

(No Model.)

G. W. MINGLE.

LIGHTNING ARRESTER FOR LINE WIRES.

No. 323,822.

Patented Aug. 4, 1885.

Fig. 1.

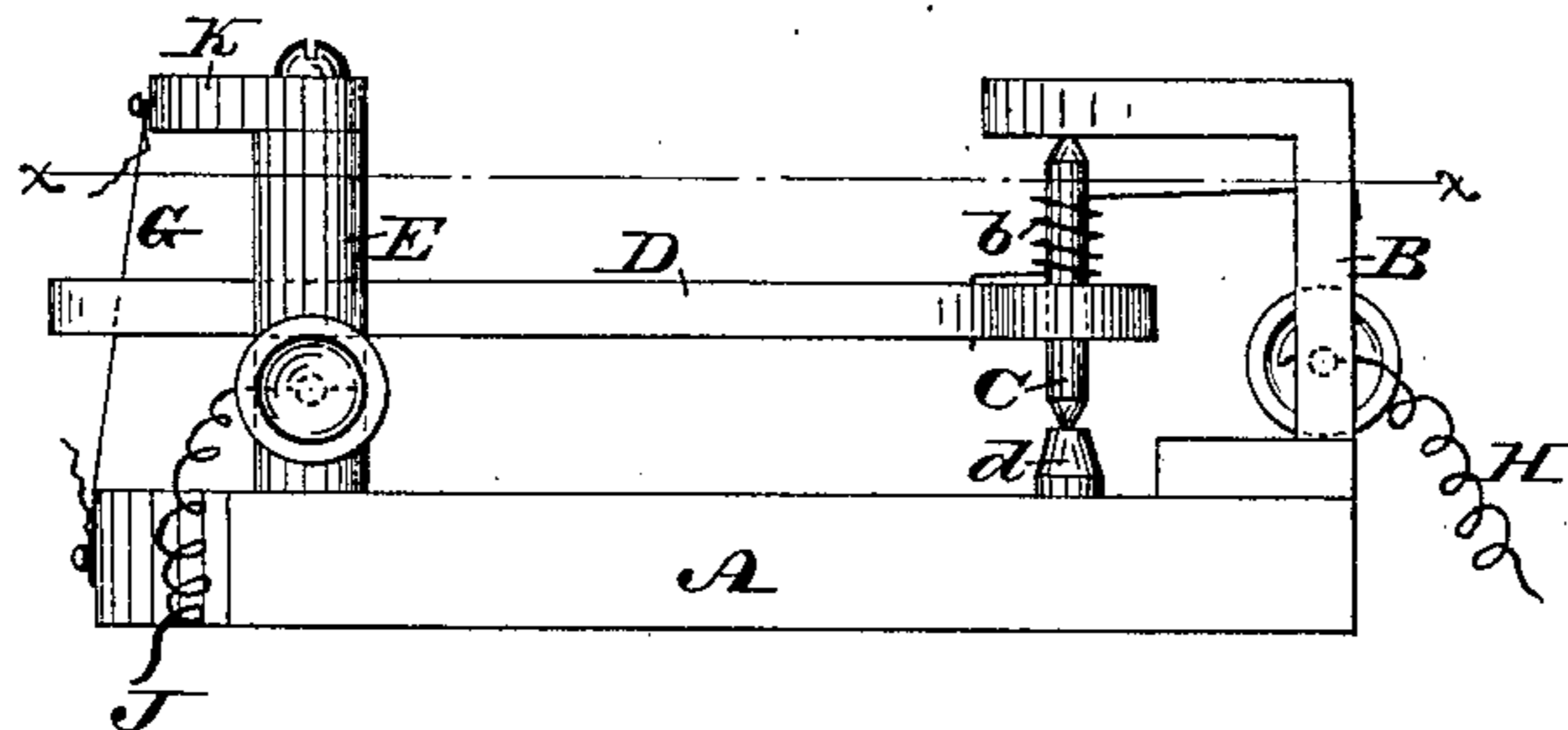


Fig. 2.

