

(No Model.)

V. A. THOMAS.
INSULATOR.

No. 459,843.

Patented Sept. 22, 1891.

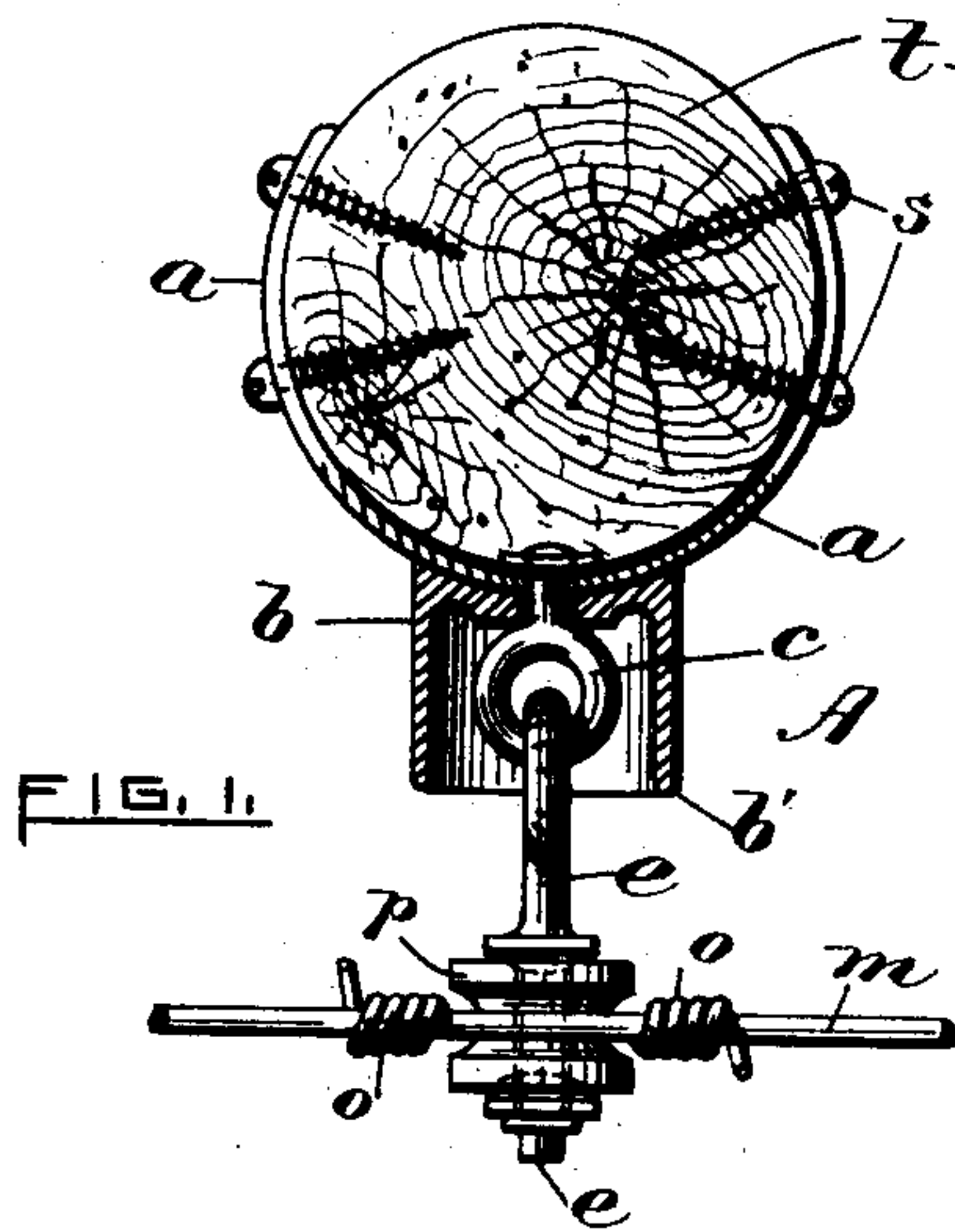


FIG. 1.

