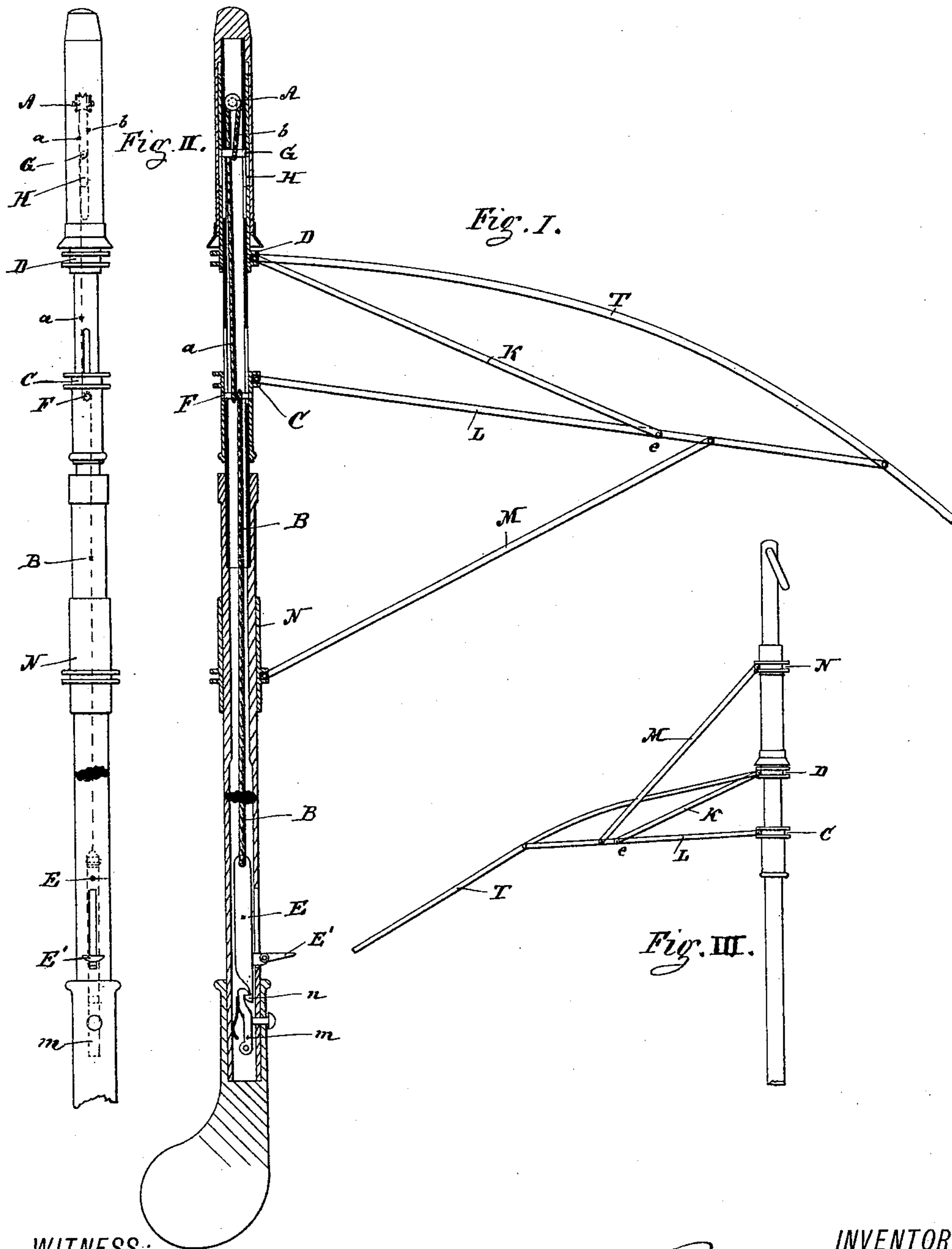


(No Model.)

R. GEISLER.
UMBRELLA.

No. 330,010.

