

No. 19,379.

PATENTED FEB. 16, 1858.

N. PARKS.
RECEIVING MAGNET.

Fig: 1.

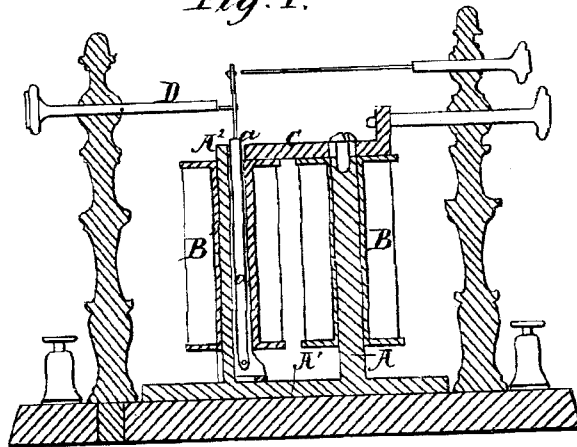
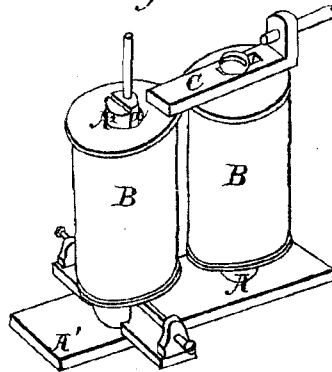


Fig: 2.



UNITED STATES PATENT OFFICE.

NATHANIEL PARKS, OF ROME, NEW YORK.

IMPROVED RECEIVING-MAGNET.

Specification forming part of Letters Patent No. 19,379, dated February 16, 1858.

To all whom it may concern:

Be it known that I, NATHANIEL PARKS, of Rome, in the county of Oneida and State of New York, have invented an Improvement in Receiving-Magnets; and I do hereby declare that the following is a full, clear, and exact description of the principle or character which distinguishes it from all other things before known, and of the usual manner of making, modifying, and using the same, reference being had to the annexed drawings, of which—

Figure 2 represents a perspective view of the helices and electro-magnet; Fig. 1, a longitudinal vertical section of the magnets, helices, &c.

My invention consists in an improvement in receiving-magnets for telegraphic and other purposes, set forth as follows:

A A' A² is the electro-magnet; B B', the helices. The leg A² of the magnet fills only a part of the bore of the helix, the remaining space being left for the vibrations of the permanent magnet *a*. This magnet is pivoted at its lower end, so that it may vibrate back and forth within the helix. Its polarity is such

that when the electro-magnet is charged repulsion shall take place between it and the leg A². In contact with the leg A is an adjustable piece of soft iron, C, the end of which is made to approach the magnet *a* and attract it, thus combining the repulsive and attractive forces in moving this magnet whenever the electro-magnet is charged. The position of the magnet *a* is regulated by the set-screw D, and the battery-connections are made in any of the modes commonly practiced with relay or receiving magnets.

What I claim as my improvement in receiving-magnets for telegraphs is—

Opening and closing the circuit by means of a vibrating permanent magnet inclosed within one of the helices, together with an electro-magnet, and operated upon by both poles of the electro-magnet in the manner herein set forth.

NATHANIEL PARKS.

Witnesses:

GEORGE MERRILL,
R. A. BARTON.