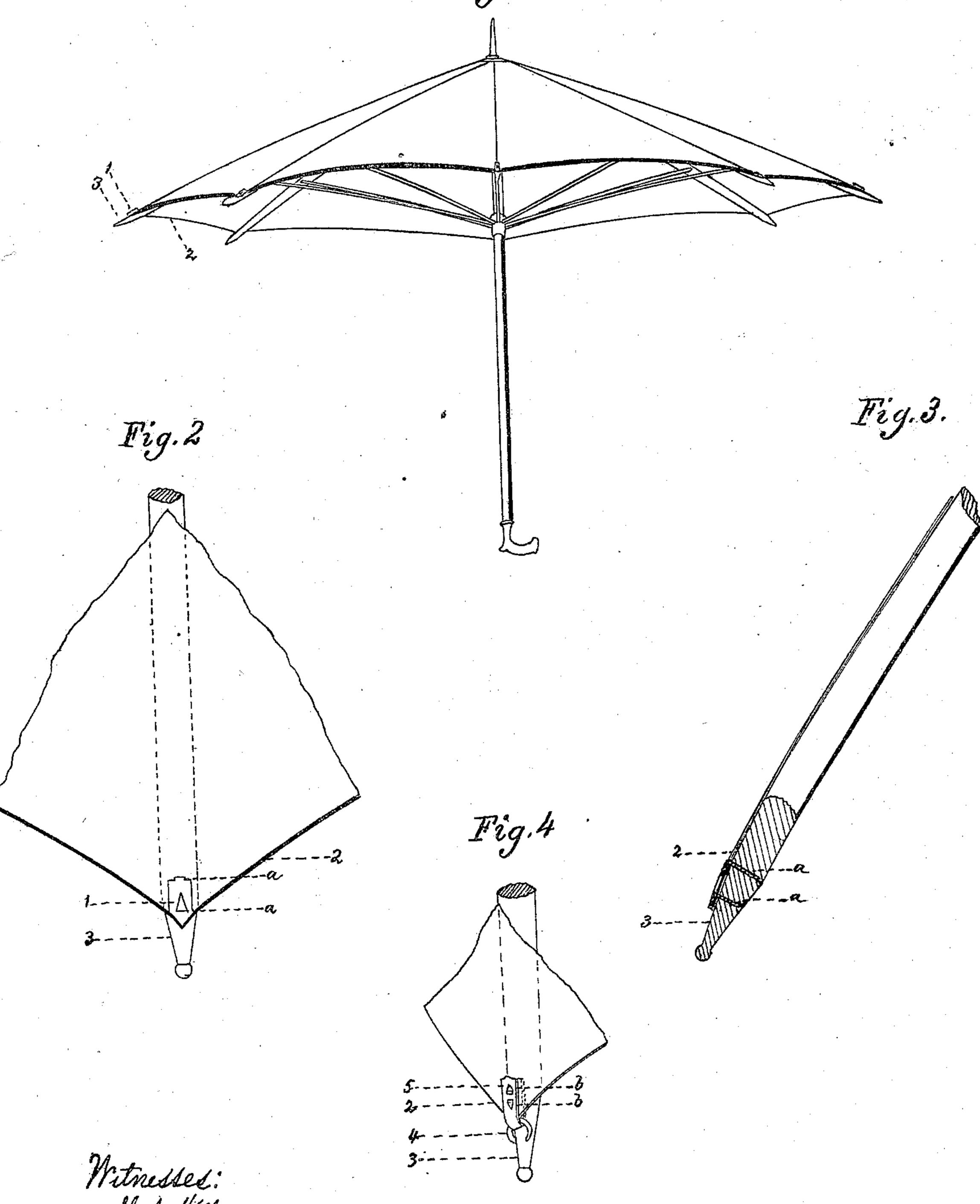
# GMPierce. Umbrella.

Nº 78893

Patented Jun. 16, 1868.

Fig. 1.



Witnesses: Milliams. Bery To Milliams.

Ges. Willis Pierce.

# Anited States Patent Office.

## BOSTON, MASSACHUSETTS.

Letters Patent No. 78,893, dated June 16, 1868.

### IMPROVEMENT IN UMBRELLAS.

The Schedule referred to in these Xetters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, George Willis Pierce, of Boston, in the county of Suffolk, in the State of Massachusetts, have invented new and useful Improvements on Umbrellas and Parasols; and I do hereby declare that the following is a full, clear, and exact description of the operation and construction of the same, reference being had to the annexed drawings, making a part of this specification, in which-

Figure 1 is a perspective view,

Figure 2 a detached and enlarged front view,

Figure 3 a detached and enlarged sectional view, and

Figure 4 a detached and enlarged perspective view.

The nature of my inventions consists of improvements in attaching or securing the coverings of umbrellas and parasols to their frames.

The usual method of doing this is by means of thread or twine passing through the covering, and through holes in the stay-rods, or through the covering and around the stay-rods, a crease being made on the stay-rods for the reception of the thread. I am aware that devices have been invented for this purpose, therefore I limit my claims to the following-described devices.

Figs. 2 and 3 show a clamp, 1, which is provided with prongs a a, that pass through the covering 2, and stay-rod 3, and are secured on the under side of the stay-rod by being bent over or clinched. The clamp may

have one or more prongs, or the clamp may be made like a rivet and clinched.

Fig. 4 shows a clamp, 5, which is bent double, and provided with one or more prongs b b on one side, which pass through the covering 2, (which is interposed between the two sides of the clamps 5,) and through holes in the opposite side of the clamp, and are bent over or clinched. A ring, 4, passes through the lower end of the clamp 5, between the two sides thereof, and through a hole in the stay-rod 3, thereby securing the covering to the frame.

I also make a clamp bent double, and provided with one or more prongs, as represented by fig. 4, and instead of the ring 4, I project one or more arms from the side or sides of the clamp, which may bend around the stay-rod 3, or pass through the stay-rod 3, and fasten on the under side, by being bent over or clinched.

#### ${\it Claims.}$

1. I claim the clamp 1, (represented by figs. 2 and 3,) provided with one or more prongs a a, for the purpose specified, the whole made and operating substantially as described, and for the purpose specified.

2. I claim the clamp. 5, in combination with the ring 4, (represented by fig. 4,) when made, combined, and operating substantially as described and for the purpose specified.

GEO. WILLIS PIERCE

#### Witnesses:

M. A. WILLIAMS,

B. P. WILLIAMS.