

(No Model.)

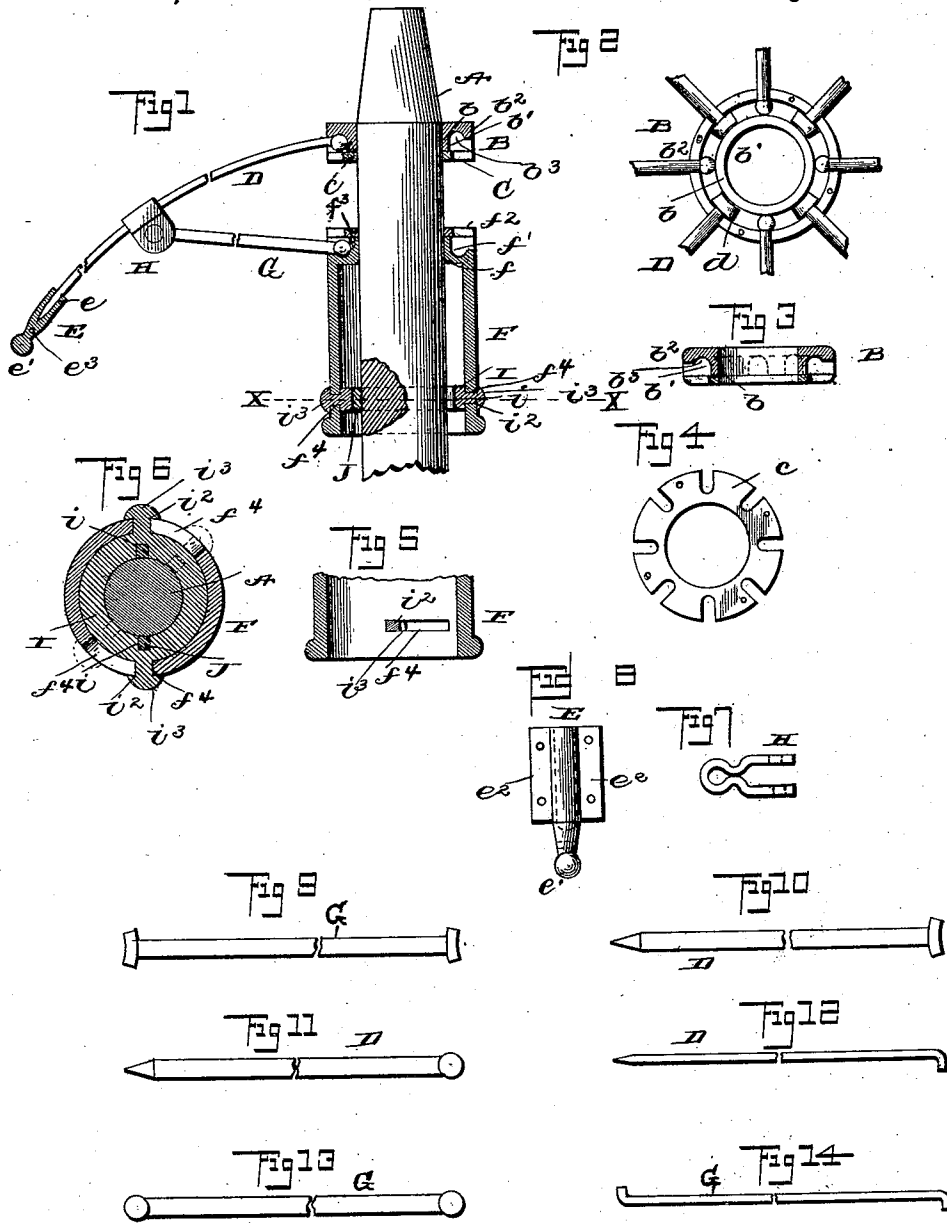
B. F. AULD, Dec'd.

E. M. AULD, Administratrix.

UMBRELLA.

No. 475,028.

Patented May 17, 1892.



Witnesses

John Tammie
Wm J. Lucee

Inventor
Benjamin F. Auld,
By his Attorney,
J. R. Lucee

UNITED STATES PATENT OFFICE.

BENJAMIN F. AULD, OF PHOENIXVILLE, PENNSYLVANIA; EMILY M. AULD
ADMINISTRATRIX OF SAID BENJAMIN F. AULD, DECEASED.

UMBRELLA.

SPECIFICATION forming part of Letters Patent No. 475,028, dated May 17, 1892.

