

(No Model.)

T. H. HERNDON.
Telegraph Sounder.

No. 241,012.

Patented May 3, 1881.

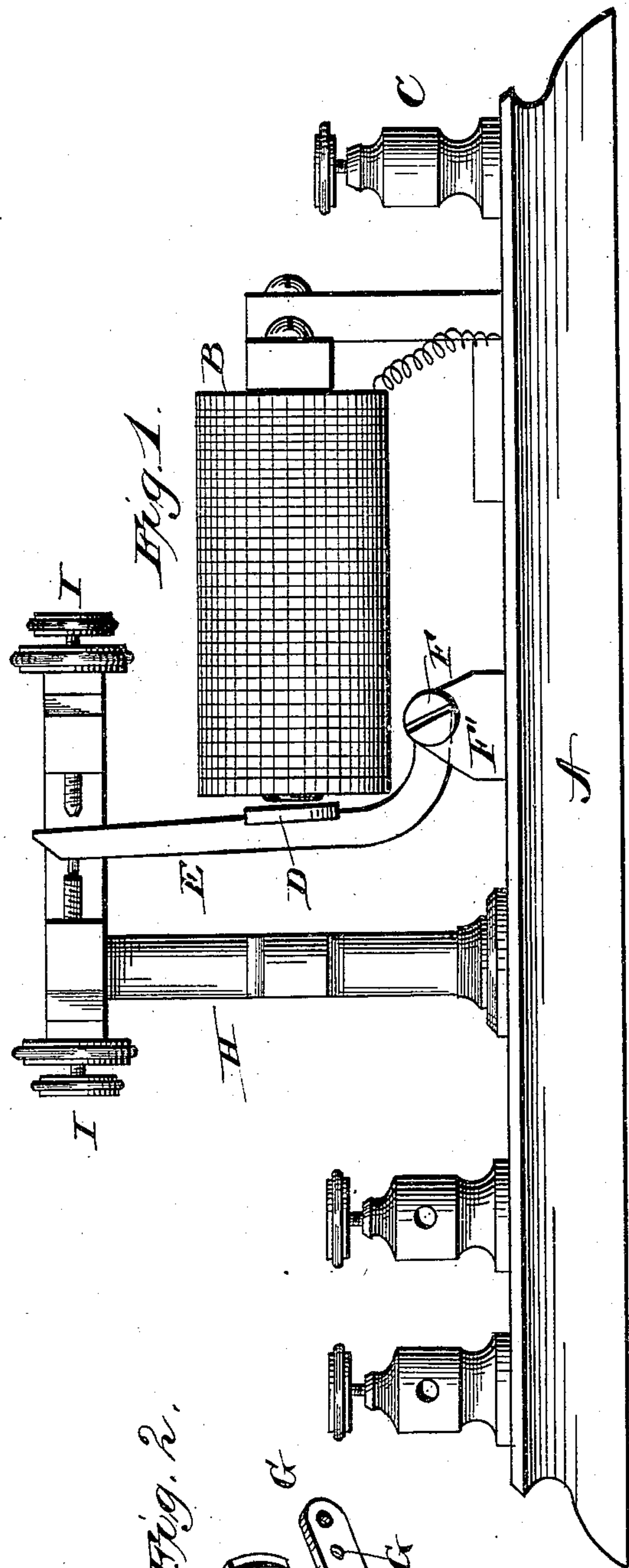


Fig. 1.

Witnesses.

F. L. Curand
H. Aubrey Truhman

Inventor
T. H. Herndon
By Alexander Thayer
attys

UNITED STATES PATENT OFFICE.

THOMAS H. HERNDON, OF LEESBURG, FLORIDA.

TELEGRAPH-SOUNDER.

SPECIFICATION forming part of Letters Patent No. 241,012, dated May 3, 1881.

Application filed January 24, 1881. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. HERNDON, of Leesburg, in the county of Sumter, and in the State of Florida, have invented certain new and useful Improvements in Telegraph-Sounders; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to certain improvements in telegraphic sounders; and it has for its objects to provide an instrument which may be placed in the main circuit of a telegraph-line, and when thus located can be operated as a sounder without the necessity of the usual relays. These objects I attain by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a side elevation of my improved invention entire, and Fig. 2 a detached perspective view of the lever carrying the armature.

The letter A indicates the base of the apparatus, upon which is mounted a vertical standard supporting the electro-magnet B. The helices of said magnet connect with the binding-posts C, attached to the base of the apparatus, the said binding-posts serving as a means of attachment, by means of which the apparatus may be placed in the main line of the telegraphic circuit.

The letter D indicates the armature, which is located opposite the poles of the magnet in the usual manner, and which is secured to a bent lever, E, which is fulcrumed by screws F passing through standards F', attached to the base of the apparatus. The said bent lever and its armature are so constructed that their combined weight will cause the two to fall back by gravity when the current through the helices is cut off, and thus dispense with the use of the spring ordinarily employed to retract the armature in the sounders in common use. The lever carrying the armature is provided with several bearings, G, by which it may be shifted as desired to regulate the weight of said lever to the strength of the current of electricity passing

through the helices and control the operation of the sounder.

The letter H indicates a standard provided with the usual set-screws, I, to regulate the throw of the lever carrying the armature of the sounder, so that the said armature may be held nearer or farther from the poles of the magnet, according as the strength of the electric current sent through the helices may vary.

I am aware that the armature of an electric magnet has been arranged to be retracted from the magnet by gravity, and that in some instances an adjustable weight has been employed in connection with the armature-lever, and in others the armature-lever has been supported upon a tilting stand, so as to cause the armature, when not attracted by the electro-magnet, to be retracted with more or less gravity.

I am also aware that in electro-magnetic annunciators an armature secured to a bent lever pivoted to the frame of the annunciator below the magnet has been employed in connection with a slide and plate to display a name or number, and such I do not claim.

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

In a telegraph-sounder, the combination, with an electro-magnet the helices of which are adapted to be placed in the main circuit of the line, of the armature attached to a bent lever fulcrumed below and back of the poles of the magnet, whereby a more distinct sound is produced and the armature is permitted to fall back by gravity, the said lever having several bearings for the fulcrum, whereby the fulcrum point of the lever can be shifted to cause the armature when not attracted to be retracted from the electro-magnet with more or less gravity, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 17th day of January, 1881.

THOMAS H. HERNDON.

Witnesses:

H. AUBREY TOULMIN,
C. A. NEALE.