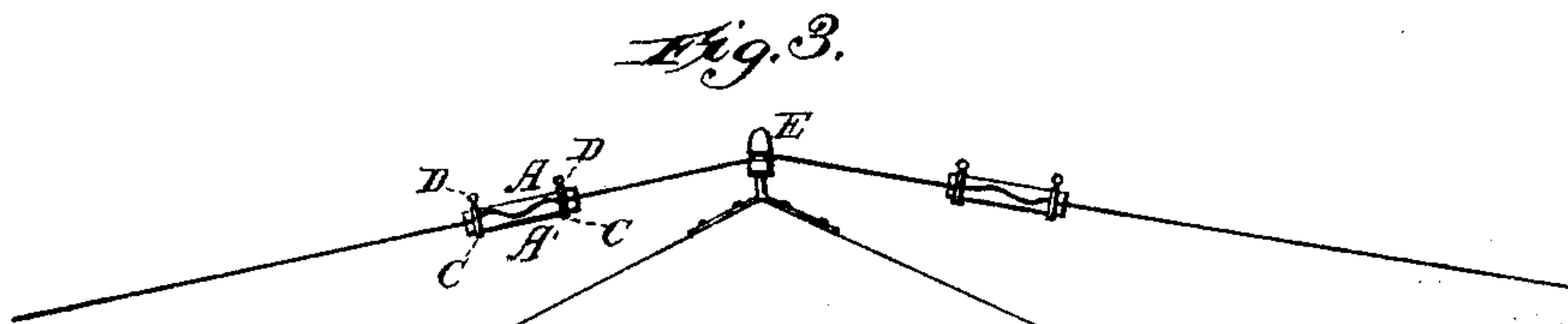
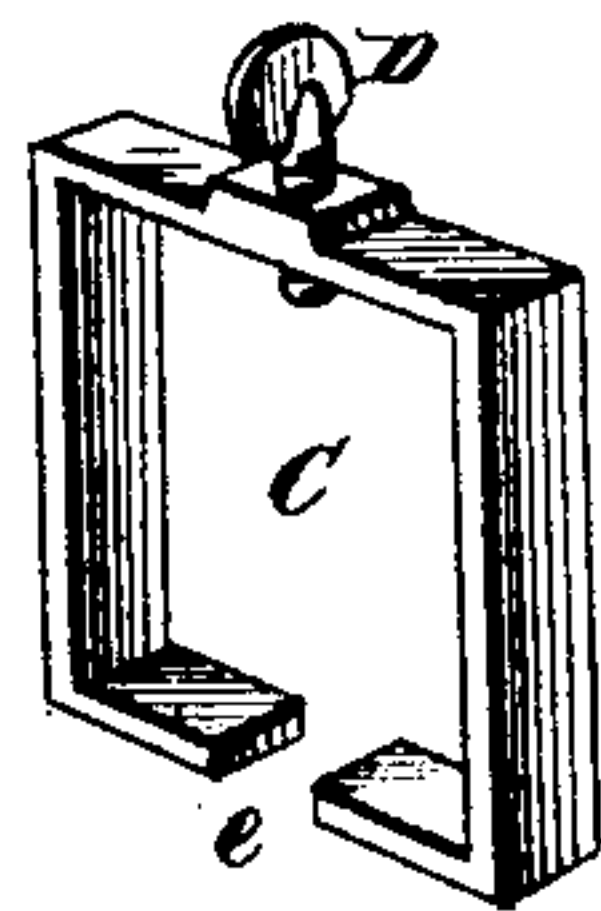
