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L. N. DE LARRANAGA.

FOLDING UMBRELLA.

APPLICATION FILED SEPT. 21, 1904.

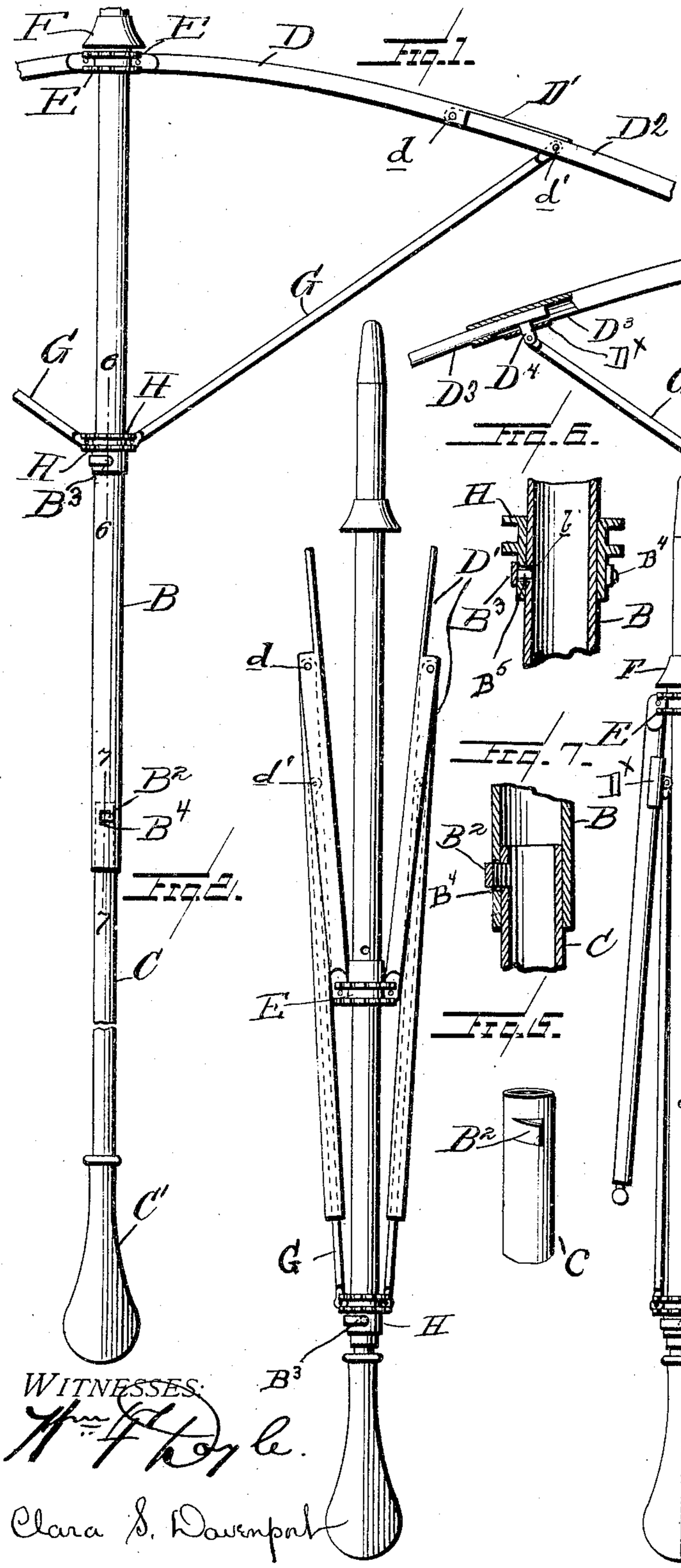


FIG. 1.

FIG. 2.

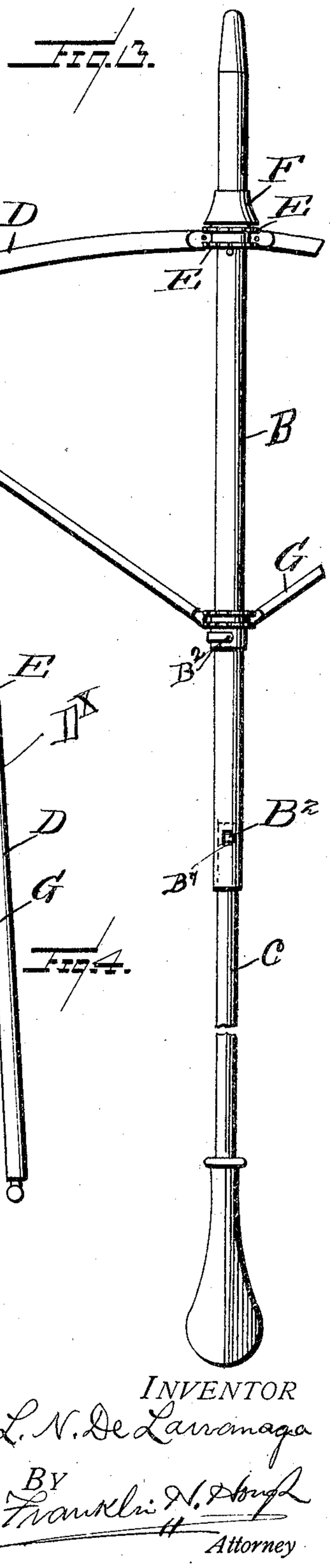
FIG. 3.

FIG. 4.

FIG. 5.

FIG. 6.

FIG. 7.



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No. 793,568. Patented June 27, 1905.

UNITED STATES PATENT OFFICE.

