G. NEU, SR.

UMBRELLA.

APPLICATION FILED FEB. 25, 1916.

1,228,810. Patented June 5, 1917.

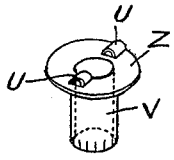


FIG. 2.

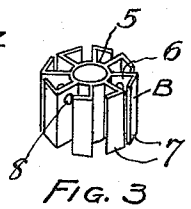


FIG. 3

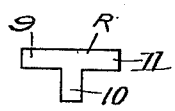


FIG. 4.

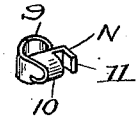


FIG. 5.

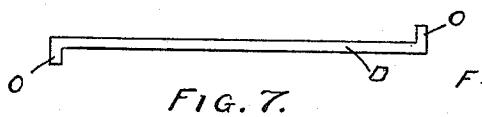


FIG. 7.

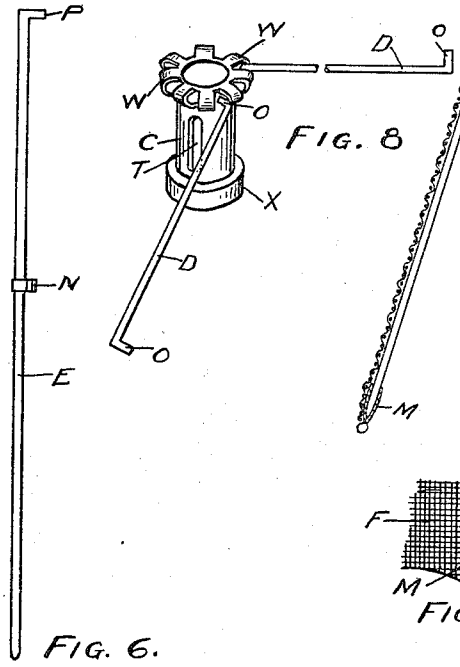


FIG. 8

FIG. 6.

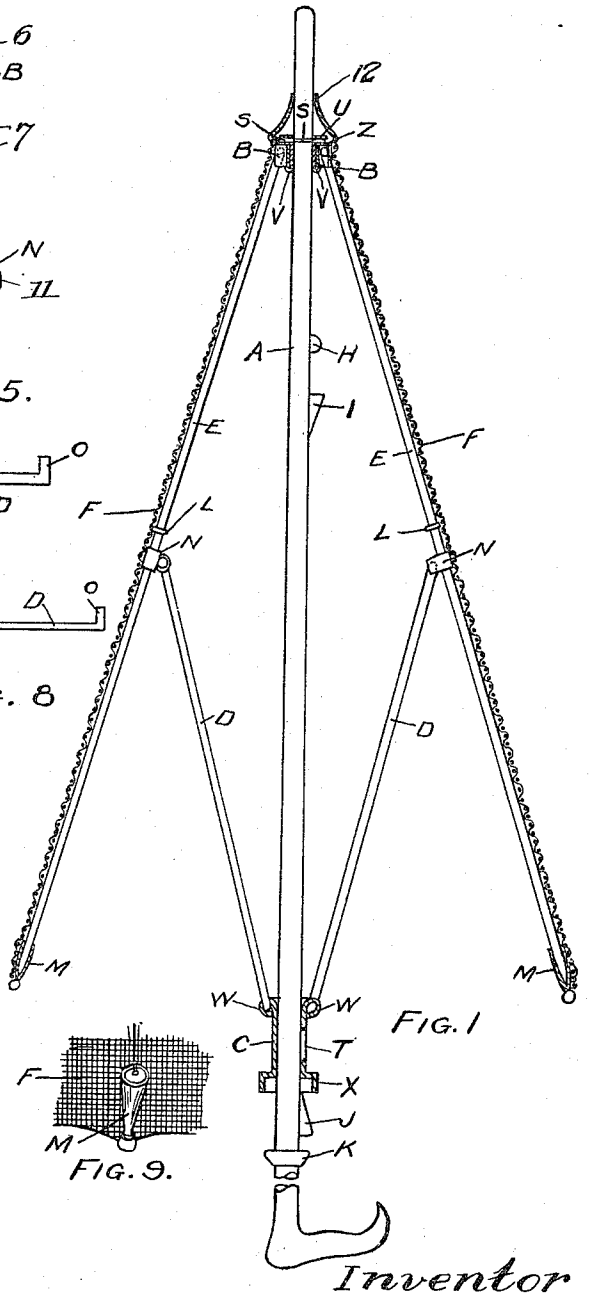


FIG. 1

FIG. 9.

Witnesses

C. M. Fahnestock

Clifford Yerkes

Inventor

George Neu Sr

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GEORGE NEU, SR., OF CINCINNATI, OHIO.

UMBRELLA.

1,228,810. Specification of Letters Patent. Patented June 5, 1917.

Application filed February 25, 1916. Serial No. 80,544.

To all whom it may concern:

Be it known that I, GEORGE NEU, Sr., a citizen of the United States, residing at Cincinnati, Ohio, have invented new and useful Improvements in Umbrellas, of which the following is a specification.

The invention relates to an umbrella, and has for its primary object the provision of an umbrella wherein the ribs and braces are swingingly connected to the crown and the runner without the use of wire, so that the skeleton frame of the umbrella is constructed without the necessity of the use of wire, or other like fasteners, and the said skeleton frame is rendered strong and less complicated in its make-up than the frame of the ordinary umbrella.

