(No Model.)

R. D. WOODWORTH.

TELEPHONE TRANSMITTER.

No. 274,075. Patented Mar. 13, 1883.

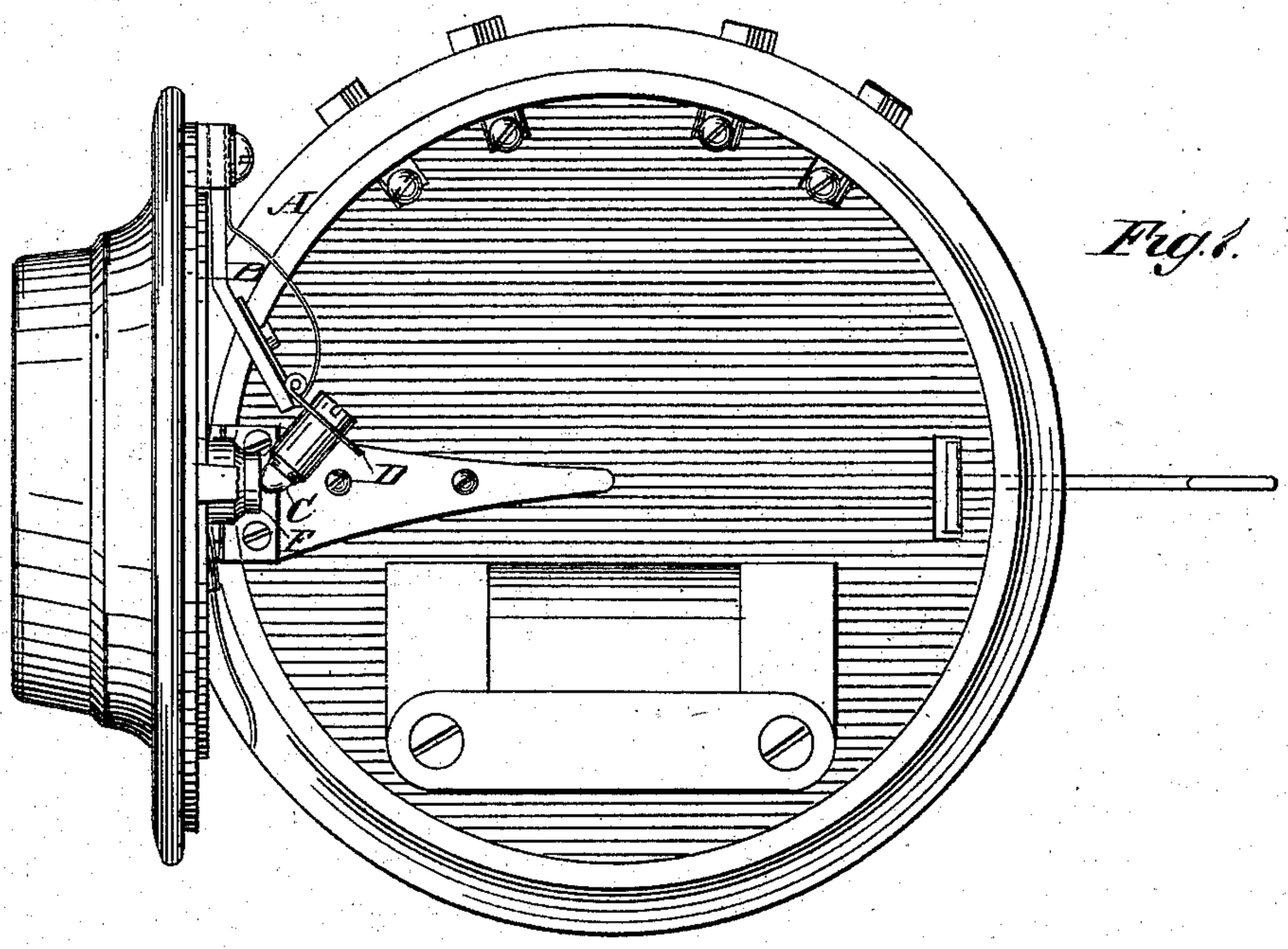
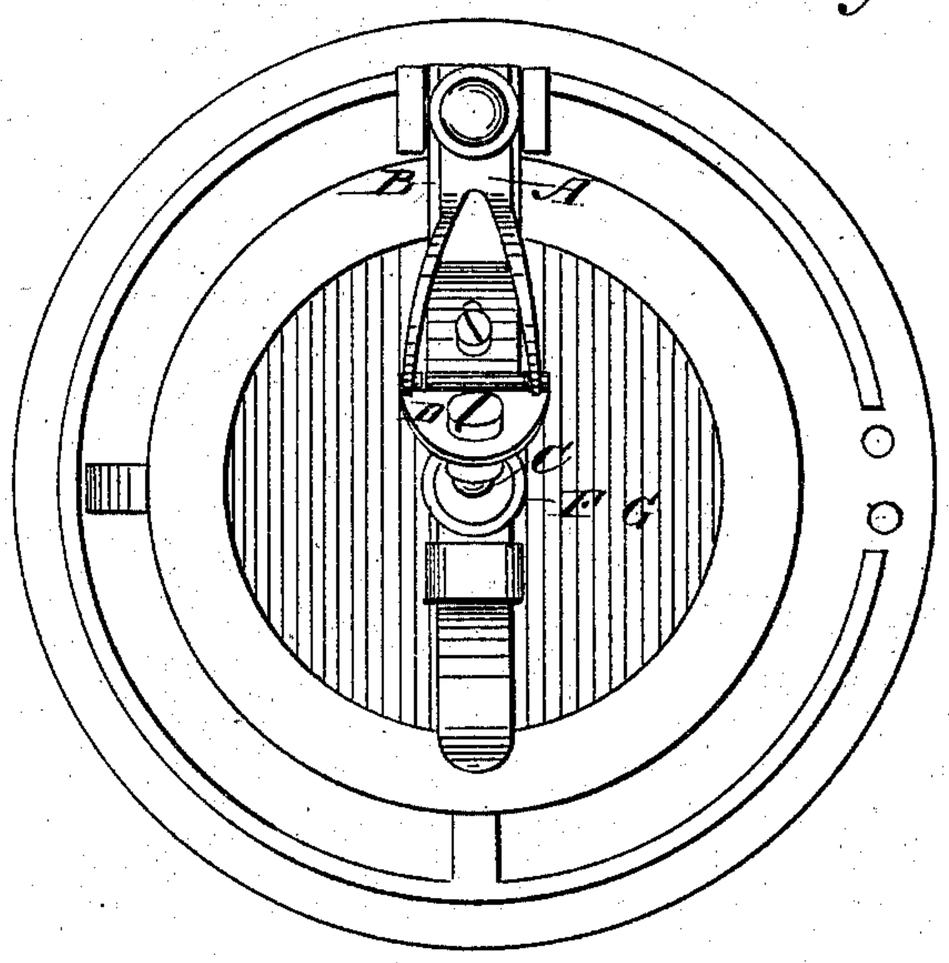