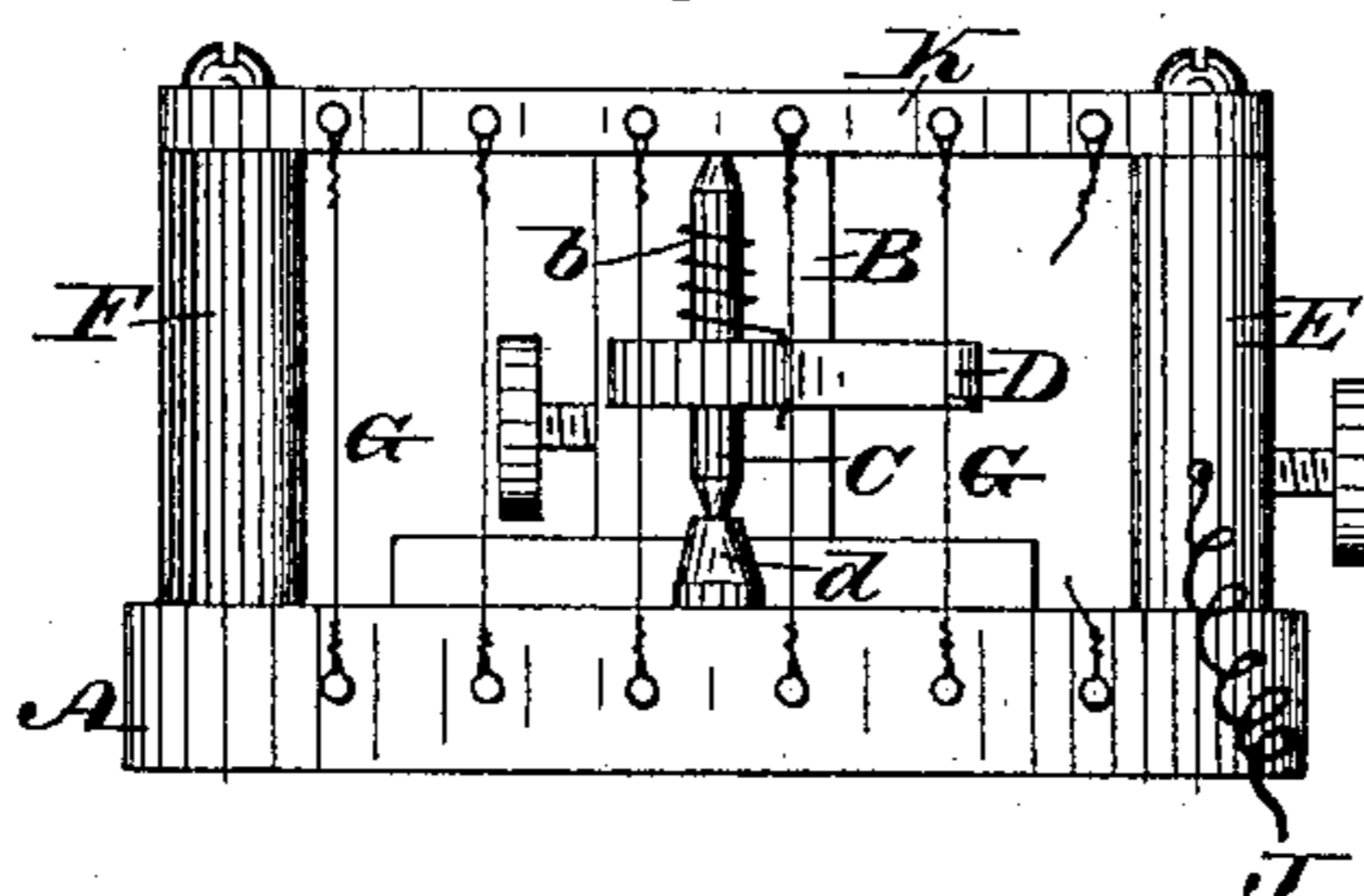
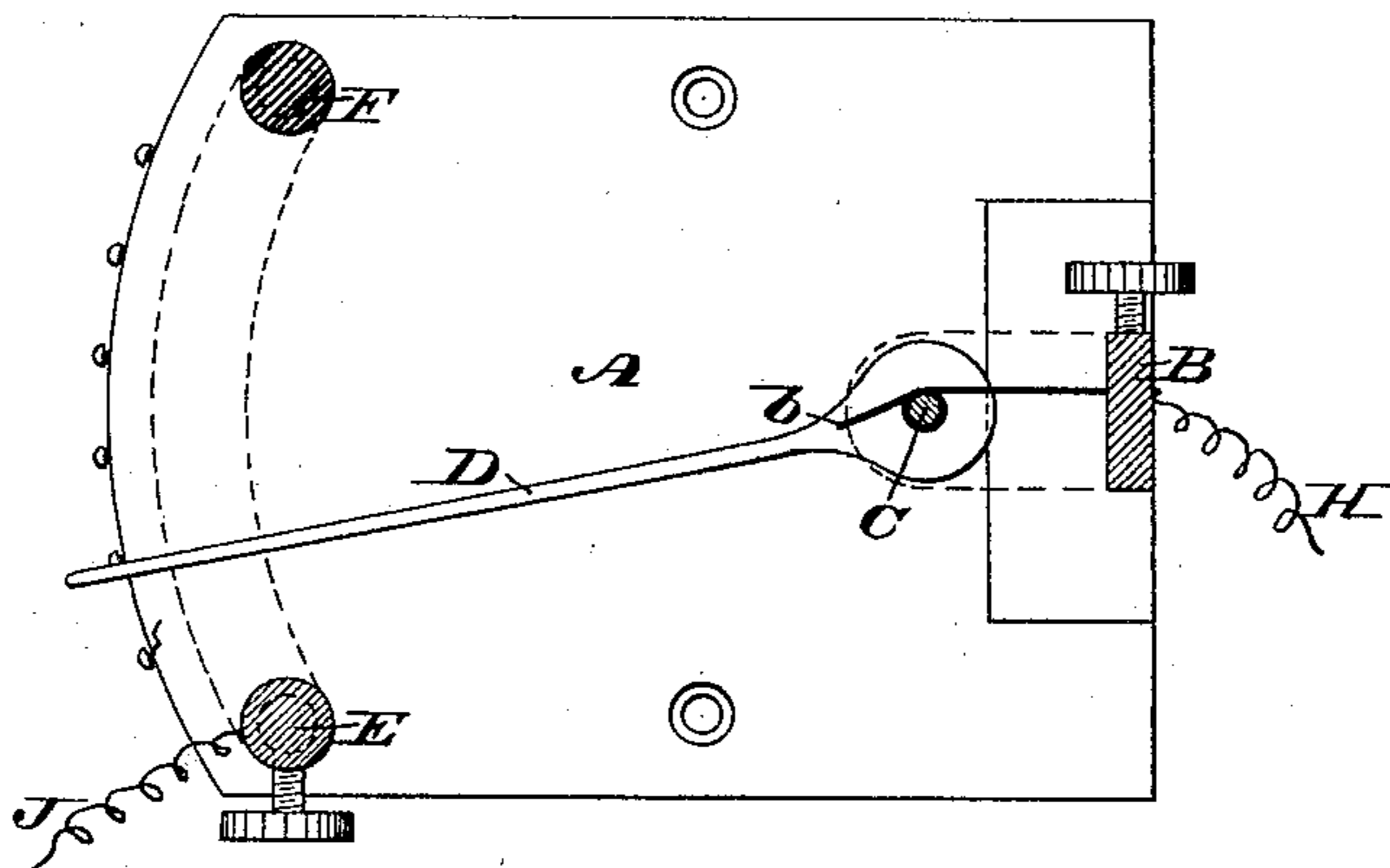


