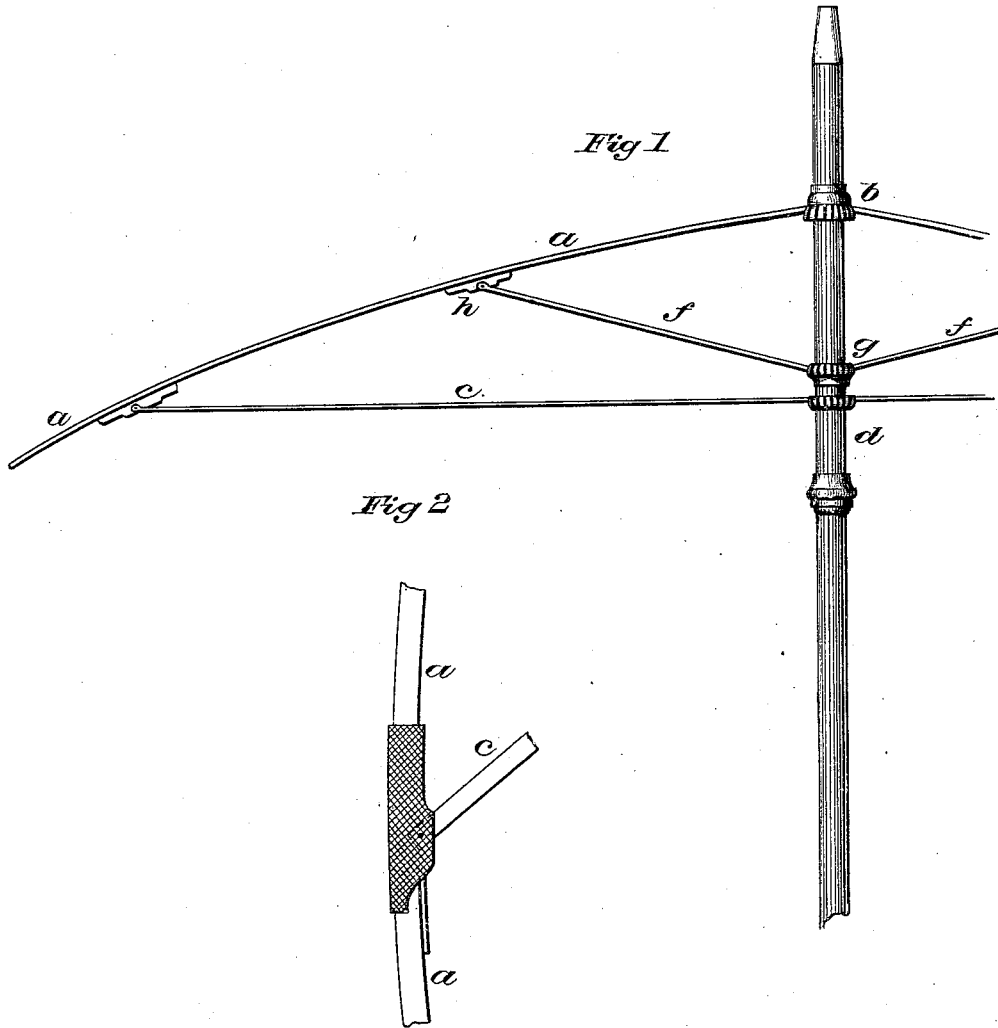


E. CHARAGEAT.  
Umbrella-Frame.

No. 205,613.

Patented July 2, 1878.



*Attest:*

*J. A. Hummer*  
*Clara Broughton*

*Inventor:*

*Emile Charageat*  
*By*  
*Wm. E. Cole*

# UNITED STATES PATENT OFFICE.

EMILE CHARAGEAT, OF PARIS, FRANCE.

## IMPROVEMENT IN UMBRELLA-FRAMES.

Specification forming part of Letters Patent No. **205,613**, dated July 2, 1878; application filed January 9, 1877.

*To all whom it may concern:*

Be it known that I, EMILE CHARAGEAT, of Paris, France, have invented Improvements in Umbrellas, Parasols, and other Similar Articles, of which the following is a specification:

By the improved frame which forms the object of my present invention I propose to give to umbrellas, parasols, and the like a firmness and stability far surpassing that hitherto secured.

While this improvement is applicable to all kinds of frames, it is particularly designed for application to that for which Letters Patent were granted to me, No. 190,551, May 8, 1877.

My invention consists in the employment of a supplementary series of stretchers independent of the runner of the large stretchers, and serving, when the umbrella is open, to form a second frame or series of stretchers, which greatly increases the resistance of the ribs to the action of the wind and all other accidental causes. On account of their shortness these small stretcher-ribs do not sensibly increase the weight of the umbrella, and, above all, I can easily re-establish its proper weight by making the whole framing lighter. The addition of this second set of stretchers has a further and very advantageous result in giving an upward pressure to the frame of large stretcher-ribs at the moment when the runner of these latter rises above or passes their horizontal position, at which said position the umbrella is fully open, and which thus insures rigidity to the frame when open, which will then better resist the force of the wind or other accidental shock; and, furthermore, the double series of stretcher-ribs give to the top of the umbrella a very regular curvature, and one incapable of being rendered unshapely, as are frames of the ordinary kind.

Figure 1 represents a portion of the complete umbrella-frame, and Fig. 2 a detail view.

The rib *a*, jointed to the top nut *b*, is again fastened by another joint to the large stretcher-rib *c*, which is itself jointed to the nut of the runner *d*. Independently of the larger stretcher-ribs *c*, I arrange a second frame of smaller cross-ribs or stretchers, *f*, jointed to a special extra nut, *g*, and a projecting piece, *h*, provided for the purpose on each rib *a* at about one-fourth of its length from the top nut *b*.

In Fig. 1, which represents the frame open, it will be seen that the top of the umbrella has a very regular curvature, which also results from the form given to the ribs of a slight arch continued throughout their length, and which also allows of the spring described in my former patent being dispensed with. The many advantages resulting from this arrangement of the double stretchers will be readily understood without further reference.

For preventing the oil which I apply to the jointing of the ribs from greasing and staining the silk of the umbrella, I bind around the joint a sort of cover, *x*, of india-rubber, as shown.

I claim—

The combination, in an umbrella provided with a runner and stretchers constructed and arranged to hold the ribs composing the frame in an extended position without the employment of the usual spring-catches on the stick, of an auxiliary runner and a second set of stretchers, substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification before two subscribing witnesses.

E. CHARAGEAT.

Witnesses:

S. S. WARD,  
ALBERT CAHENS.