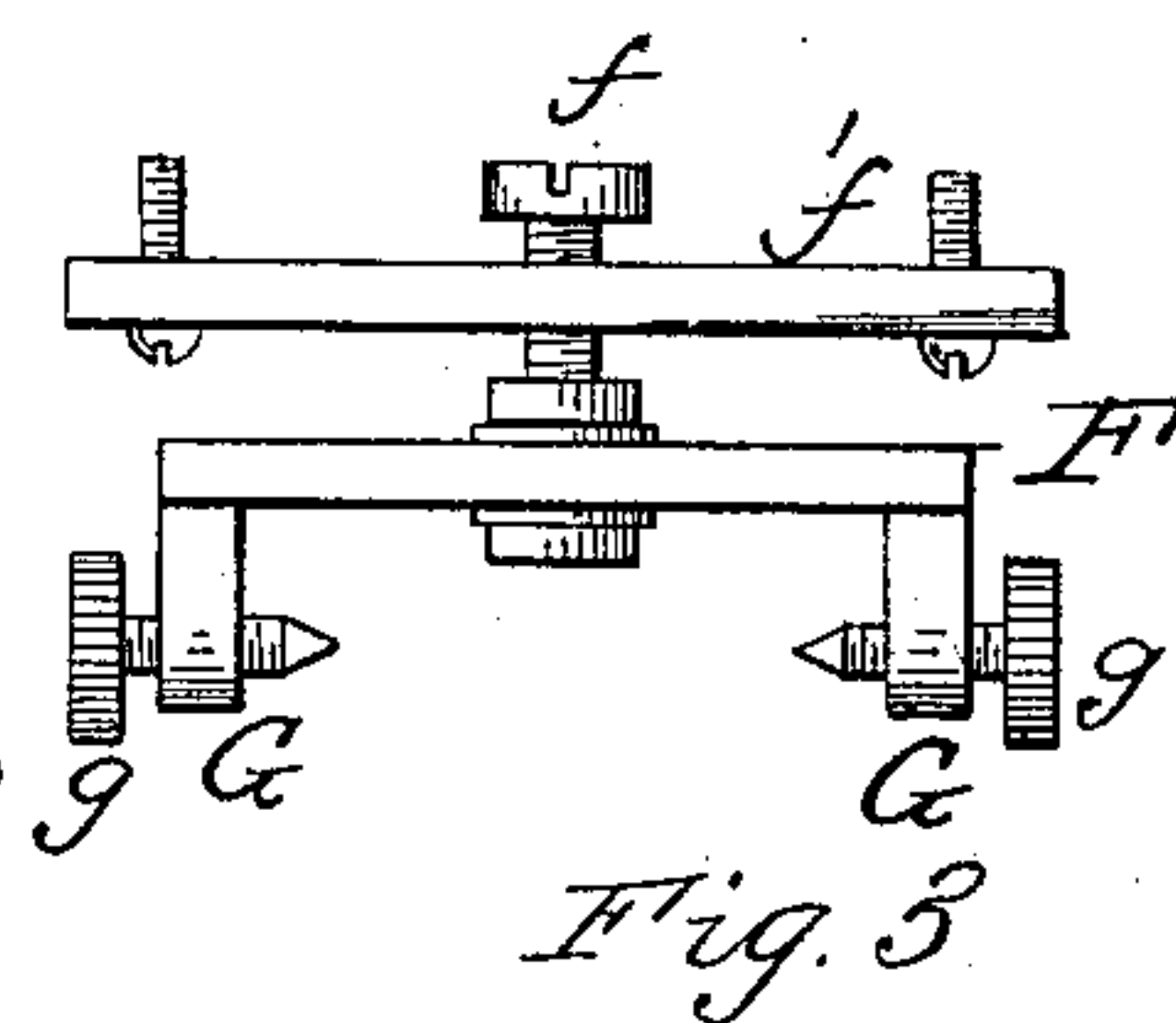
