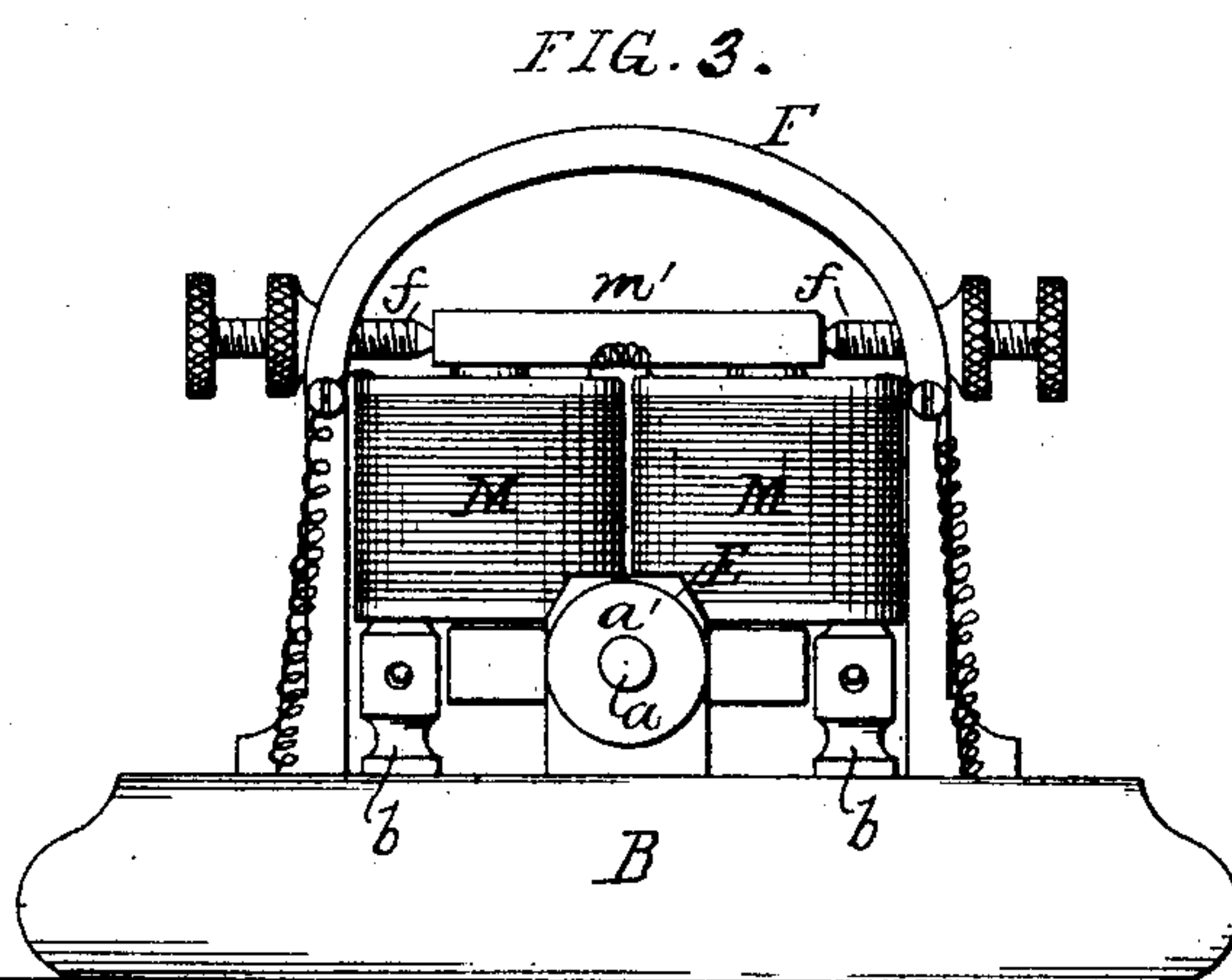
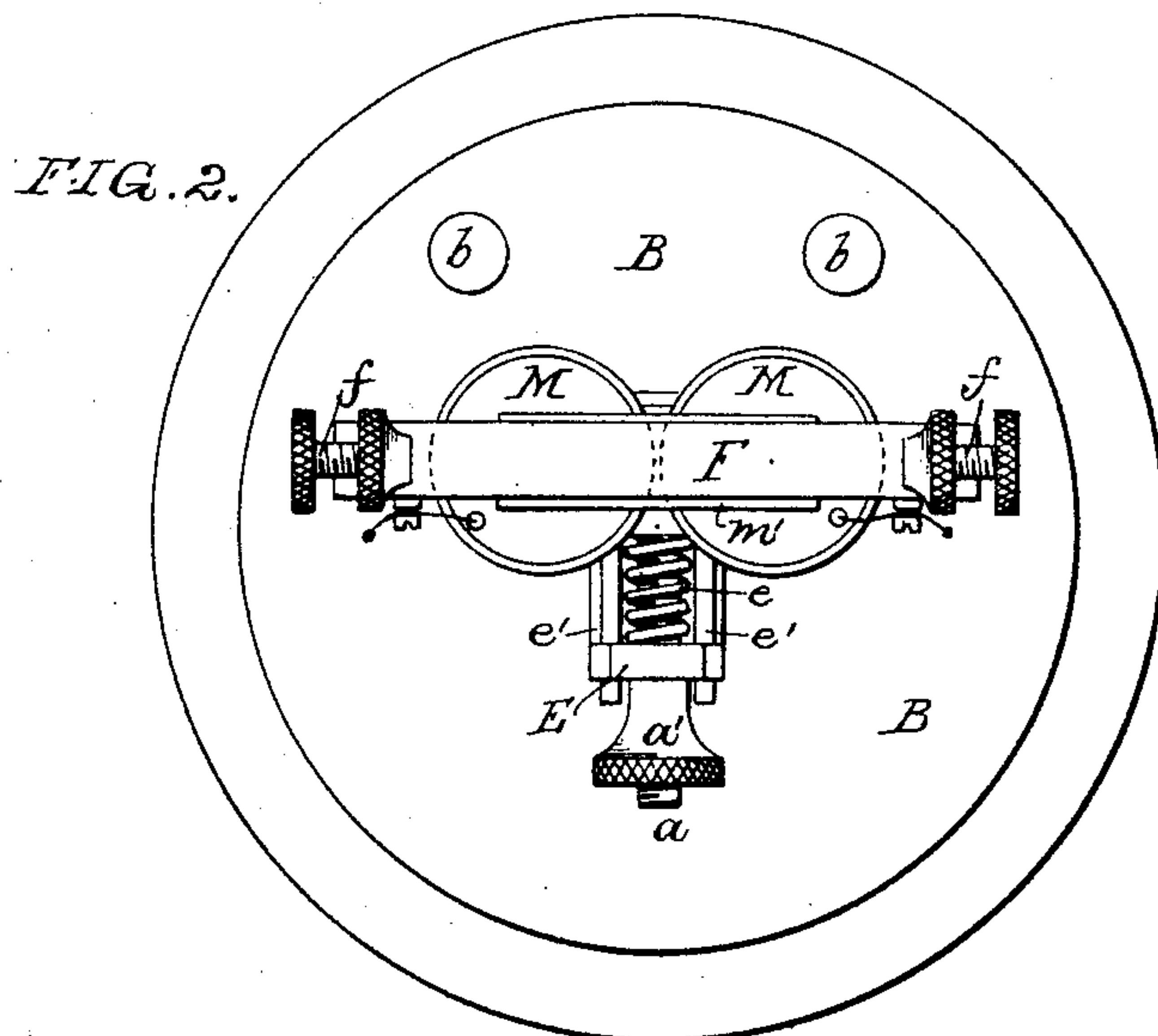
