No. 768,298. PATENTED AUG. 23, 1904.

T. H. PLANTE.

UMBRELLA.

APPLICATION FILED DEC. 23, 1903.

NO MODEL.

Fig. 1.

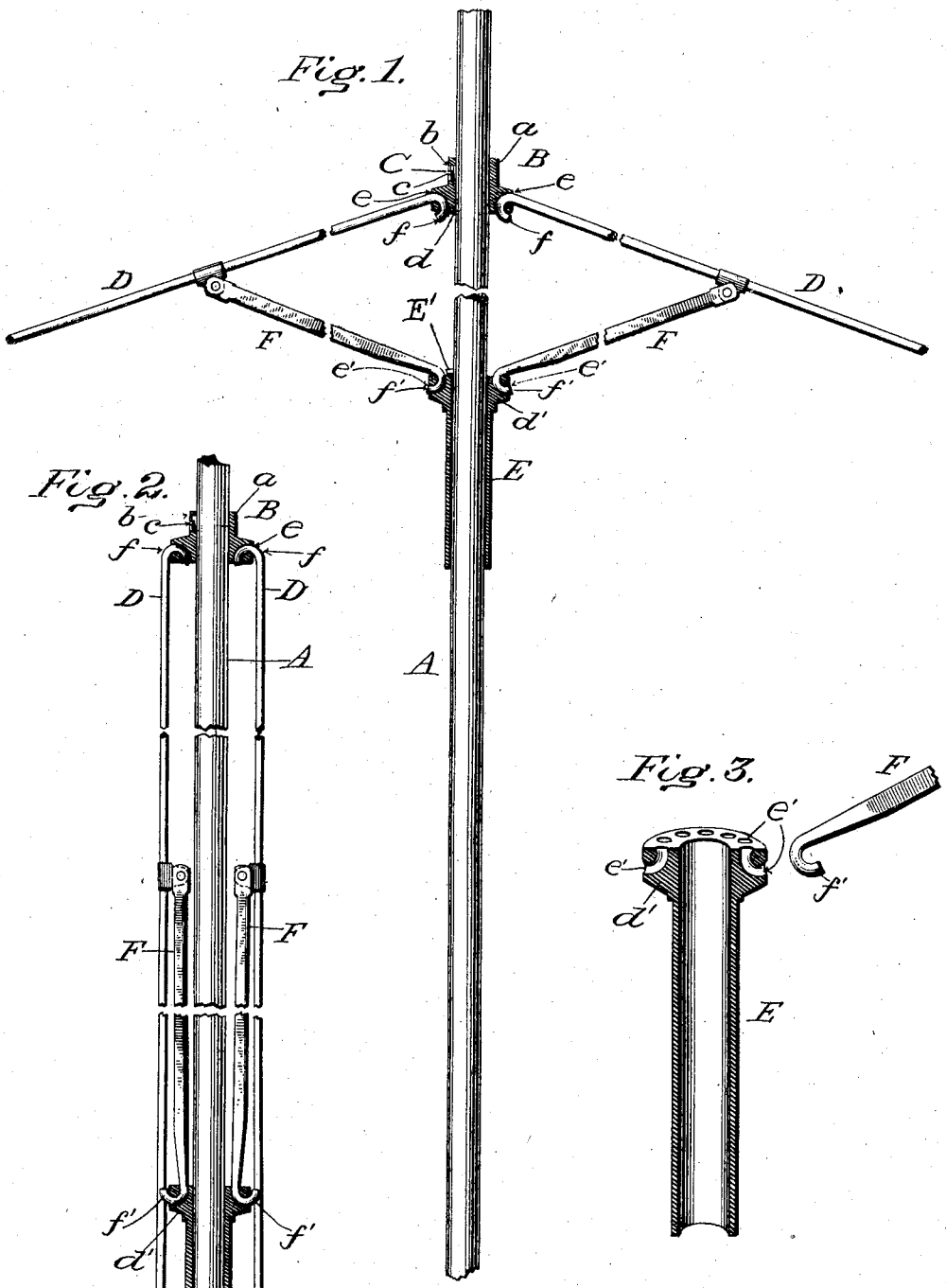


Fig. 2.

Fig. 3.

Witnesses

R. C. Haley

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by James J. Shuchy Attorney

No. 768,298. Patented August 23, 1904.

UNITED STATES PATENT OFFICE.

TELESPHORE H. PLANTE, OF AUBURN, MAINE.

UMBRELLA.

SPECIFICATION forming part of Letters Patent No. 768,298, dated August 23, 1904.

Application filed December 23, 1903. Serial No. 186,309. (No model.)