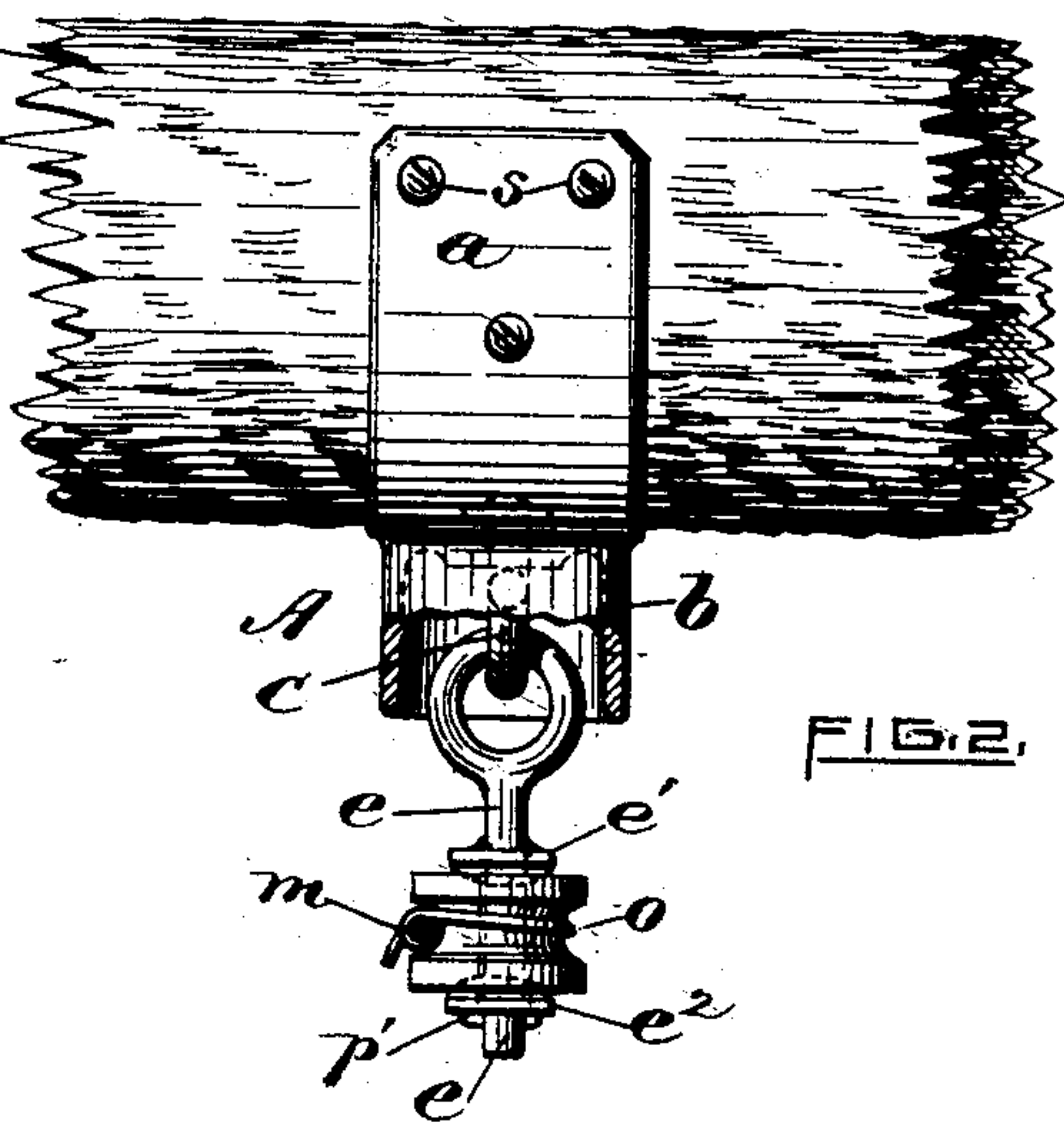


FIG. 2.