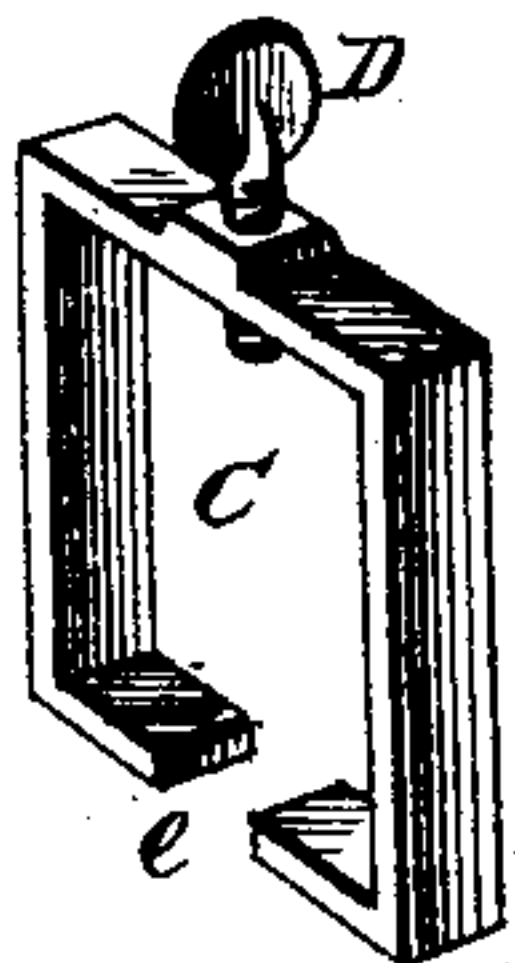