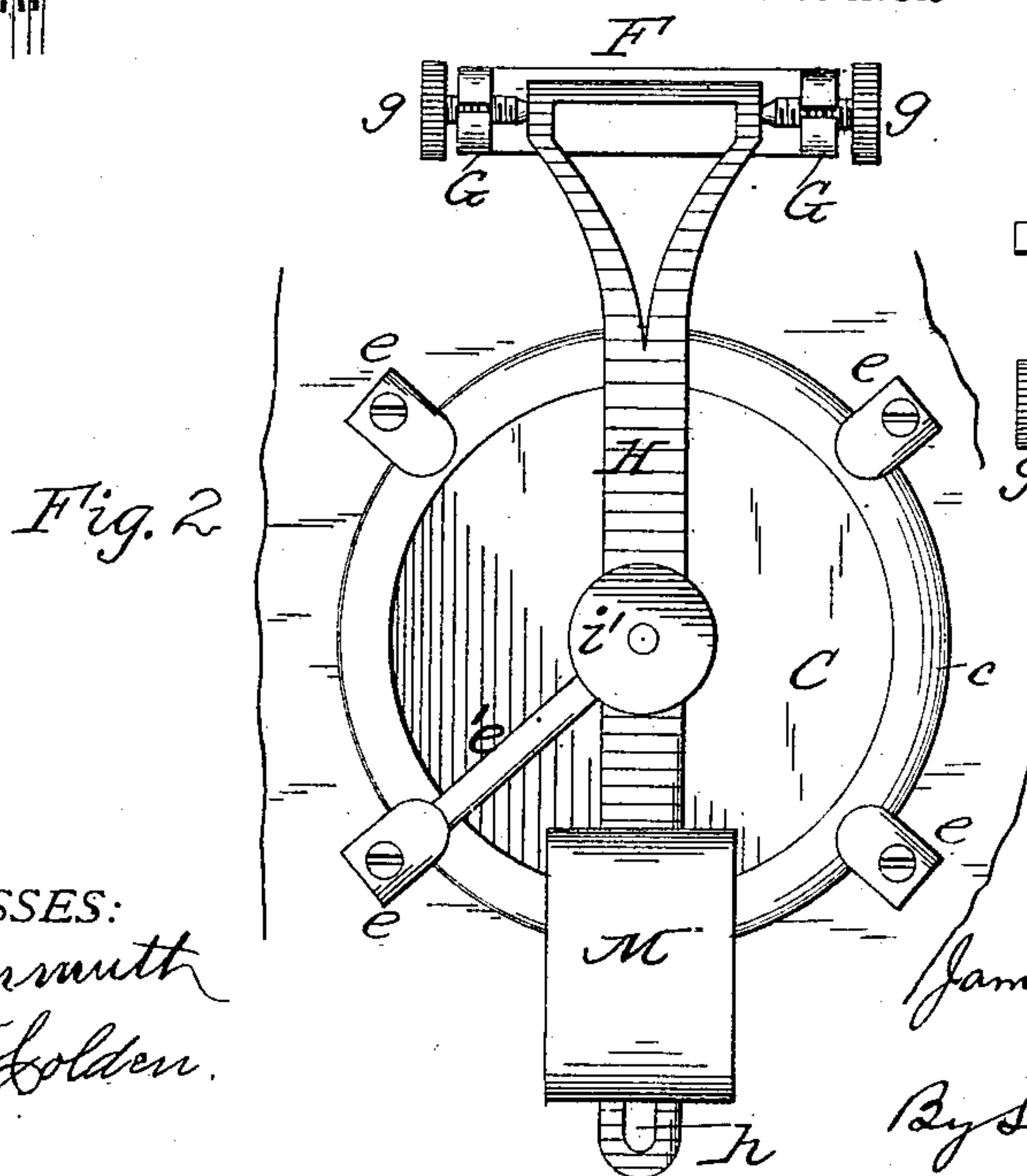
