## A, GILSON. Umbrella.

No. 198,374.

Patented Dec. 18, 1877.

Fig.l.

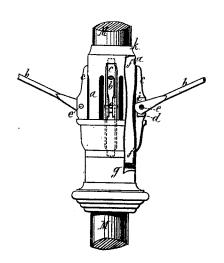
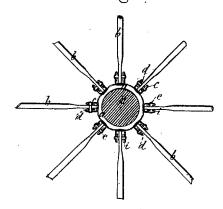


Fig. 3.



Fig. 2.



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## UNITED STATES PATENT OFFICE.

ALFRED GILSON, OF PARIS, FRANCE.

## IMPROVEMENT IN UMBRELLAS.

Specification forming part of Letters Patent No. 198,374, dated December 18, 1877; application filed November 22, 1877.

To all whom it may concern:

Be it known that I, Alfred Gilson, of Paris, France, merchant, have invented an Improvement in Umbrellas, Parasols, and like articles, of which the following is a specification:

The object of this invention is to dispense with the ordinary cap-fastener and springs, and to substitute a new arrangement of runners into the sticks or handles of umbrellas and like articles.

By my invention the ribs are kept close against the stretchers by a spring acting upon the stretchers when the umbrella is closed.

The following description, with reference to the annexed drawings, will explain the new arrangement of runner constructed in accordance with this invention.

The runner (represented in vertical section, Figure 1, and in plan, Fig. 2) is formed with a socket, a, in which are cut out a series of slots, to form a kind of gallery. The socket a presents as many full parts as there are stretchers b to the umbrella. Each of these stretchers b is jointed upon a distinct support, c, placed directly upon each full part of the socket. All these little isolated supports supply the place of the notch-ring at present employed to serve for jointing the stretchers to the runner. These supports c, one of which is seen in section, the other in elevation, upon Fig. 1, and the third in perspective, Fig. 3, are formed of a sheet or plate of metal, cut and folded in such manner as to present two side cheeks, d, between which is jointed the stretcher b upon the pin e, which also passes through the cheeks. Each cheek has a lip folded inward, as at i, for additional strength, and because the stretcher is thinner at this part. The back of each support is slit at the side, so as to separate the back and form a spring, to enable the stretcher to exercise, through its cam-shaped end, pressure to depress this part, which is, so to speak, in-

dependent of the rest of the support, this pressure being also transmitted to the upper of full part of the socket a, in such manner that the latter, in reacting, is caused, by its springiness, to act and determine the approach of the ribs when the umbrella is closed. The bottom of the support may be dispensed with, and allow the cam-shaped end of the stretcher to bear directly on the socket.

To fasten the support c within the runner-socket a, the extremities f, below the socket, are caused to take into little openings provided for this purpose. The opposite extremities f' are maintained by the socket g, which is screwed upon the runner-socket a. This lower socket a is prolonged beyond the thread, and covers the supports c at their lower jointing

The socket a of the runner, being necessarily of an elastic nature, is, preferably, made of steel. The superior molding or ring k in this socket a prevents the extremities f and f' of the support c from touching the handle M, and making scratches or streaks thereon.

Having thus described the nature of my invention, and the manner of performing it, I claim—

In an umbrella-runner, the combination of the socket a, support c, attached thereto so as to form an elastic back, and the stretchers b, constructed with cam-shaped ends, and hung in said socket, substantially as described, so that the elastic back will operate upon said cam-shaped end of the runners, to retain said stretchers in the closed position.

stretchers in the closed position.

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

A. GILSON.

Witnesses:
EMIL HELLOR,
CH. MARDALET.