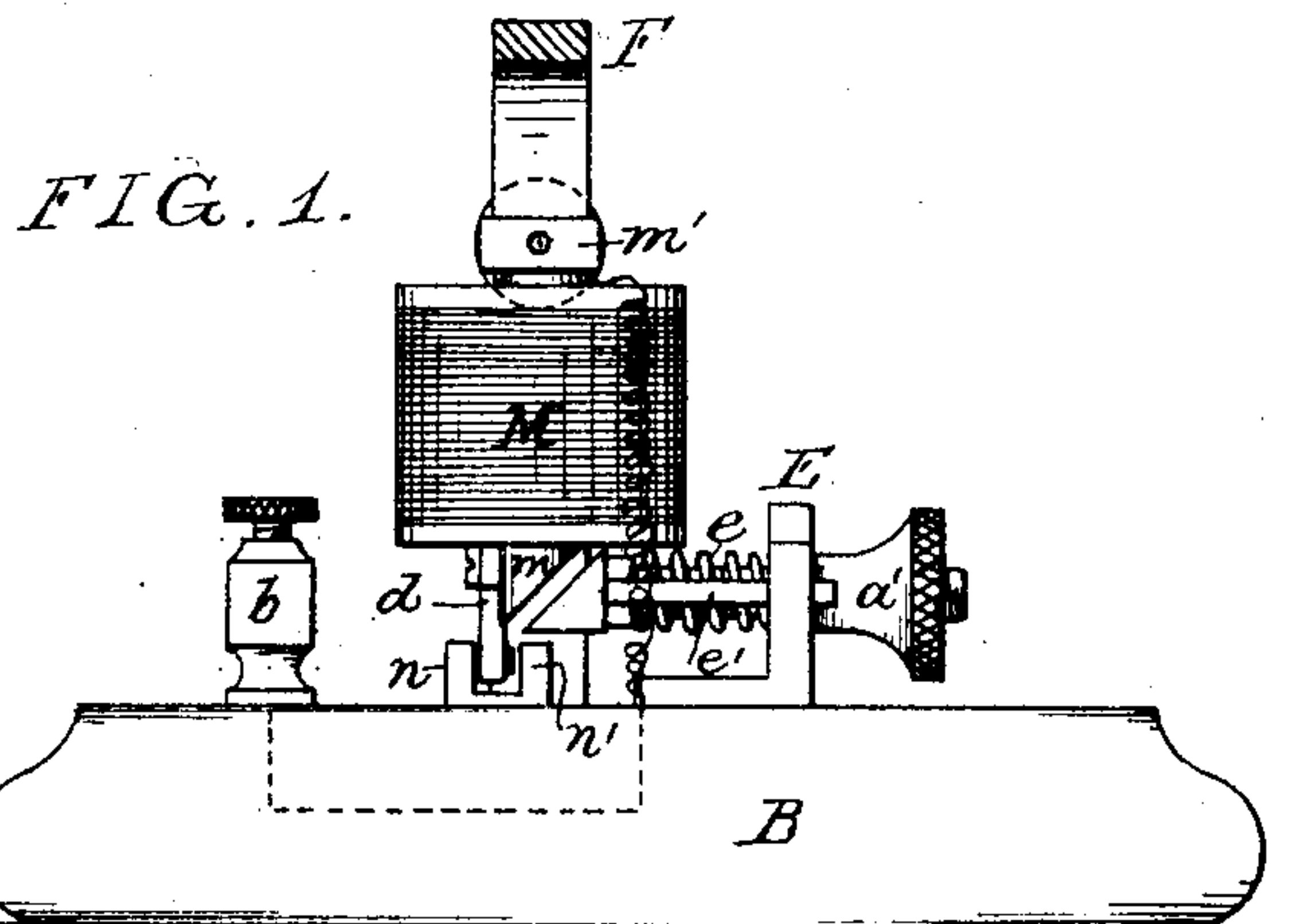