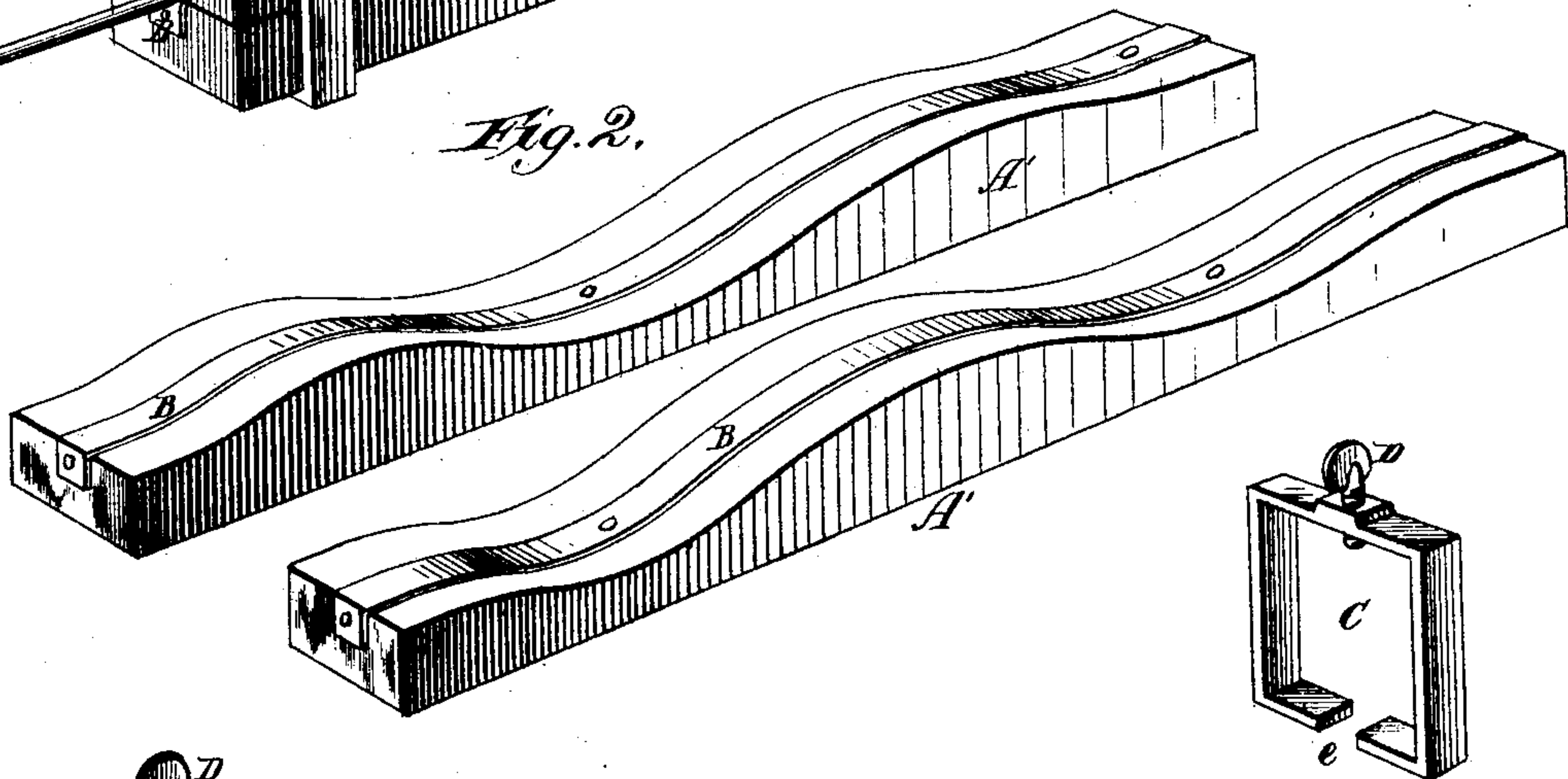
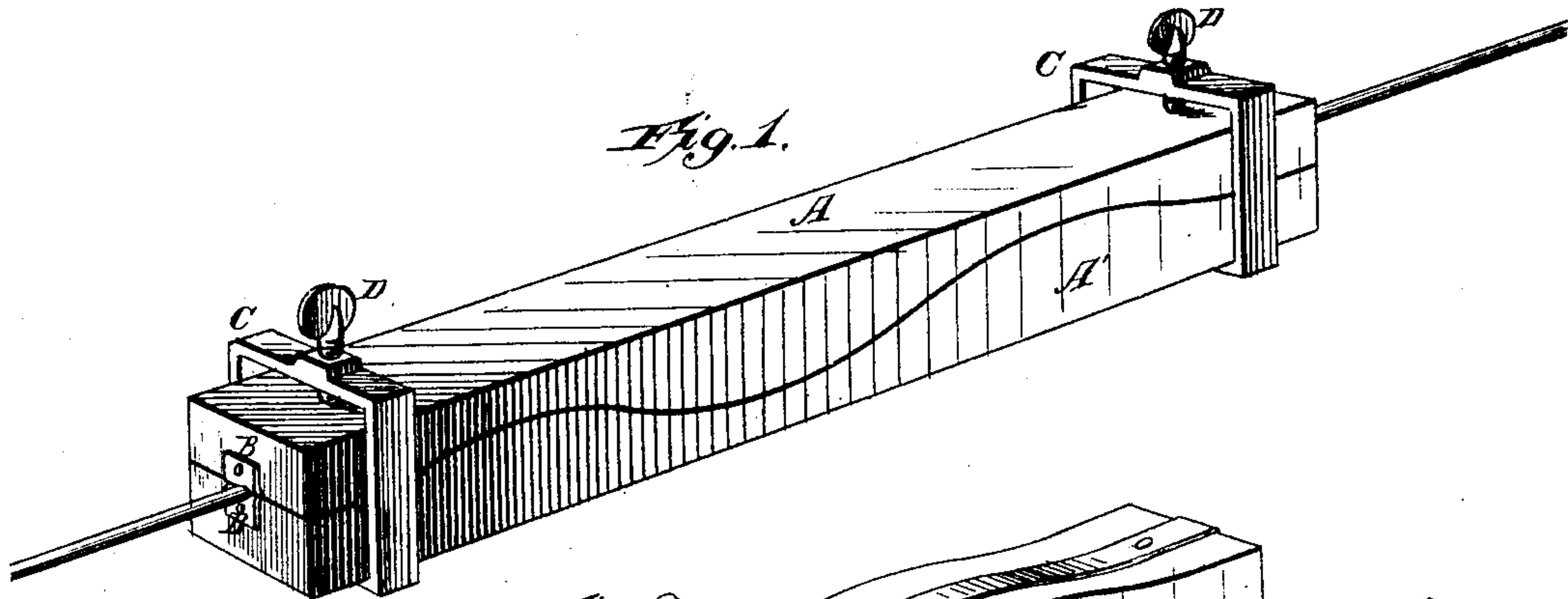