Fig. 3.



WITNESSES:

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LIGHTNING-ARRESTER FOR LINE-WIRES.

SPECIFICATION forming part of Letters Patent No. 323,822, dated August 4, 1885.

Application filed October 1, 1884. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. MINGLE, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Lightning-Arresters for Electric Wires, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents a side elevation of a lightning-arrester for electric wires embodying my invention. Fig. 2 represents an end view thereof. Fig. 3 represents a horizontal section in line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

My invention relates to improvements in lightning-arresters; and it consists of a spring-actuated shaft carrying a lever or finger, and a series of wires whereby a circuit is maintained, as will be hereinafter fully set forth.

Referring to the drawings, A represents a base constructed of any non-conducting material. Placed thereon, at one end, is a binding-post, B, having a horizontal projection at the upper part for the seating in its under face of a conical-pointed shaft, C, the other end of the shaft being journaled in a small metallic bearing, *d*, in the base. Coiled around the shaft, and secured at one end to the binding-post, is a spring, *b*. This spring is also secured to a finger or lever, D, rigidly secured to the shaft. The free end of lever D plays between a binding-post, E, and an insulating-post, F, composed of hard rubber or other non-conducting material. To a metallic upper or cross piece, K, connecting the posts E and F, are fastened, at their upper ends, wires

G, which at their lower ends are connected by pins or other suitable means with the base. To binding-posts B and E are attached the electric wires H and J. The spring *b* causes the lever or finger D to press against one of the wires G, thus maintaining the circuit. If the wire is fused by the action of lightning or otherwise, the lever is then pressed against the next wire, and the circuit remains unbroken. When all the wires are fused, the lever is forced by the spring against the insulating-post, when the circuit is broken or grounded, as may be desired.

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

1. In a lightning-arrester, the base A, provided with binding-posts B and E, in combination with a shaft having suitable bearings, a lever rigidly attached to said shaft, a spring actuating said shaft, a frame having an insulating-post and attached to said base, and wires attached to said frame and base, substantially as described.

2. A lightning-arrester consisting of the base A, provided with the binding-posts B and E, shaft C, having pivotal bearings in horizontal arm of the post B, and bearing *d*, lever D, secured to said shaft C, coiled spring *b*, operating said lever D, insulating-post F, cross-piece K, and wires G, said wires being secured to said cross-piece K and base A, all of said parts being combined and operating substantially as set forth.

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Witnesses:

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