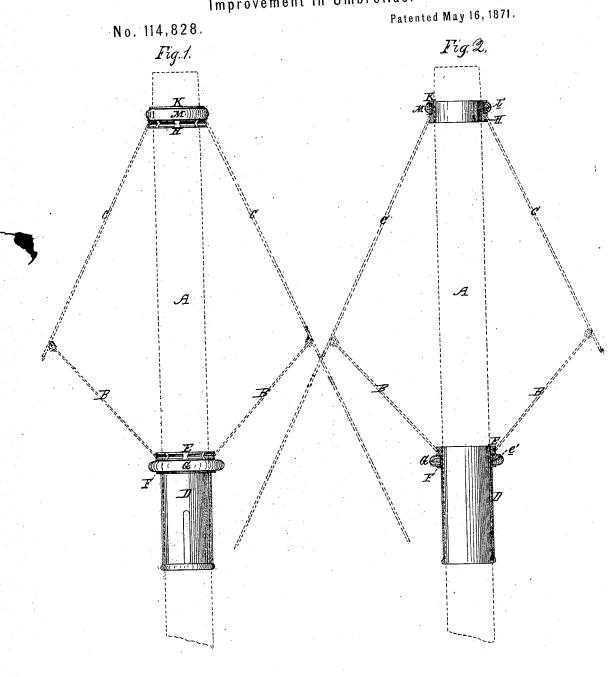
ROBERT P. KNAPP. Improvement in Umbrellas.



Witnesses: Brthun Cheill Gnile Soltz. Robert P. Minapp

United States Patent Office.

ROBERT P. KNAPP, OF NEW YORK, N. Y.

Letters Patent No. 114,828, dated May 16, 1871.

IMPROVEMENT IN UMBRELLAS.

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

I, ROBERT P. KNAPP, of New York, county of New York and State of New York, have invented certain Improvements in Umbrellas, of which the following is a specification.

The nature of my invention consists in forming or casting an annular lip or flange on the runner of an umbrella near to its serrated brace-holder, so as to form a receptacle for an India-rubber ring, and a similar lip on the stationary rib-holder outside of the serrated connection for reception of another rubber ring, said India-rubber rings being made to project a little above the serrated connections of the holders, for the purpose of preventing wear of the umbrella-covering by contact with the serrated brace and rib-holders.

I will further explain by reference to the accompa-

nying drawing, in which-

Figure 1 represents an elevation of a portion of an umbrella, showing the annular projections on the runner and rib-holder, and also the India-rubber-ring guards; and

Figure 2, a vertical section of same.

In the said drawing—

A indicates a portion of an umbrella-handle;

B, the braces; and

C, the ribs.

D is the runner, of which E is the brace-holder, with which the braces are connected by a wire, in the usual manner.

F is the annular flange, which, with the brace-holder

E, forms the receptacle, e', for the India-rubber-ring guard G.

H is the stationary rib-holder, placed near the upper end of the umbrella-handle A, said holder being serrated for reception of the ribs C, which are united to the holder by a wire, forming a hinge connection in the usual manner.

K is the annular flange, cast or formed on the upper side of the rib-holder H, and, with said rib-holder, forming the recess, l, for reception of the India-rubberring guard M.

As a manufacturer I found that the sharp angularities of the serrated holders tended to cut and to destroy the silk covering of the umbrella; and to give durability to the umbrella by preventing contact of the covering with the serrated holders, by means of the annular flange and rubber-ring guards, has been the object of my invention.

What I claim is-

The annular flanges F K and India-rubber-ring guards G M, when used in combination with the runner D and stationary holder H of an umbrella, substantially as and for the purposes described and set forth.

In testimony whereof I have hereunto set my signature this 23d day of August, 1870.

Witnesses: ROBERT P. KNAPP.
ARTHUR NEILL,

EMILE MOLTZ.