

M. W. GOODYEAR.  
Telegraph Sounders.

No. 140,266.

Patented June 24, 1873.

Fig. 1.

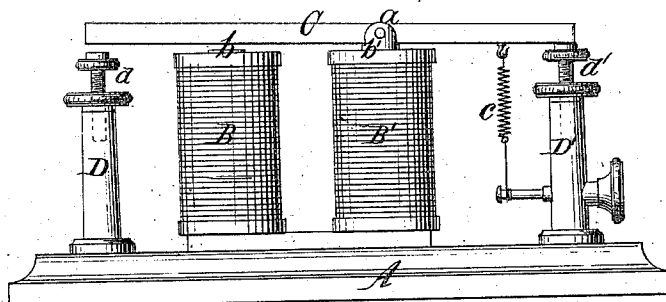
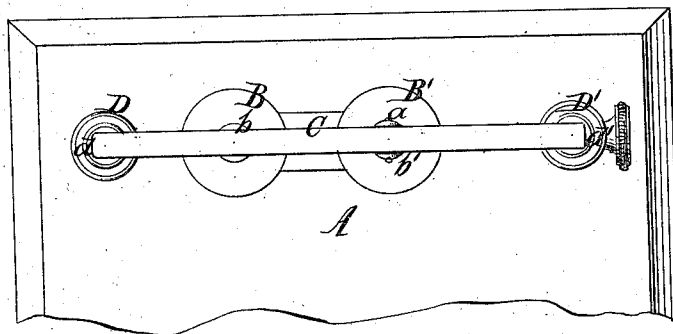


Fig. 2.



Witnesses.

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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN TELEGRAPH-SOUNDERS.

Specification forming part of Letters Patent No. 140,266, dated June 24, 1873; application filed May 10, 1873.

### *To all whom it may concern:*

Be it known that I, MILES W. GOODYEAR, of the city, county, and State of New York, have invented a new and useful Improvement in Telegraphic Sounders; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a side view of my invention. Fig. 2 is a plan or top view thereof. Similar letters indicate corresponding parts.

This invention consists in the combination of the armature of an electro-magnet having its fulcrum in the continuation of one of the cores of the magnet, and the sounding-posts provided on their tops with set-screws for regulating the stroke, as hereinafter described.

In the drawing, the letter A designates the base of my sounder, on which are secured the electro-magnets B B'. The core *b*' of one of these electro-magnets is elongated, and it forms the bearing for the pin *a*, on which swings the armature-lever C, said pin being so situated that the armature-lever extends across the core *b* of the electro-magnet B and forms the armature for this electro-magnet. The ends of the armature-lever C are opposite to posts

D D', and a spring, *c*, draws said lever down upon the post D'. This spring is weak, so that when the circuit is closed the lever C will be attracted by the electro-magnet B and it will be brought down upon the post D.

The height of the posts D D' is adjusted by screws *d d'*, or in any other suitable manner.

By this arrangement a sound is produced whenever the circuit is closed and the armature-lever is brought down upon the post D, and another sound is produced when the circuit is opened and the lever C is brought in contact with the post D' by the action of the spring *c*.

The simplicity in the construction of my sounder will be readily seen from the drawings, and it requires no further explanation.

What I claim as new, and desire to secure by Letters Patent, is—

The two electro-magnetic helices B B', the core of one of which forms the fulcrum for the armature-lever C, in combination with the armature-lever C, studs D D', and adjusting-screws *d d'*, which receive the blows of the armature-lever, all constructed and operating substantially as and for the purpose shown and described.

Witnesses: MILES W. GOODYEAR.

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