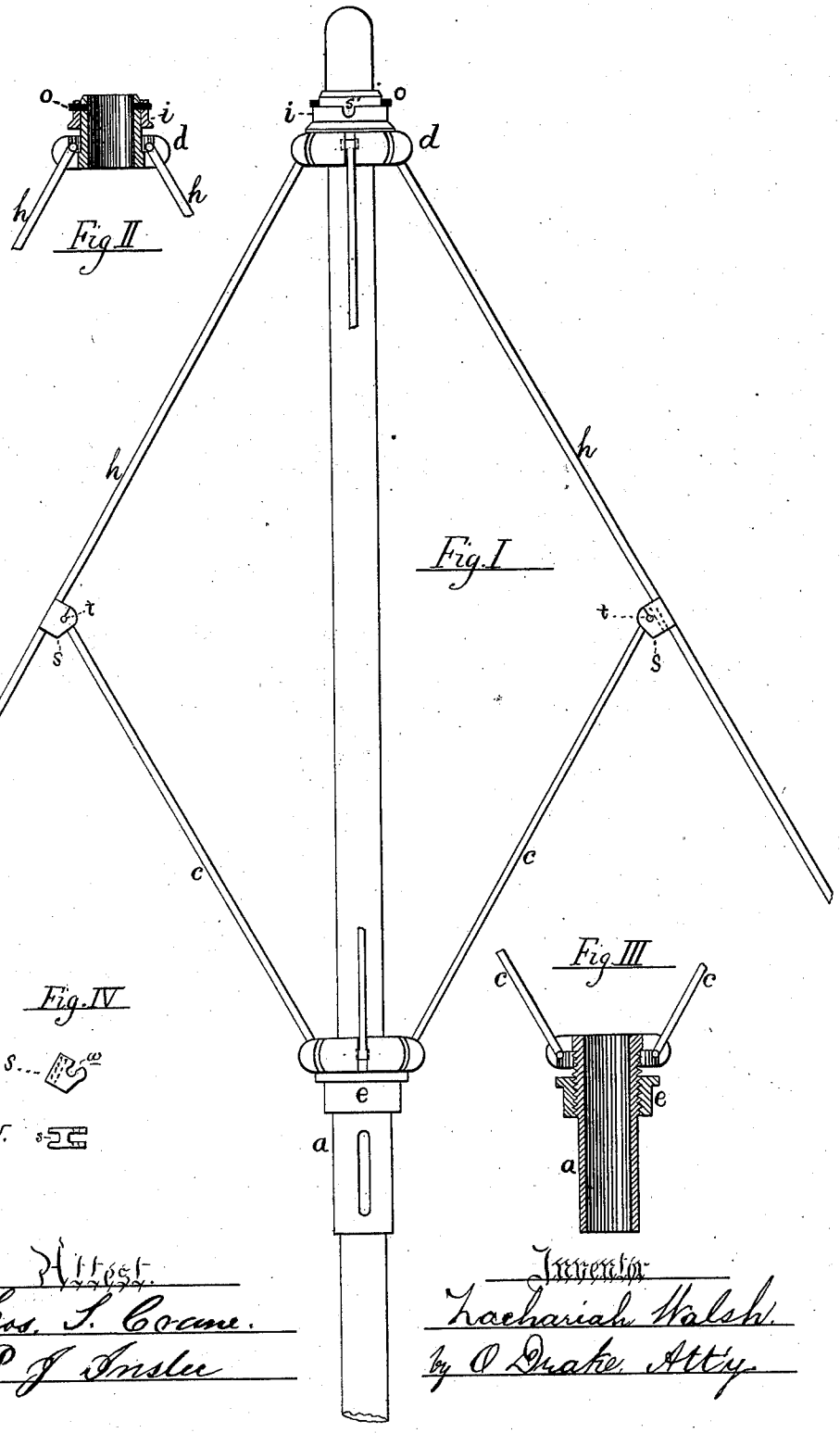
Z. WALSH.
Umbrella.

No. 216,490. Patented June 10, 1879.



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IMPROVEMENT IN UMBRELLAS.

Specification forming part of Letters Patent No. **216,490**, dated June 10, 1879; application filed October 7, 1878.

To all whom it may concern:

Be it known that I, ZACHARIAH WALSH, of the city of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Umbrellas; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to an improvement in umbrellas and parasols, the object of which is to facilitate the adjustment of the ribs and stretchers, and to dispense with the use of wires, which have heretofore been employed to bind said stretchers and ribs in their respective sockets or grooves at the top of the umbrella and in the runner, so that said ribs and stretchers may be adjusted without removing the fabric or cover, or necessitating the employment of a skilled workman for the purpose.

