

L. E. WARNER.
SAMPLE-GARMENTS.

No. 186,282.

Patented Jan. 16, 1877.

Fig. 1.

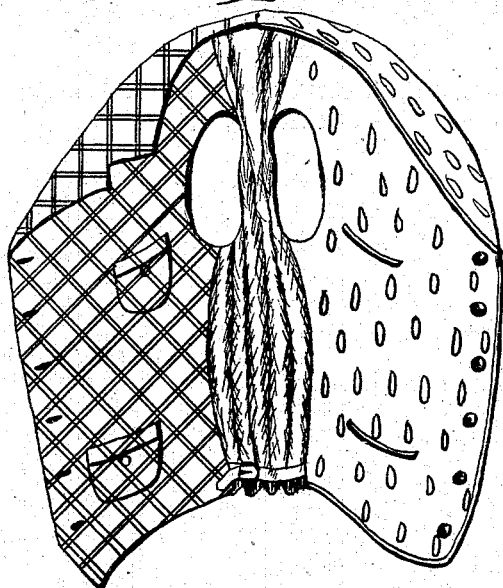


Fig. 2.



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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN DIAL-TELEGRAPHS.

Specification forming part of Letters Patent No. **186,283**, dated January 16, 1877; application filed December 1, 1876.

To all whom it may concern:

Be it known that I, JOHN H. C. WATTS, of Baltimore, in the county of Baltimore and State of Maryland, have invented certain new and useful Improvements in Dial-Telegraphs; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

The object of my invention is to make a compact and economical instrument, especially suited for learners, though useful for general telegraphic purposes. To these ends the invention consists of those features more particularly hereinafter described and claimed, reference being had to the accompanying sheet of drawings, in which—

Figure 1 is a perspective view of my dial-telegraph; Fig. 2, a view of the interior of case A, taken from the rear, and Fig. 3 a vertical section of Fig. 1.

The interior dial mechanism is contained within a small case, A. This case is preferably rounded at the top, and has its front, top, and sides made of one piece of metal, or as a unit, the bottom and rear being open. Across the rear is a bridge-piece, D, between which and the front is journaled the small shaft E, carrying the ratchet-wheel F and pointer *e*. The shaft and ratchet are actuated by an anchor-escapement having pawls *g g*, which are caused to vibrate by the magnets H H attracting the armature *h* attached to G in one direction, and the spring *a* retracting it in another.

The case A is made with a circular flange, L, upon its face, forming a guard for the dial M. The latter is, preferably, for economy of paper, fastened within the circle bounded by L, and has the Roman and the Morse characters and the numerals displayed upon its surface. These characters are arranged in three concentric circles, which are divided by

radial lines, those characters within any one division formed by the radial lines being the equivalents of each other in the various codes.

The base B is made in one piece, and has at its rear an upwardly-projecting piece, *b*, of a size to fit the rear of A, made or cast with it. A screw, *s*, passes through *b* and takes into D, firmly uniting the two parts A and B. Whenever it is desired to repair the works of the instrument, the removal of screw *s* allows A to be detached, and with it all of the mechanism. This makes a compact instrument of cheap construction, in which parts are readily accessible for repairs or renewal. On the front of the base is placed the strap-key C, the play of which is regulated by the set-screw *c* on standard *c'*. The front anvil of the key is directly on the binding-post 2. For convenience or cheapness the standard R supporting the rear of the key may be the other binding-post, 1.

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

1. The case for containing the operative parts of a dial-telegraph, having its front, sides, and top made in one piece, and having the recessed space upon its front for the dial, and the bridge D, for supporting the parts, substantially as set forth.

2. The base for dial-telegraphs, consisting of the parts B *b*, made as described, and adapted to receive and hold the case A, as set forth.

3. The dial-telegraph, consisting of the case A containing all of the operative parts, and the base B, having the key, the two being constructed as shown and set forth, and united by a single fastening, S, substantially as set forth.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

J. H. C. WATTS.

Witnesses:

AUG. D. DAVIS,
ALFRED E. WAIT.