G. B. CANNON, JR., AND F. W. HOWARD.

UMBRELLA.

APPLICATION FILED APR. 7, 1919.

1,356,265. **Patented Oct. 19, 1920.**

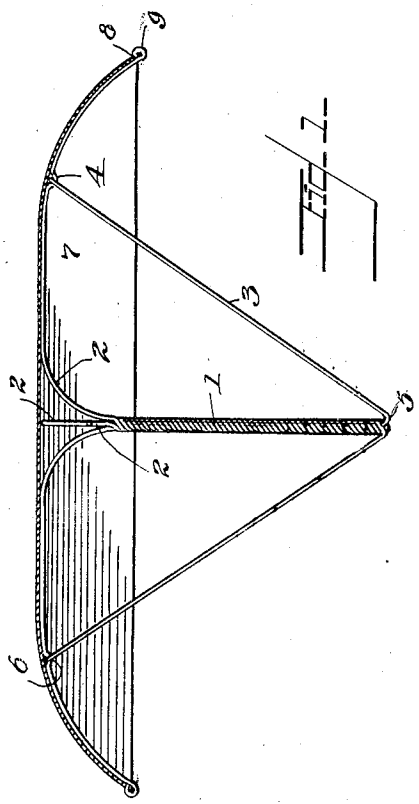


FIG. 1.

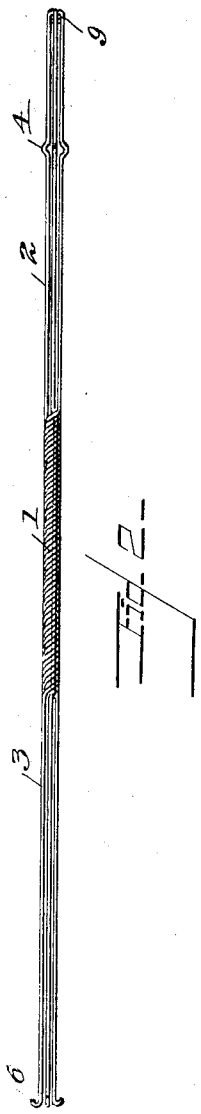


FIG. 2.

Inventors:
George B. Cannon Jr.
Frank W. Howard
by
Francis D. Cannon
their Atty

UNITED STATES PATENT OFFICE.

GEORGE B. CANNON, JR., OF BROOKLYN, AND FRANK W. HOWARD, OF NEW YORK, N. Y.

UMBRELLA.

1,356,265. Specification of Letters Patent. Patented Oct. 19, 1920.

Application filed April 7, 1919. Serial No. 287,992.

To all whom it may concern:

Be it known that we, GEORGE B. CANNON, JR., and FRANK W. HOWARD, citizens of the United States, and residents of Brooklyn, in the county of Kings, State of New York, and New York city, in the county of New York, respectively, and State of New York, have invented certain new and useful Improvements in Umbrellas, of which the following is a specification.

This invention relates to umbrellas, and the general object of the invention is to produce an umbrella, the frame of which is of very simple construction enabling the ribs and stretchers to be readily formed of wires without necessitating the use of special means for attaching the same to the stick. Our general purpose is to produce an umbrella which can be very economically manufactured and placed on sale for a nominal price. To this end it is contemplated to employ a cover on the frame which would be formed of a relatively inexpensive material such as water proof paper.

The invention consists in the features of construction and details set forth in the accompanying specification and claims all of which contribute to produce a simple and efficient umbrella.

In the drawing which fully illustrates a preferred embodiment of our invention,

Figure 1 is a vertical central section through the umbrella cover and illustrating the construction of the frame;

Fig. 2 is a side elevation showing the elements of the frame at one stage in the manufacture of the completed frame.

According to our invention we provide a stem from the upper end of which the rib wires extend upwardly and outwardly, and from the lower portion of which the stretcher wires extend up to connect with the ribs.

