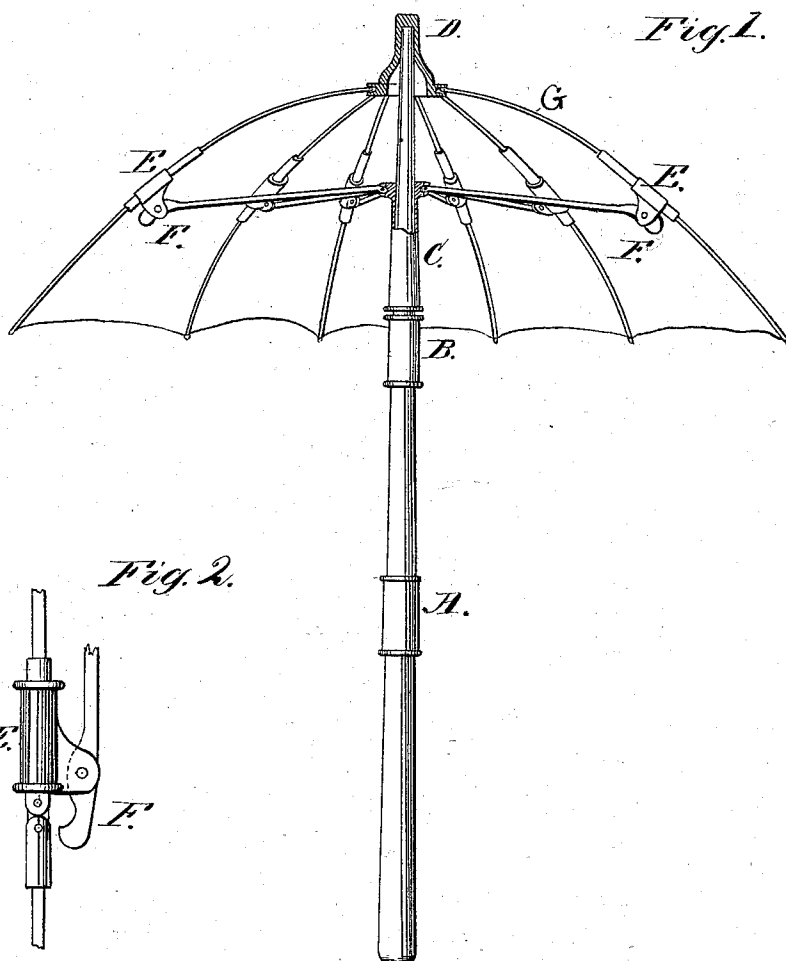


G. PHILLIPS & F. A. BURNHAM.

Folding-Umbrellas.

No.147,517.

Patented Feb. 17, 1874.



Witnesses.

N. Longo, A. Tapley
A. J. Poland

Inventors.

Gilman Phillips
F. A. Burnham

UNITED STATES PATENT OFFICE.

GILMAN PHILLIPS AND FOSS A. BURNHAM, OF BIDDEFORD, MAINE.

IMPROVEMENT IN FOLDING UMBRELLAS.

Specification forming part of Letters Patent No. **147,517**, dated February 17, 1874; application filed October 15, 1873.

To all whom it may concern:

Be it known that we, GILMAN PHILLIPS and FOSS A. BURNHAM, both of Biddeford, in the county of York and State of Maine, have invented a new and Improved Folding Umbrella; and we do hereby declare that the following is a true and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The object of our invention is to enable umbrellas to be packed in a small compass for the convenience of travelers and others having occasion to use them; and in order that all such may understand their construction and operation, we will proceed to describe one.

We construct our umbrella as follows: The shaft consists of three pieces of wood or other material, united by joints, and secured by metallic cylinders sliding from above downward over the joints. The cylinders are lettered, respectively, A B C. The shaft terminates with a hollow flange of metal, marked D, and is so constructed as to receive the cylinder marked C when the umbrella is closed. The ribs are composed of two pieces of suitable material, united by joints, and secured by sliding metallic cylinders, marked E E. The cylinders are kept in their places by hooks, marked F F, attached to the braces supporting the ribs, and connected with the flange on the top of the cylinder C, as in ordinary umbrellas; but the mode of action of the cylinder C is just the reverse

of that in the ordinary umbrella. In order to open the umbrella, the cylinder C must be drawn down instead of being pushed up.

When the umbrella is closed, the necessary steps to be taken in order to open it are as follows: Straighten the shaft and let the cylinders A and B slide down to secure it. Then, holding the umbrella in the right hand, with the point upward, strike the base of the shaft with the left hand in order that the cylinders on the ribs may slide into their places. Then take hold of the cylinder C and pull down, and the umbrella will open.

If desirous of closing it, relieve the cylinder C from the spring which holds it, and strike the point of the umbrella on the ground, that the cylinders on the ribs slide back into their places, when the ribs may be easily folded together. Push the cylinders A and B upward, and the shaft may in like manner be folded.

What we claim exclusively as our invention is—

The flange D, cylinders E E, hooks F F, and jointed ribs G, all combined and arranged to operate substantially as and for the purpose set forth.

GILMAN PHILLIPS.
FOSS A. BURNHAM.

Witnesses:

ALONZO A. TAPLEY,
ALVIN J. POLAND.