LOUIS NICKOLAS DE LARRANAGA, OF CLARKSVILLE, IOWA.

FOLDING UMBRELLA.

SPECIFICATION forming part of Letters Patent No. 793,568, dated June 27, 1905.

Application filed September 21, 1904. Serial No. 225,363.

To all whom it may concern:

Be it known that I, LOUIS NICKOLAS DE LARRANAGA, a citizen of the United States, residing at Clarksville, in the county of Butler and State of Iowa, have invented certain new and useful Improvements in Folding Umbrellas; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in folding umbrellas; and it has for its object the provision of a simple, durable, and efficient umbrella of this description which may be readily folded into small compass for convenience, both in carrying and also in transportation, the construction being such as to adapt an umbrella of ordinary size to be folded within such a compass as to be readily packed in an ordinary trunk or satchel.

More specifically, the invention comprises a stick composed of two telescoping sections, with means whereby the length of the stick may be adjusted and the parts conveniently and securely locked in their relative positions.

The invention relates, further, to certain details of construction whereby the frame of the umbrella may be readily folded against the stick, all as will be more fully described, and shown in the accompanying drawings, and then specifically defined in the appended claims.

The invention is clearly illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a portion of my umbrella-frame, the same being shown as open and with the telescoping and hinged parts shown in the positions occupied when the umbrella is in readiness for use. Fig. 2 is a like view showing the umbrella-frame folded. Fig. 3 is a side elevation of a modification. Fig. 4 is a side elevation of the construction shown in Fig. 3, the frame being shown as folded; and Fig. 5 is an enlarged detail view in perspective of the member employed in locking the telescoping sections of the stick. Fig. 6 is a sectional view taken on line 6 6 of Fig. 1, and Fig. 7 is a sectional view taken on line 7 7 of Fig. 1.

Reference now being had to the details of the drawings by letter, the stick of the umbrella is made up of two sections B and C. The section C, to which is attached a handle C′, has an upset resilient lug b^2. (Shown clearly in Fig. 5 of the drawings.) Said section C is of smaller diameter than the section B, in which it telescopes, and an aperture B^4 is provided near one end of the section B and in which said resilient lug B^2 is adapted to spring for the purpose of holding the sections extended, as shown in Fig. 1 of the drawings. When it is desired to telescope the sections, a partial rotary movement is imparted to one or the other of said sections in such a manner as to cause the lug to retract within the section B and allow the sections to move longitudinally. The section B has a runner H thereon, to which are pivotally connected the stretchers G, and B^3 designates a flexible finger, semicylindrical in shape, as shown in Fig 6 of the drawings, attached to the runner. Said flexible finger carries near its free end a pin B^5, which is positioned in an aperture in the circumference of said runner and is designed to also engage an aperture *b* in the section B when the two apertures come into registration, as shown in Fig. 6, whereby the runner may be held in the position shown in Fig. 1 of the drawings.

Referring to Figs. 1 and 2 of the drawings, F designates a thimble fitted to the section B, and E is a notch to which the ribs D are pivotally connected. The outer end of each rib has an overhanging projecting portion D′, and D^2 designates a section of the rib which is pivoted at *d* to the rib D. Said pivotal point between the rib-sections, it will be observed upon reference to Fig. 1, is between the walls of the rib-sections D, which are of the usual construction U-shaped in cross-section. The stretchers G are pivotally connected to the rib-sections D^2 by means of pins *d*′, which pivotal pins when the rib-sections are in alinement are positioned adjacent to the end of said overhanging portion D′.

Referring to Fig. 2 of the drawings, there will be seen the form of construction shown in Fig. 1 with the parts folded, in which the runner assumes the position shown, while the stretchers G fold within the sections D^2.

Referring to Figs. 3 and 4 of the drawings, I have shown a slight modification in which the rib-sections D^3 telescope within the ribs D, and to each section D^3 is fastened a lug D^4, which is pivotally connected to the stretcher G. To each of said lugs D^4 is connected a semicylindrical plate $D^\times$, as shown clearly in Fig. 4 of the drawings, which is adapted to guide the telescoping rib-section D^3 within the hollow rib-section D.

By the provision of the construction shown and described it will be observed that an umbrella is produced which may be easily and conveniently reduced to a small compass for the purpose of packing and convenience in transportation and may be readily opened out when ready for use.

While I have shown a particular form of apparatus illustrating my invention, it will be understood that I may vary the details of the same, if desired, without in any way departing from the spirit of the invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A folding umbrella having a stick made up of telescoping sections, one of said stick-sections having a resilient lug struck up therefrom and adapted to spring into an aperture in the section in which it telescopes, a runner mounted upon one of said sections of the stick, a notch, ribs pivotally connected to said notch, stretchers connecting said runner and ribs, a semicircular resilient finger fixed at one end to said runner, a pin near the free end of said finger adapted to engage registering apertures in said runner and one of the stick-sections whereby the stretchers may be held extended, as set forth.

2. A folding umbrella made up of two telescoping sections, a runner, a resilient finger carried by said runner and adapted to engage registering apertures in the runner and one of the stick-sections, a movable notch mounted upon one of said sections, rib-sections pivotally connected to said notch and each provided with an overhanging projecting portion at the outer end thereof, an outer rib-section pivotally connected to said first-mentioned rib-section, stretchers pivotally connecting said runner with the outer rib-sections adjacent to the ends of said overhanging projecting portion of the inner rib-sections, as set forth.

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

LOUIS NICKOLAS DE LARRANAGA.

Witnesses:
C. G. SCHELLENGER,
LOUIS SLIMMER.