Another object of the invention is the provision of an umbrella wherein the skeleton frame has the cover thereon secured in a novel way, without necessitating the stitching or sewing of the cover upon said skeleton frame, and thus any part of the skeleton frame can be removed with despatch for the placing of a new part therein in event of breakage of the frame.

A further object of the invention is the provision of an umbrella of this character wherein the construction in its entirety is novel in form to insure maximum strength, and also to increase the longevity of the umbrella when in use.

A further object of the invention is the provision of an umbrella wherein the construction thereof makes it impossible for the umbrella to turn inside out when in use.

A still further object of the invention is the provision of an umbrella of this character which is extremely simple in construction, thoroughly reliable, and efficient in its operation, strong, durable, and inexpensive in manufacture.

With these and other objects in view, the invention consists in the features of construction, combination, and arrangement of parts as will be hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claim hereunto appended.

In the accompanying drawing, Figure 1 is a vertical sectional view through an umbrella, constructed in accordance with the invention, the frame of the umbrella being shown slightly opened.

Fig. 2 is a perspective view of the crown ferrule.

Fig. 3 is a perspective view of the crown member.

Fig. 4 is a plan view of the blank from which the brace joint is made.

Fig. 5 is a perspective view of the brace joint completed.

Fig. 6 is a side elevation of one of the ribs of the umbrella.

Fig. 7 is a plan view of one of the braces.

Fig. 8 is a perspective view of the runner showing one of the braces swingingly connected thereto and another brace in position for swinging engagement with the runner.

Fig. 9 is a perspective detail of one of the socket members in position.

Similar reference characters indicate corresponding parts throughout the several views in the drawing.

Referring to the drawing in detail, the umbrella comprises a stick or staff A, which is of the required length, and has at one end a suitable handle as usual, while on the opposite end is mounted a crown piece B, which includes a hub 5, and radially disposed wings 6, which are spaced an equal distance apart and extend longitudinally of the said hub 5, the wings being bent at right angles to form retaining flanges 7, while said wings are provided with apertures 8, which together with the said flanges 7 are for a purpose presently described.

Slidably mounted upon the stick or staff A is a runner C which swingingly supports a plurality of braces D, pivotally connected to a plurality of ribs E, forming the skeleton frame of the umbrella.

Supported upon the ribs E of the skeleton frame of the umbrella is the covering F, which is fastened in a manner presently described.

The stick or staff A has mounted therein a stop H which is spaced from the crown piece B, and limits the movement of the runner C upon said stick or staff A when the same is moved in a direction for the opening of the umbrella.

Mounted within the stick or staff are the usual catches I and J respectively, one of which serves to lock the runner C in position for holding the umbrella open while the other catch serves to fasten the umbrella closed.

The covering F has mounted on the inner face thereof near the outer free edge at intervals substantially cone-shaped socket members M, which receive the outer ends of the ribs E, while secured to the said ribs intermediate the ends thereof are brace joints N each being made from a substantially T-shaped blank R, which has one branch bent to form an eye 9, which snugly embraces the rib E, carrying the said joint, the eye being soldered or otherwise fastened thereto, while another branch is bent to form a pintle sleeve 10, for receiving the right angular pivot terminal O of the brace D, the remaining branch of the said blank being also bent to provide an abutment wing 11 which prevents the pivot terminal O of the brace D from working out of the pintle sleeve 10, and in this manner the brace D is pivotally connected to said rib.

The hub 5 of the crown piece B is fitted upon a crown sleeve V, which is formed with an out-turned annular flange Z, provided with diametrically opposed eyes U, in which is received a fastening pin S, the same being passed transversely through the stick or staff A for the fastening of the sleeve V thereon.

The cover F is secured at the point thereof concentrically with respect to the stick or staff A between the disk Z and the ferrule collar 12, as shown in Fig. 1 of the drawing.

Each rib E is formed with a right angular terminal P which engages in the opening 8 in the crown piece B, and in this manner the said ribs are swingingly connected to the crown piece, the flanges 7 on the wings being designed to hold the ribs pivotally connected with the crown piece.

The runner C, at its inner end is cut and bent to form a plurality of radially disposed eyes W, in which are received the other pivot terminals O of the brace D, and in this manner, the latter are swingingly connected to the runner, which is also provided with a slot T for receiving the catch J to lock the umbrella closed.

The outer end of the runner C is formed with an enlarged hollow portion X to receive the handle band K when the umbrella is closed.

It will be obvious that the cover is mounted upon the frame of the umbrella without the sewing thereof thereto. Also it will be noted that the braces and ribs of the umbrella are swingingly connected without the use of wire.

From the foregoing, it is thought that the construction and manner of assemblage of the umbrella will be clearly understood, and therefore, a more extended explanation has been omitted.

What is claimed is:—

In a device of the character described, in combination, with a rib, a brace joint secured thereto, said brace joint being formed substantially from a T-shaped metal blank, said T-shaped blank having one of its alining arms curled around in one direction so as to provide a loop, the arm at right angles to the last-named arm being curled back at right angles to the plane of said last-named loop, while the third and remaining arm is bent back at right angles upon itself so as to be spaced apart from the adjacent edge of said second named curled portion, and a rib having a right angular terminal of a length sufficient to project into said second-named curled portion as said rib also engages said right angular portion of the third arm.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE NEU, Sr.

Witnesses:
AUGUST TAPPE,
CHAS. D. CHERDRON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."