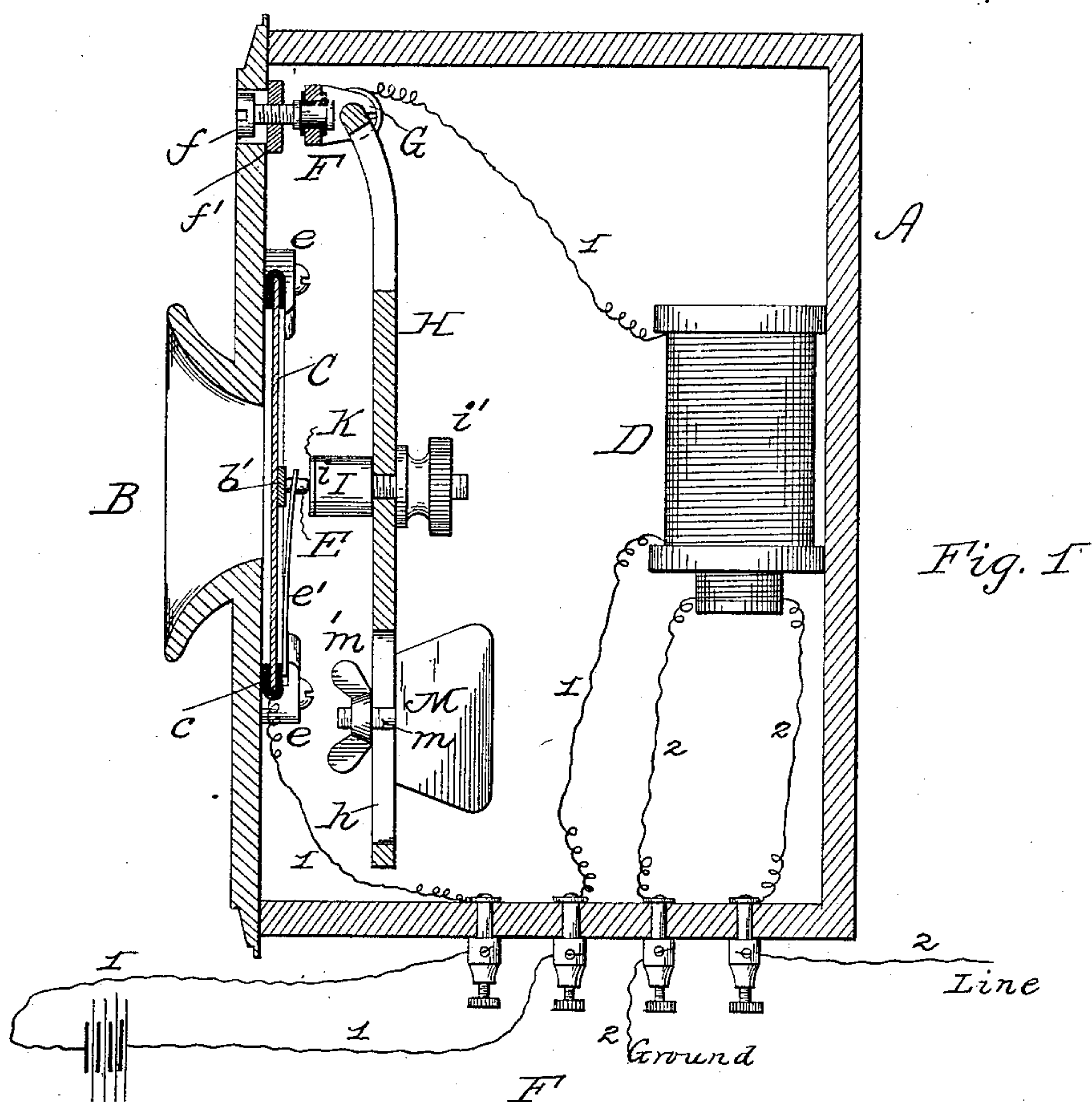