(No Model.)

P. D. CONNOR.
Device for Deadening Sound Vibrations of Telegraph
Wires.

No. 243,513.

Patented June 28, 1881.



Witnesses.

Robert Emmett.
W. B. Hale.

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UNITED STATES PATENT OFFICE.

PAUL D. CONNOR, OF WASHINGTON, DISTRICT OF COLUMBIA.

DEVICE FOR DEADENING SOUND-VIBRATIONS OF TELEGRAPH-WIRES.

SPECIFICATION forming part of Letters Patent No. 243,513, dated June 28, 1881.

Application filed May 2, 1881. (No model.)

To all whom it may concern:

Be it known that I, PAUL D. CONNOR, a citizen of the United States of America, residing at Washington, in the county of Washington and District of Columbia, have invented certain new and useful Improvements in Devices for Deaden-
ing Sound-Vibrations of Telegraph-Wires; 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 or figures of reference marked thereon, which form a part of this specification.

The object of this invention is to prevent the annoyance to occupants of houses occasioned by the humming sound transmitted from telegraph and telephone wires supported by insulators attached to the roofs or walls.

The supporting of telegraph and telephone wires on a house top or wall has the effect, as is well known, of converting the house into a huge resonator or sounding-board to such an extent that in many cases, when a breeze plays on the wires and sets them vibrating, sleep is impossible to many persons, and to sick and nervous persons the sound is excessively annoying and injurious.

An attempt has been made to intercept the æolian vibrations of the wires on each side of their supports which are attached to houses, and thus prevent the annoyance referred to, and this attempt has been in a great degree successful; but it involves the cutting of the wires on each side of their supports and inserting between the ends devices for preventing the vibrations from being communicated to said supports, unstrained loops of wire passing around the said devices and connecting the ends of the wires electrically to preserve the circuit. The cutting of the wires is very objectionable, and the insertion of the devices referred to is expensive and troublesome. In my invention I obviate the cutting of the wires and produce a sound-intercepting device which is cheap in construction, easily applied, and effectually accomplishes the purpose intended.

In the accompanying drawings, Figure 1 is a perspective view of my invention applied to a wire. Fig. 2 is a similar view of the parts

detached from each other. Fig. 3 illustrates the application of the invention to use.

The letters A and A' denote bars of wood, each of which has one of its longitudinal surfaces undulated or corrugated to fit a correspondingly-shaped surface of the other. Upon the longitudinal central portion of the undulating surface of each bar is secured a thin strip, B, of lead. When the two bars are placed upon opposite sides of a wire, with their lead strips in contact with the same, a clamp, C, is slipped over the bars at each end, so that its clamping-screw D bears upon the back of one of the bars. The screws D being tightened or driven inward, the two bars are forced together, so that the wire is bent to conform to the undulating surfaces of the lead strips, the resilience of the wire assisting materially to produce a close contact and friction, which holds the bars in place. The lead being non-resonant, its contact with the wires intercepts the æolian vibrations and prevents them from being communicated to the bars. The short length of wire between the bars and the insulator, when the device is in use, is incapable of vibration to any harmful extent.

The clamp C consists of an open metal frame cleft on one side, as shown at e, to permit it to be passed over the wire, in order that it may be slipped over the ends of the bars after they are placed in position on opposite sides of the wire. The screw D is preferably inserted through the opposite side of the frame from its cleft; but it may be inserted through either of the other sides, as the frame may be turned to proper position after being passed over the wire.

I do not confine myself to bars of wood having undulated or corrugated surfaces, as straight surfaces with straight strips of lead to bear upon the wire would have the effect of intercepting the sound-vibrations of the wire; but the undulating surfaces clamp the wire better and hold the bars more firmly in place, while intercepting sound better. The bars might be made of any other substance than wood, or entirely of lead, in which case, of course, the separate lead strips would be omitted. In practice the bars are about eight-
een inches in length, an inch and a half wide, and an inch thick at their thinnest portions,

swelling to an inch and a quarter at their thick portions when undulated, and in applying them to use, as shown in Fig. 3, they are placed on the wire at about three feet from the insulator E, which is attached to the house on each side of said insulator.

What I claim is—

1. A device for intercepting the sound-vibrations of wires, consisting of two bars having corrugated or undulated non-resonant surfaces, and a clamp for embracing said bars and binding them upon a wire, with said surfaces of the respective bars facing each other, substantially as described.

2. In a device for intercepting the sound-vibrations of wires, the combination of two

bars of wood, each having a lead-covered surface, and one or more clamps for binding said bars upon a wire, substantially as described.

3. In a device for intercepting the sound-vibrations of wires, the combination of two bars of wood, having undulated or corrugated surfaces, with strips of lead arranged thereon, with a suitable device or devices for binding the same upon a wire, substantially as described, and for the purpose set forth.

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

PAUL D. CONNOR.

Witnesses:

H. J. STEVENS,

J. F. CONNOR.