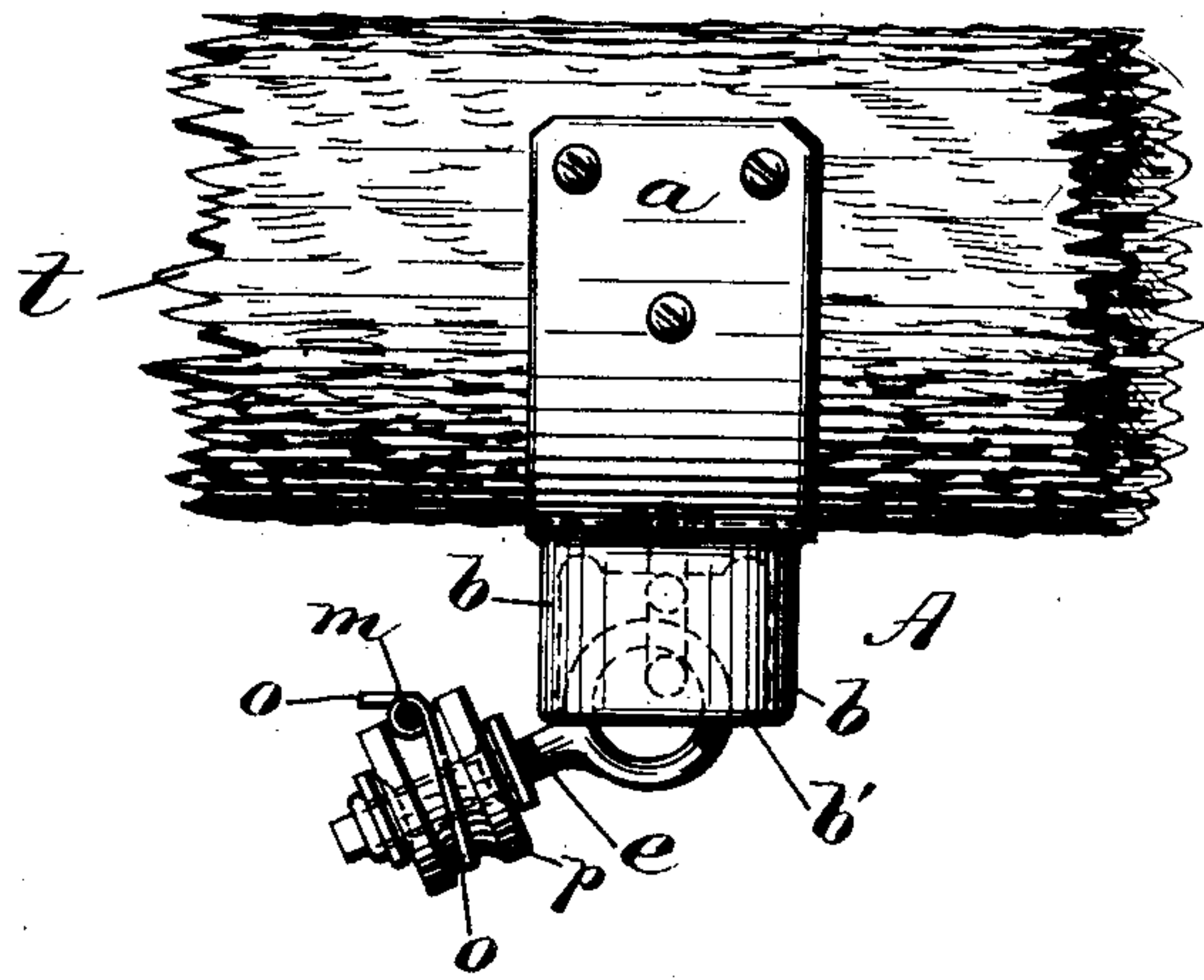


FIG. 3.

WITNESSES.

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VAN A. THOMAS, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR OF ONE-HALF
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INSULATOR.

SPECIFICATION forming part of Letters Patent No. 459,843, dated September 22, 1891.

Application filed November 22, 1890. Serial No. 372,343. (No model.)

To all whom it may concern:

Be it known that I, VAN A. THOMAS, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Tree-Irons or Insulating Devices; and I do hereby 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 letters of reference marked thereon, which form a part of this specification.

My invention relates to hangers or suspension devices for conductors employed in electric circuits, such as electric-light wires, current-carrying wires for power purposes, &c.

The object I have in view is to produce an insulated "hanger" adapted to be readily secured to the limbs or branches of trees, &c., the hanger being arranged so as to freely permit the wire to vibrate in unison with the limb's movement at all times. The hanger is, however, provided with a stop for limiting the lateral or swaying movement of the wire in an upward direction, thereby preventing the wire from touching the limb or other arm sustaining it, and thus maintaining, as far as the hangers are concerned, an unbroken or ungrounded current.

In the accompanying sheet of drawings, illustrating my improved hanger or "tree-iron," as it is termed, Figure 1 is a transverse sectional view taken through the center, showing the hanger as in use. Fig. 2 is a side elevation of the same, a portion of the hanger being broken away; and Fig. 3 is a similar elevation showing the wire or conductor vibrated upwardly to its limit.

Again referring to the drawings, A designates my improved device as a whole, the same having a bent yielding clamping portion or yoke *a*, made of thin sheet metal. By means of such flexible attaching base or plate *a* the hanger may be bent to readily accommodate itself to limbs varying in size, screws or nails *s*, passing through the plate, serving to rigidly secure the hanger or tree-iron in place. To the under side of the plate is secured a hollow iron hub or cup-shaped boss *b*,

provided with an eye or ring *c*, into which is linked a pin *e*. This pin as drawn is furnished with a fixed collar *e'* and a loose lower collar *e''*, the latter being retained in place by a small pin *p'*. These collars serve to hold in place upon the stem or pin *e* the insulator or porcelain *p*, the latter being made substantially as common, all as clearly represented by the drawings.

In use my improved tree-iron A is first secured to the tree-limb *t* by means of drive screws or nails *s*, after which the lineman secures the line-wire or conductor *m* to the peripherally-grooved loosely-mounted insulator or porcelain *p* in the usual manner or by a piece of binding-wire *o*, as represented, thereby suspending the conductor at that point. Now if the tree-iron itself or the conductor, or even both, be violently vibrated from any cause the linked or swivel pin *e* will be arrested in its lateral movement by means of its engagement with the lower portion of the boss *b*, (see Fig. 3,) thus preventing the live wire *m* from contact with conducting-bodies.

I claim as my invention—

1. A tree-iron of the class hereinbefore described, having a yielding yoke or base, a movable insulator-carrying stem or pin, and a stop for limiting the movement of the said stem.

2. A tree-iron having a swinging stem, an insulator mounted on the stem adapted to carry a live wire, a stop for limiting the lateral movement of the stem, and a yoke supporting said stem for attaching the device to a tree or other support.

3. The tree-iron hereinbefore described, consisting of a yielding yoke or base arranged to be secured to a tree, &c., a stem jointed or swiveled to the lower portion of said yoke, an insulator arranged to carry a live wire loosely mounted on said stem, and a stop for limiting the lateral movement of the stem, all combined and adapted for operation substantially as set forth.

In testimony whereof I have affixed my signature in presence of two witnesses.

VAN A. THOMAS.

Witnesses:

CHARLES HANNIGAN,
GEO. H. REMINGTON.