To all whom it may concern:

Be it known that I, TELESPHORE H. PLANTE, a citizen of the United States, residing at Auburn, in the county of Androscoggin and State of Maine, have invented new and useful Improvements in Umbrellas, of which the following is a specification.

My invention pertains to umbrellas; and it has for one of its objects to provide an umbrella in which the ribs and stretchers are individually and sturdily connected to the notch and runner, respectively, so that any rib or stretcher may be readily removed and replaced without affecting the others and this without the employment of wires or other extraneous devices and in such manner that the umbrella may be freely opened and closed and when opened is not liable to be turned inside out.

With the foregoing in mind the invention will be fully understood from the following description and claim, when taken in connection with the accompanying drawings, forming part of this specification, in which—

Figure 1 is a broken view, partly in elevation and partly in section, of so much of an umbrella as is necessary to illustrate my invention, the same being shown as open. Fig. 2 is a view of the same as it appears when closed, and Fig. 3 is a view showing the runner and a stretcher disconnected.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which—

A is the stick of my novel umbrella, which may be of metal or any other suitable material, and B is the notch, which is cast or otherwise formed in one piece of metal. The said notch is mounted on the stick and is provided in its upper reduced portion *a* with a radially-disposed threaded aperture *b*, in which bears a set-screw C. This screw is of a length corresponding to or slightly less than the thickness of the notch portion *a*, so as to offer no obstruction to the parts of the umbrella usually placed over the notch, is provided in its outer end with a kerf *c* for the engagement of a screw-driver, and is designed to be set against the stick A, so as to adjustably fix the notch in position thereon. In virtue of the provision of the screw C in the notch it will be observed that the notch may be adjusted on the stick to the exact point desired and then readily fixed to the stick at such point; also, that while there is no liability of the notch casually moving during the use of the umbrella, yet when it is desired to remove the notch to facilitate repairing of the umbrella the same may be readily accomplished. In its lower and comparatively large portion *d* the notch is provided with apertures *e*, which describe parts of circles and extend from the outer side or edge of said portion to the under side thereof. These apertures *e* loosely receive and are entirely occupied by downwardly-extending hooks *f* at the inner ends of ribs D, which hooks describe parts of circles, and hence it will be observed that the ribs may be moved from the position shown in Fig. 1 to that shown in Fig. 2, and vice versa; also, that the upper walls of the apertures *e* offer stops to the straight portions of the ribs when the latter are in the position shown in Fig. 1, and thereby effectually prevent the umbrella from turning inside out. It will further be observed that by virtue of the apertures *e* and the hooks *f* describing parts of circles and the latter fully occupying the former the notch and ribs are connected together in a strong and durable manner of themselves, and yet the ribs may be freely opened and closed.

E is the runner, loosely mounted on the stick so as to freely move thereon; E′, a stop fixed to the stick and designed to limit the upward movement of the runner, and F F, stretchers interposed between the runner and the ribs and pivotally connected to the latter. The runner, which is cast or otherwise formed in one piece, has an enlargement *d′* at its upper end, in which is formed a circular series of curvilinear apertures *e.′* These apertures extend from the upper side of the enlargement *d′* to the outer side or edge thereof and are designed to loosely receive curved hooks *f′* at the inner ends of the stretchers, so as to permit of said stretchers being moved with ease from their closed position to their open position, and vice versa. The individual connections of the stretchers to the runner are possessed of all the advantages ascribed to

the connections of the ribs to the notch, and hence any one of the stretchers may be removed and replaced without affecting the others. The notch and the runner are each the equivalent of the other, and the claim to the notch is intended to comprehend the runner.

The notch B carries the screw C and is connected by the same to the stick A, and hence serves to connect the ribs D to the stick without the employment of extraneous means. This obviously renders the construction very simple and admits of the umbrella being easily finished in a neat manner at the top.

I have entered into a detailed description of the construction and relative arrangement of the parts embraced in the present and preferred embodiment of my invention in order to impart a full, clear, and exact understanding of the same. I do not desire, however, to be understood as confining myself to such specific construction and relative arrangement of parts, as such changes of modifications may be made in practice as fairly fall within the scope of my invention as claimed.

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

In an umbrella, the combination of a stick, a notch thereon having apertures which describe parts of circles and extend inwardly and downwardly from the outer side of the notch to the inner end of the notch, and ribs having straight portions and hooks at the inner ends of the said straight portions; the said hooks describing parts of circles and extending downwardly from the straight portions and arranged in and entirely occupying the said apertures of the notch.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

TELESPHORE H. PLANTE.

Witnesses:

ZEPHIRIN VINCENT,

EMILE P. MARTIN.