Patented Nov. 10, 1885.



WITNESS:

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ROBERT GEISLER, OF LEIPSIC, GERMANY.

UMBRELLA.

SPECIFICATION forming part of Letters Patent No. 330,010, dated November 10, 1885.

Application filed October 21, 1884. Serial No. 146,430. (No model.)

To all whom it may concern:

Be it known that I, ROBERT GEISLER, a citizen of Germany, residing at Leipsic, in the Empire of Germany, have invented a new and
5 useful Improvement in Umbrellas, of which the following is a specification.

In the accompanying drawings, Figure I represents an umbrella-frame with my improvements in section quite opened. Fig. II
10 shows an outside view of the umbrella-stick with slides and tip-holders, but with the ribs and struts removed. Fig. III shows the improvement as arranged on a sunshade.

Similar letters represent similar parts in all
15 the figures.

In the inside of the umbrella-stick, at the upper end, a small roller, A, is arranged, around which a chain or cord, *a b*, passes. The end *a* of the cord is connected by means
20 of a pin, F, with the tip-holder C, and the end *b* of said cord is connected by means of a pin, G, with an upper tip-holder, D. The lower pin, F, is connected by means of a chain or cord, B, with a slide, E, arranged in the
25 lower part of the stick or handle, provided with a knob or projecting part, E', extending outward for the purpose of operating the same.

When the umbrella is closed, the downward movement of the slide E moves the tip-holder
30 C downward, and at the same time the tip-holder D upward, and opens thereby the umbrella. To facilitate the operation, the lower tip-holder, C, moves first some little distance downward before the upper tip-holder, D, is
35 acted upon. This is produced by means of a slot, H, in the tip-holder D, in which the pin G slides first before acting upon said tip-holder D.

The lower end of the slide E is arranged
40 with a suitable hook, *n*, engaging with a suitable spring-catch, *m*, whereby this slide E is held fast when the umbrella is quite open, and as long as the same is desired to remain open.

The closing of the umbrella is produced by
45 means of the peculiar tension given to the ribs T during the opening of the umbrella.

The ribs T are attached to the upper tip-holder, D, and the struts L to the tip-holder

C, the struts L being connected to the ribs T near their outer ends, in the usual manner. 50 From the tip-holder D braces K are arranged, connected to the struts L some little distance from the center toward the outer ends. By this arrangement a certain tension is given to the ribs T when the umbrella is quite opened, 55 which, when the umbrella is to be closed and the slide E disengaged from the spring-catch *m*, and thereby left at liberty, will cause the closing of the umbrella, bringing thereby the tip-holder D, as well as the tip-holder C, back 6c again into their normal position.

To strengthen the frame or ribs, braces M, attached to a sliding piece, N, may be arranged, the other ends of said braces M being attached to the struts L some distance outside of the 65 center of connection *e* of the braces K. In umbrellas this sliding piece N is arranged below the ribs T and struts L, as shown in Fig. I, while for sunshades this sliding piece N may be arranged above the ribs T, as shown 70 in Fig. III, whereby when the covering is put on, inclosing these braces M and the ribs T, a dome-shaped appearance will be produced in the sunshade when open.

What I claim as my invention, and desire to 75 secure by Letters Patent, is—

1. The combination of an upper tip-holder, D, and lower tip-holder, C, both sliding upon the handle or stick of an umbrella, cord *a b*, passing over a fixed roller, A, cord B, and slide 80 E, arranged to operate in the manner and for the purpose substantially as described.

2. The combination of ribs T, attached to a sliding tip-holder, D, struts L, attached to a sliding tip-holder, C, braces K, and braces M, 85 and means for operating the sliding tip-holders, as described, arranged to operate in the manner and for the purpose substantially as set forth.

In testimony whereof I have signed my name 90 to this specification in the presence of two subscribing witnesses.

ROBERT GEISLER.

Witnesses:

GEORG TH. VOECKLER,
HERMANN PEIPKER.