Application filed July 8, 1891. Serial No. 398,776. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. AULD, a citizen of the United States, residing at Phoenixville, in the county of Chester and State of Pennsylvania, have invented certain new and useful Improvements in Umbrellas; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in umbrellas and parasols; and it consists in the novel construction and arrangement of parts hereinafter fully described, and afterward definitely pointed out in the claims, due reference being had to the accompanying drawings, forming a part of this specification, wherein—

Figure 1 represents a longitudinal sectional view of my improved umbrella or parasol frame, a portion of the stick and of the ribs and stretchers not being shown; Fig. 2, a bottom view of the annulus, in which the upper ends of the ribs have their bearings, the cap-plate being removed; Fig. 3, a central vertical sectional view of said annulus, the cap-plate being in position; Fig. 4, a bottom plan view of the cap-plate; Fig. 5, a partial vertical section of the runner, the fastening-ring not being shown; Fig. 6, a horizontal section on the line X X, Fig. 1, showing the runner on the stick. Fig. 7 is a detail view of the clip employed for securing the stretchers to the ribs; Fig. 8, a similar view of the rib-tip; Figs. 9 and 10, plan views, respectively, of the stretcher and rib; and Figs. 11, 12, 13, and 14, similar views of modified forms of ribs and stretchers.

Referring to the drawings, the letter A indicates the upper portion of the umbrella or parasol stick, to near the tip of which is secured an annulus B, consisting of a hub b , having an annular flange b' , with a depending flange b^2 , being recessed at suitable intervals, as at b^3 , to receive the ribs.

C indicates the cap-plate, adapted to fit about the stick A and is secured to the under side of the annulus B by means of screws c .

D indicates the ribs, preferably formed at their upper ends with T-shaped heads d and pointed at their lower ends, the T-shaped heads d being confined between the annulus

B and cap-plate C, as shown, and adapted to freely swing therein by means of the recesses b^3 . Upon the lower ends of the ribs D are secured tips E, each consisting of a hollow shank e , provided at its extremity with a rounded nib e' and upon each side with a web e^2 , the webs e^2 being perforated, by which means the cover can be attached by sewing, and the extremity of the tip E is also perforated, as at e^3 , to permit the extreme edge of the cover to be whipped thereto in the usual manner.

F indicates the runner, consisting of a cylinder provided at its upper end with an inwardly and upwardly turned flange f , having an annular groove f' and a cap-plate f^2 , secured thereto by screws f^3 , all constructed and arranged in similar manner to the annulus B and cap-plate C, before described.

Between the upper end of the runner F and cap-plate f^2 are secured the inner headed ends of the stretchers G, the outer headed ends of said stretchers being secured to clips H, secured to the ribs D. Said clips H consist of oblong blanks of the shape shown, perforated at each end and bent to tightly encircle the ribs D, the perforations in their ends registering and adapted to be sprung apart to embrace and form bearings for the outer headed ends of the stretchers G.

I indicates a rotating ring adapted to fit within the lower end of the runner F and encircle the stick and provided with opposite interior recesses or slots i , which are adapted to register with lugs J, secured to the stick A. Said ring I is provided with arms i^2 , which project through slots f^4 , formed in the lower end of the runner F, and are provided with thumb projections i^3 , by means of which said ring may be rotated. The slots f^4 are preferably of such a length as to permit the ring I to be revolved forty-five degrees about the stick, and when in the position shown by full lines in Fig. 6 said runner may be raised or lowered upon the stick to raise or lower the umbrella or parasol, the recesses i permitting the ring I to pass over the lugs J, secured to the stick A; but when raised or lowered the ring I is partially turned by means of the thumb projections i^3 , preventing the runner F from raising or lowering and maintaining the umbrella in a raised or lowered position.

Instead of forming the headed ends of the ribs and stretchers T-shaped, as before described, they may be provided with spherical-shaped ends, as shown in Figs. 11 and 13, or with L-shaped ends, as shown in Figs. 12 and 14; but I prefer the T-shaped form as more effectually preventing the liability of the ribs or stretchers twisting in the operation of raising and lowering the umbrella or parasol.

10 Having described my invention, what I claim is—

1. In an umbrella or parasol, the combination, with the stick provided with longitudinally-arranged lugs or projections, of a collar 15 carried by the stick and having an annular groove, slots radiating therefrom, and a radially-slotted cap, ribs provided with heads bearing in said collar, a runner consisting of a cylinder provided with horizontal slots, and 20 an adjustable ring provided with interior slots

adapted to register with the lugs or projections, said ring having arms projecting through the horizontal slots in the cylinder, and stretchers connected with the ribs and provided with heads bearing in recesses therefor in the runner, substantially as set forth. 25

2. In an umbrella or parasol, the combination, with the stick provided with lugs, of the ribs and stretchers, a runner consisting of a cylinder provided with horizontal slots, and 30 a rotating ring provided with interior slots adapted to register with said lugs and having arms projecting through said horizontal slots, substantially as shown and described.

In testimony whereof I affix my signature in 35 presence of two witnesses.

BENJAMIN F. AULD.

Witnesses:

J. R. LITTELL,

M. J. McMAHON.