(No Model.)

G. S. MOTT.  
TELEGRAPHIC SOUNDER.

No. 252,498.

Patented Jan. 17, 1882.



Witnesses:  
Harry Drury.  
James F. Tobin.

Inventor:  
Garret S. Mott  
by his attorneys  
Howe, Mansfield & Co.

# UNITED STATES PATENT OFFICE.

GARRET S. MOTT, OF PHILADELPHIA, PENNSYLVANIA.

## TELEGRAPHIC SOUNDER.

SPECIFICATION forming part of Letters Patent No. 252,498, dated January 17, 1882.

Application filed July 7, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, GARRET S. MOTT, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Telegraphic Sounders, of which the following is a specification.

The object of my invention is to construct a simple telegraphic Morse sounder, and this object I attain by combining a vibrating electro-magnet with a stationary armature, as more fully described hereinafter, reference being had to the accompanying drawings, in which—

Figure 1 is a side view of the instrument with a portion of the frame in section; Fig. 2, a plan view, and Fig. 3 a front view.

On the base B of the instrument is mounted the frame F, formed in the present instance in the shape of an arch. On the screw-points *f*, passing through the upper part of the frame, are mounted the coils of the electro-magnet M, the screw-points in this instance being adapted to openings in the ends of the soft-iron connecting-piece *m'*, so that the pendent coils, being thus pivoted, may have a vibrating motion limited by the striking-piece *d*, secured to the lower end, coming into contact with one or other of the fixed stops *n n'*. The terminals of the coils are connected to the binding-posts *b b* in any convenient manner. The poles *m m* of the coils are preferably beveled, as illustrated in Fig. 1, corresponding with the beveled face of the stationary armature. This armature is carried by a horizontal screw-rod, *a*, passing through a lug, E, on the base and acted upon on one side of the lug by a spring, *e*, and on the other by a screw-nut, *a'*, by which the armature may be adjusted nearer to or farther from the poles of the electro-magnet. The armature is guided and prevented from turning while being ad-

justed by pins *e'*, carried by the armature and passing through openings in the lug E. The electro-magnet M is hung on its pivots with its center of gravity out of a vertical line through the centers of the pivots, so that when there is no current passing through the coils, and the poles *m* are not attracted to the armature, the striker *d* will fall back into contact with the fixed stop *n*; or, instead of having the electro-magnets fall back by gravity, they may be acted on by a non-adjustable spring inserted, say, between the arch of the frame F and the top of the coils on one side of the pivoting-point.

I claim as my invention—

1. A telegraphic sounder having a vibrating electro-magnet, a stationary adjustable armature, and fixed stops for the electro-magnet, substantially as described.

2. In a telegraphic sounder, the combination of a frame and a stationary armature with fixed stops and a pendent electro-magnet pivoted with its center of gravity out of a vertical line drawn through its pivoting-points, substantially as shown and described.

3. The combination of the frame and pendent pivoted electro-magnet having beveled poles *m* with the stationary adjustable armature at right angles thereto, and having a correspondingly beveled face, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GARRET S. MOTT.

Witnesses:

HARRY DRURY,  
HARRY SMITH.