Referring more particularly to the parts, 1 represents a central stem which may constitute the stick-portion of the frame. From the upper portion of this stem, wires 2 extend upwardly and outwardly, each wire being disposed in a curve near the stem, see Fig. 1. These wires constitute ribs of the umbrella.

In order to hold the ribs extended we provide stretchers 3 which are also in the form of wires, which extend from the lower portion of the stem. The stem 1 may be as long or as short as desired. It may be formed by twisting a plurality of wires, for example, four wires together near their middle portions so as to form a short central rod or stem 1, (see Fig. 2). Beyond the ends of this part which is to become the stem (corresponding to the stick-portion of the frame) the wires extend longitudinally in parallel relation. In this way the ribs and stretchers may be integral extensions of the wires of the stem. The wires are composed of a resilient material such as steel so that they will readily flex.

Any suitable means may be provided to form a connection between the stretchers 3 and the ribs 2. This is preferably accomplished by forming the rib wires 2 with bent portions or sockets 4 at a suitable intermediate point on their length.

The stretcher wires 3 are also bent at the lower portion of the stem, for example at the point 5 (see Fig. 1), so that they extend upwardly in an inclined direction. These stretcher wires 3 are preferably formed with hooks 6 at their extremities which may hook into the bends or sockets 4.

The cover 7 of the umbrella in the present instance will be of square form, as the umbrella has only four ribs. However, there may be six ribs if desired, in which case, of course, the umbrella cover would be of hexagonal form. The edges of the umbrella will be provided at the points 8 with suitable eyelets, not shown, which will be engaged by the upwardly bent ends of the ribs 2 which form eyes 9 respectively engaging the eyelets.

It is evident that a frame having the features described above can be very inexpensively produced. Such a frame is particularly adapted for use with a cover of waterproof paper because it avoids the necessity for attaching the cover to the stick, and subjects the cover to slight strains.

We do not limit ourselves, in any way, to the particular means illustrated for connecting the stretchers to the ribs.

It is understood that the embodiment of the invention described herein is only one of the many embodiments or forms this invention may take, and we do not wish to be limited in the practice of our invention nor in our claims to the particular embodiment set forth.

What we claim and desire to secure by Letters Patent is:—

1. An umbrella frame having a central

stem, and having a plurality of wires extending upwardly and outwardly from the upper portion of said stem and constituting ribs for the umbrella, and a plurality of wires connected to the lower portion of said stem and connected with said ribs to form stretchers.

2. An umbrella frame having a central stem comprising a plurality of wires twisted together, said wires having upper integral extensions projecting upwardly and outwardly from the upper end of said stem and constituting ribs of the umbrella, said wires also having integral extension projecting from the lower end of said stem and connected with said ribs to form stretchers.

3. An umbrella frame having a central stem comprising a plurality of wires twisted together, said wires having integral extensions projecting upwardly and outwardly from the upper portion of said stem and constituting ribs of the umbrella, said wires also having integral extensions projecting upwardly from the lower portion of said stem and connected with said ribs to form stretchers.

4. An umbrella frame having a central stem comprising a plurality of wires twisted together, said wires having integral extensions projecting upwardly and outwardly from the upper portion of said stem and constituting ribs of the umbrella, said wires also having integral extensions projecting upwardly from the lower end of said stem, and constituting stretchers, said ribs having bent portions for attachment to the ends of said stretchers.

5. In an umbrella, the combination of a frame having a central stem consisting of a plurality of wires twisted together, said wires having integral extensions projecting upwardly and outwardly from the upper end of said stem and constituting ribs of the umbrella, said wires also having integral extensions projecting upwardly from the lower portion of said stem and constituting stretchers, and connected to said ribs, and a cover supported by said ribs.

Signed at New York city in the county of New York and State of New York this first day of April A. D. 1919.

GEORGE B. CANNON, JR.
FRANK W. HOWARD.