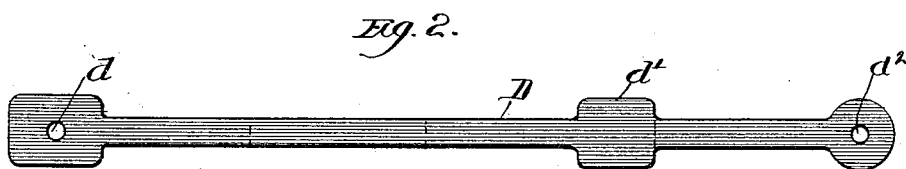
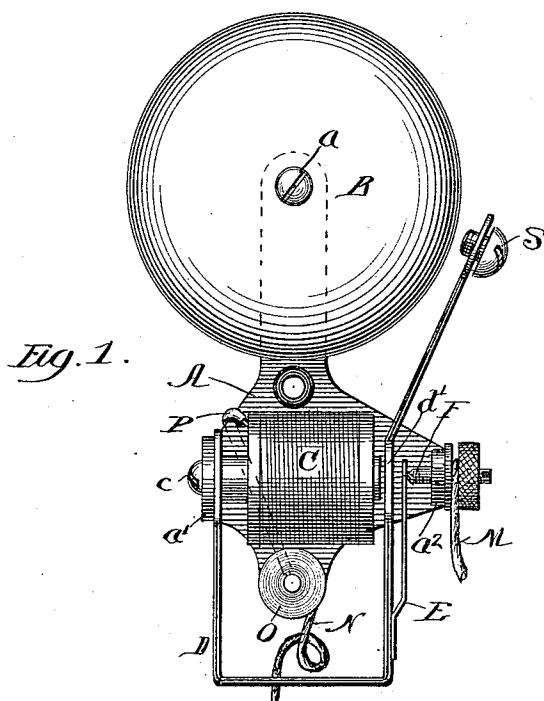


(No Model.)

W. HAY.
ELECTRIC BELL.

No. 460,503.

Patented Sept. 29, 1891.



Witnesses:
Charles O. Shervey.
C. P. Smith.

Inventor:
Walter Hay
By Wiles, Gross & Wetmore
Attorneys.

UNITED STATES PATENT OFFICE.

WALTER HAY, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO GEORGE E. HORN, OF SAME PLACE.

ELECTRIC BELL.

SPECIFICATION forming part of Letters Patent No. 460,503, dated September 29, 1891.

Application filed May 11, 1891. Serial No. 392,300. (No model.)

To all whom it may concern:

Be it known that I, WALTER HAY, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Electric Bells, of which the following is a specification.

My invention relates to an electric bell and is designed to cheapen the manufacture and render more easy the putting up and care of such bells.

I shall proceed to describe carefully and specifically my preferred construction, and shall then point out the essential features thereof which I believe to be new.

In the drawings, Figure 1 is a front elevation of my improved bell, and Fig. 2 a flat view of a piece used in its construction.

The base or frame of the bell is a plate or casting A, which supports the bell B by means of a screw a , and has two outwardly-projecting lugs a' a^2 . A single electro-magnet C is used, and a strip D, of sheet metal, is stamped out, preferably in the form shown in Fig. 2 and bent as seen in Fig. 1. This strip contains a hole d , and a screw c is passed through the lug a' , the hole d , and into the core of the helix C. This firmly secures the strip D and the helix to the frame, and the strip is bent about until the enlarged portion d' is brought in front of the pole of the magnet and the free end of the strip is brought near to the bell. A strip of metal E is soldered to the strip D at e and extends upward to a contact-screw F, mounted in the lug a^2 . This contact-screw is insulated from the lug and connects with one of the line-wires M. The other line-wire N connects with a binding-screw O, and thence by means of a wire P with the coil of the helix, which at its other end is connected with the strip D.

It is a well-known fact that to get the best and loudest tone from a bell it is necessary that the armature should be adjusted to the proper distance from the pole of the magnet,

the contact-screw should be properly adjusted, and also that the hammer should be at the proper distance from the bell. Contact-screws are always, or at least generally, made adjustable; but the adjustment of the armature and also of the hammer have been commonly made by bending their supporting wires or plates. It is obvious that the bending of these supporting devices to adjust one must disturb the adjustment of the other. To avoid the inconvenience resulting from this fact, I have made an important improvement consisting in the provision of means for the independent adjustment of the hammer upon its supporting device. The means which I have devised are exceedingly simple, consisting of a screw-threaded hole d^2 in the free end of the strip D and an ordinary screw S tightly threaded to this hole. In putting up the bell the strip is bent to bring the armature the proper distance from the pole, and then the screw S is adjusted to exactly the proper distance from the bell without any danger of disturbing the adjustment of the armature.

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

1. The combination of the bell B, the frame A, having the lugs a' a^2 , the helix C, the strip D, stamped from a single sheet of metal bent into substantially the form shown, a hammer mounted thereon, the screw c , uniting the lug a' , the end of the strip D, and the helix C, and suitable contact devices, substantially as described.

2. The combination, with the frame A, the bell B, the helix C, and suitable contact devices, of the strip D, bent substantially as shown and having the screw S threaded to its free end, substantially as described.

WALTER HAY.

Witnesses:

H. BITNER,
C. P. SMITH.