(No Model.)

J. F. McLAUGHLIN.
TELEPHONIC TRANSMITTER.

No. 335,294.

Patented Feb. 2, 1886.



WITNESSES:

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INVENTOR

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UNITED STATES PATENT OFFICE.

JAMES F. McLAUGHLIN, OF PHILADELPHIA, PENNSYLVANIA.

TELEPHONIC TRANSMITTER.

SPECIFICATION forming part of Letters Patent No. 335,294, dated February 2, 1886.

Application filed November 27, 1883. Renewed June 1, 1885. Serial No. 167,265. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. McLAUGHLIN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Telephonic Transmitters, of which the following is a specification, reference being had therein to the accompanying drawings, wherein—

Figure 1 is a vertical section; Fig. 2, a broken elevation, and Fig. 3 a detail plan.

My invention has relation to telephonic transmitters, and has for its object to simplify and improve their construction, whereby their practical efficiency is greatly enhanced.

In the drawings, A represents the usual or other box or case, having mouth-piece B, diaphragm C, with rubber seat *c*, and induction-coil D. The diaphragm is held in position by buttons *e*; or other suitable means may be substituted therefor. Attached to the center of the inner side of the diaphragm is a plate or point of platina, *b'*, against which impinges a platina button, E, secured to one end of a spring, *e'*, which is held in place by one of the fastening-buttons *e*, as plainly shown in Figs. 1 and 2.

F represents a bracket swiveled or otherwise suitably secured upon an adjusting-screw, *f*, working in plate *f'*, secured to box A. The bracket F has split or clamp bearings G G for adjusting screws *g g*, having tapering or other suitably-configured ends, which form pivotal points or journals for a bar, H, which is located in position back of the diaphragm, as illustrated. To said bar, and in line with the platina button E, is screwed a block, I, having a plate or face of zinc, K, attached to its end *i*, and is provided with a jam-nut, *i'*, for holding it in a fixed position when suitably adjusted. The gravity of the pendent bar H tends to move it toward the diaphragm to produce contact between the plate *b'*, button E, and zinc plate K, for completing the battery-circuit through said parts. The degree of pressure of such contact is regulated or varied by adjustment of screw *f* and block I, and, if desired, it may be further regulated by means of a sliding weight, M, carried by bar H. Said weight, as shown, is provided with a screw, *m*, which moves in an elongated slot, *h*, in bar H, and

is provided with a jam or thumb nut, *m'*; but, if desired, any other suitable means may be employed for securing the weight M to bar H and adjusting it thereon.

1 1 represent the battery-circuit for the diaphragm and primary of the induction-coil, and 2 2 the line-wire in circuit with the secondary of the induction-coil, said circuits being arranged in the usual or other desired manner.

From the foregoing it will be noted that the plate *b'* is fixed upon the diaphragm, while the button E is freely supported between said plate and the zinc plate K. The vibrations of the diaphragm vary the pressure of button E upon the zinc plate K, causing the latter to offer different resistances to the passage of the battery-current, whereby its strength is varied in unison with the vibrations of the diaphragm.

Such described construction and arrangement of plate *b'* and button E, together with the use of the zinc plate K, I find in practice provide an exceedingly efficient transmitter.

What I claim is—

1. In a transmitter, the combination of a diaphragm, a swinging or pendent bar carrying an adjustable block, and a freely-supported button or block, E, interposed between and in contact with said diaphragm and adjustable block, substantially as shown and described.

2. In a transmitter, the combination of a diaphragm having an electrode, a pivoted or swinging bar provided with an adjustable block faced with zinc, and an interposed button between said electrode and block, substantially as shown and described.

3. In a transmitter, the combination of a diaphragm, a freely-supported bar having an attached zinc plate, and a button interposed between said diaphragm and plate, substantially as shown and described.

4. In a transmitter, the combination of a diaphragm, a swinging or pivotal bar, and a freely-supported button, and a zinc plate interposed between the diaphragm and bar, substantially as shown and described.

5. The combination of diaphragm C, bar H, pivoted upon bracket F, means for adjusting the latter, adjustable block I, faced with zinc, and the freely-supported button E, substantially as shown and described.

6. The combination of diaphragm C, hav-

ing electrode b' , the swinging adjustable bar H, having block I, means for adjusting the latter and weight M, the button E, and plate K, interposed between said electrode and block I, substantially as shown and described.

7. In combination with diaphragm C, the freely-supported and adjustable bar H, having weight M and block I, and the button E, interposed between and in the same plane as said diaphragm and block, substantially as shown and described.

8. The combination of diaphragm C, the adjustable swinging bar H, carrying an adjustable block and weight, and the button E, interposed between and in contact with said diaphragm and block, substantially as shown and described.

9. The combination of diaphragm C, having electrode b' , the button E, having spring-support e' , the pendent bar H, having adjustable block I, and zinc plate K, substantially as shown and described.

10. The combination of diaphragm C, freely-supported bar H, block K, button E in contact with said diaphragm and block, and means for regulating the force of contact between said parts, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES F. McLAUGHLIN.

Witnesses:

S. J. VAN STAVOREN,
CHAS. F. VAN HORN.