The accompanying drawings illustrate the nature and character of the invention, in which—

Figure 1 represents an umbrella embodying the improvements partially opened. Fig. 2 is a cross-section of the top band and sleeve; Fig. 3, of the runner and its sleeve or clamp; Fig. 4, a view of the clip; and Fig. 5, a plan of Fig. 4.

Similar letters of reference indicate corresponding parts in each of the several figures.

The invention consists in the construction of a flanged runner, *a*, notched or slotted to receive the stretchers *c*, the flange of said runner being slightly recessed or cupped on the under side to receive the ends of the stretchers *c*, and also to accommodate a sleeve or clamp, *e*, flanged at its upper end, with which runner *a* is provided.

On the ends of stretchers *c*, which are to be adjusted in the flange of said runner, a small head or T is formed, so that when they are placed in their respective positions and the sleeve or clamp adjusted they cannot slip out of said slots, as they are held securely in their places by said sleeve or clamp *e*, which covers the recess in said runner, thus inclosing the ends of said stretchers, and at the same time allowing them to operate freely as the umbrella is opened and closed, as indicated in the several figures.

It will be observed that sleeve or clamp *e* may be applied in any other appropriate manner and perform the same function—as, for instance, by dispensing with the thread and substituting therefor a sleeve or clamp sufficiently long to admit of one or more notches or slots, *s'*, cut in the lower end of said sleeve, to engage with one or more studs or pins that may be permanently secured to the outside of runner *a*, as indicated in Fig. 2, which represents the band and sleeve hereinafter to be described.

Hence it will be seen that by turning the sleeve on the runner until the slots or notches come opposite said studs said sleeve may be moved far enough to allow of the displacing or placing in said flange any or all of the said stretchers. The clamp or sleeve is then pushed up and turned as far as may be necessary, so that the slots become removed from said studs, and allowing the sleeve to rest on the studs, thus covering the recess in the flange of runner *a*, and at the same time securing and holding the stretchers in position, as shown and indicated.

The invention also consists in a flanged band, *d*, secured to the top of the handle, slotted and recessed to receive the ends of the ribs *h*, which are slightly flattened, forming a small head or T on the same, said band being also provided with a clamp or sleeve, *i*, constructed and applied substantially in the same manner as that of runner *a*, heretofore described.

If preferred, however, the sleeve may be applied and operated from the under side of said band instead of from the top by a slight alteration only in its construction, as will be obvious.

If desired, a screw or threaded sleeve or clamp may be used for both the runner *a* and flanged band *d*, or studs *o* may be substituted therefor in both cases, as before mentioned.

Another important feature contained in my invention is in the construction of clips *s*, which are designed and arranged to be clasped to the ribs and to receive the other end of the stretchers *c*. (Shown in Fig. 4.)

Said clips may be made of any flexible metal of sufficient thickness to admit of a groove

(indicated in dotted lines in Figs. 1 and 4) to be formed in one of the edges to receive the ribs *h*.

The clips are held in their places to the ribs by simply pressing or forcing the sides of the groove together, thus clamping the clip to the rib firmly.

To obviate the use of rivets and pins, generally used for connecting the stretchers with the ribs, jaws are formed in said clips, and in said jaws a slot, *w*, is cut transversely to receive the T or pivot *t* formed on the end of said stretchers.

Said T is placed in the jaws, which are then closed, thereby forming an adjustable socket, (as they may be forced open to remove said stretchers when required,) at the same time allowing the T to operate freely.

By this device it will be seen that facility and convenience in removing or replacing any of the parts are readily accomplished.

Hence it will be observed that, from the above description of my improvements, they can be produced at a less expense than those in general use, as they may be struck up from any sheet metal, and the labor of adjusting the ribs, stretchers, &c., is comparatively small, and the simplicity of the invention enables any possessor of an umbrella or parasol to do his own repairing without the aid of one skilled in the art.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The flanged band *d*, notched and recessed for the reception of the T-headed ribs *h*, and provided with an adjustable sleeve or clamp, *i*, having notches *s'*, adapted to pins *o*, for the purposes set forth.

2. The clip *s*, provided with the grooves to receive the ribs *h* and stretchers *c*, and the adjustable socket, as and for the purposes set forth.

In testimony that I claim the foregoing as my own I hereto affix my signature in presence of two witnesses.

ZACHARIAH WALSH.

Witnesses:

OLIVER DRAKE,

P. J. INSLEE.