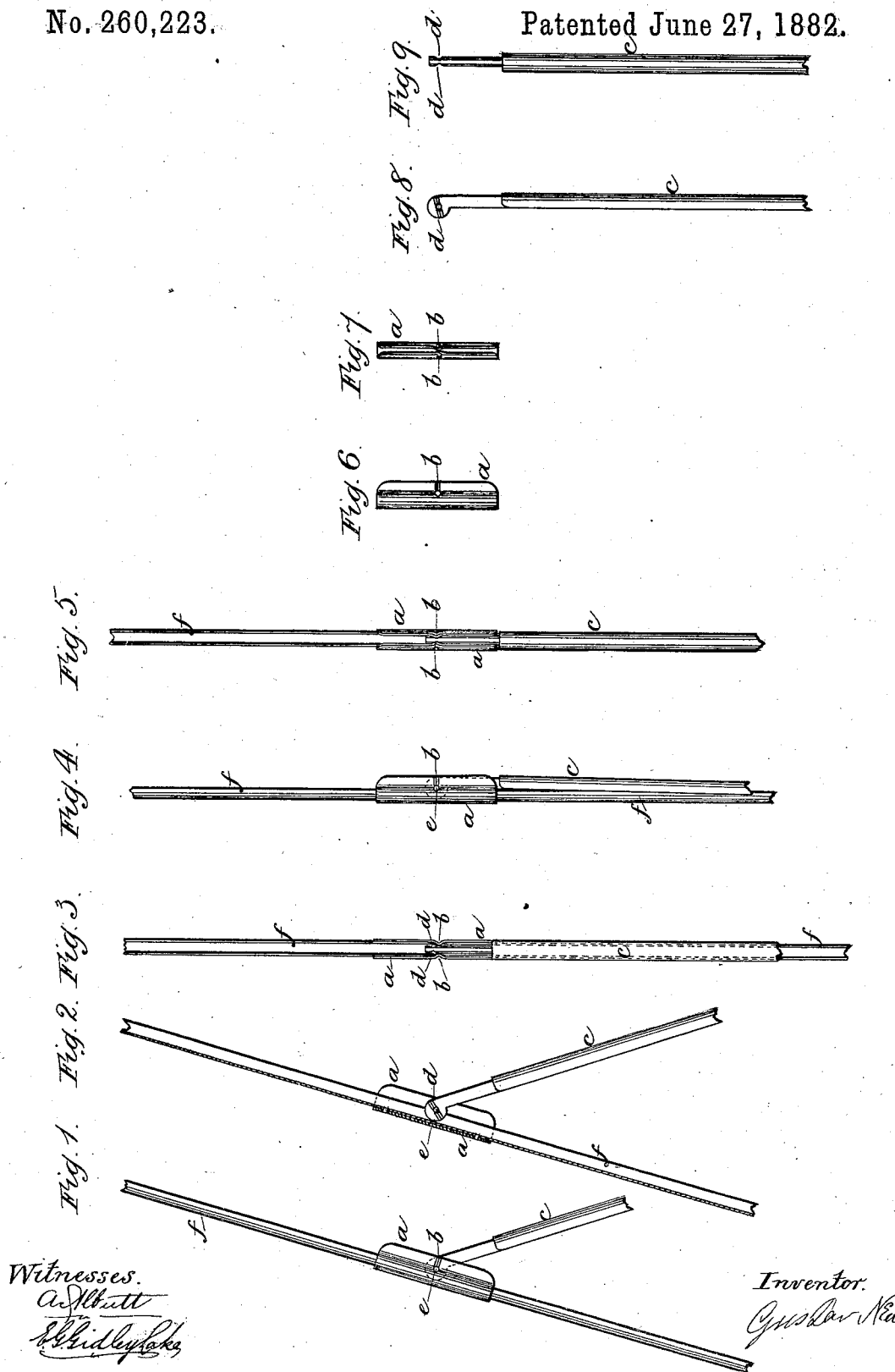


(Model.)

G. NEU.
UMBRELLA.

No. 260,223.

Patented June 27, 1882.



UNITED STATES PATENT OFFICE.

GUSTAV NEU, OF LONDON, ENGLAND, ASSIGNOR TO SEPTIMUS EDMUNDUS CARLISLE AND ALFRED PORTWAY, BOTH OF SAME PLACE.

UMBRELLA.

SPECIFICATION forming part of Letters Patent No. 260,223, dated June 27, 1882.

Application filed June 17, 1881. (Model.) Patented in England March 19, 1881, No. 1,209; in France June 7, 1881, No. 143,247, and in Germany June 4, 1881, No. 17,494.

To all whom it may concern:

Be it known that I, GUSTAV NEU, a subject of the Queen of Great Britain, residing at London, England, have invented new and useful Improvements in Umbrella-Frames, of which the following is a specification.

This invention relates to improvements in umbrella or like frames, the object of the improvements being to so construct the joint of the rib and stretcher that when the umbrella is closed the ribs shall be automatically locked or held against the stretchers, whereby the use of the usual tip-cap may be dispensed with.

In carrying out my improvements I form the "gate" or "middle-bit" of spring-steel, and on the inner surface of each side of such gate I form a projection at right angles to the axis of the gate. The end of the stretcher through which the joint passes is formed on each side with a groove or slot corresponding with the said projections in the gate.

In order to make my invention better understood, I will proceed to describe the same by reference to the accompanying drawings, in which—

Figure 1 represents a side elevation, Fig. 2 a section, and Fig. 3 a front elevation, of part of a rib and stretcher of an umbrella-frame with my improvements applied thereto, and showing the position occupied by the parts when the umbrella is partly opened. Fig. 4 is a side elevation, and Fig. 5 a front elevation, showing the position the said parts occupy when the umbrella is closed. Figs. 6 and 7 are detached views of the spring-gate; and Figs. 8 and 9 are detached views, showing the end of the stretcher.

Similar letters in all the figures represent similar parts.

a is the gate or middle-bit, which I make of spring-steel, and pass the same over the rib *f* and rivet or otherwise fix it thereto.

b is the projection, formed by stamping or otherwise on the inner surface of each side of the said gate and at right angles to the axis thereof.

c is the stretcher. *d* is the groove or slot formed on each side of the end of the stretcher *c*, through which the joint-pin *e* passes. The said grooves or slots *d* correspond with the said projections *b* in the gate *a*, but are placed at a slight angle thereto, so as to cause the spring-gate to more firmly lock the stretcher and rib together.

By this construction of joint it will be understood that when the umbrella is closed the projections *b* on the gates *a* will take or spring into the grooves or slots *d* in the ends of the stretchers *c*, and will thus hold or lock the ribs *f* and stretchers *c* together and keep them against the stick of the umbrella, and the use of the usual tip-cap may be dispensed with.

Having thus described the nature of my said invention and the best means with which I am acquainted for carrying the same into effect, I would have it understood that I do not confine myself to the precise details herein laid down, as the same may be varied without departing from the peculiar character of the invention; but

What I do claim is—

1. The improved locking-joint for umbrella or like frames, consisting of the gate or middle-bit *a*, having transverse indentations or projections *b*, and of the stretcher *c*, having corresponding transverse grooves, and of joint-pin or rivet *e*, substantially as shown and described.

2. An umbrella or like article constituted with a frame provided with self-locking joints for the ribs and stretchers, such joints being constituted of a joint-pin or rivet, *e*, of projections on the gate or middle-bit of the ribs, and of corresponding grooves on the inner ends of the pivoted stretchers.

GUSTAV NEU.

Witnesses:

A. ALBUTT,
E. G. GIDLEY LAKE.