Fig. 1.

Fig. 2



WITNESSES:

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ROBERT D. WOODWORTH, OF ORANGE, NEW JERSEY.

TELEPHONE-TRANSMITTER.

SPECIFICATION forming part of Letters Patent No. 274,075, dated March 13, 1883.

Application filed June 20, 1882. (No model.)

To all whom it may concern:

Be it known that I, ROBERT D. WOODWORTH, of Orange, in the county of Essex and State of New Jersey, have invented a new and Improved Telephone-Transmitter, of which the following is a full, clear, and exact description.

I have found that the Berliner telephone-transmitter does not operate perfectly after having been in use for a short time, and I am of the opinion that this imperfection is caused by oxidation of the hinge of the pendulous electrode, and consequent imperfect transmission, and a further cause of this imperfection to be that the pendulous electrode does not act rapidly enough under the action of gravity only.

The object of my invention is to avoid the above defects; and to this end I attach a spring to the fixed part of the jointed conductor for conducting the current to the pendulous electrode, which spring has its free end resting on the hinged or swinging part to which the pendulous electrode is attached, whereby the oscillations of the pendulous electrode will be accelerated and the current will be transmitted without passing the hinge.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a front elevation of a Berliner transmitter provided with my improvement, the transmitter being shown opened. Fig. 2 is an elevation of the inside of the hinged cover.

A spring, A, made of any suitable kind of metal, is attached to the fixed part B of the conductor for conducting the current to the pendulous electrode C, which is attached to a swinging part, D, hinged to the fixed part B. The free end of the spring A rests on the outer surface of the swinging part D, adjoining the hinge, so that it will not prevent free oscillation of the hinged part, but will exert sufficient pressure on the same to insure a close contact of the pendulous electrode C with the electrode F on the diaphragm G. The spring A is preferably made forked, the free ends of the shanks resting on the swinging part D, near the side edges, for the purpose of producing a uniform pressure on the swinging part D; but, if desired, the spring can consist of a single strip resting on the swinging part D at the middle of the joint. The spring A is to be curved or bent, as shown, so that when the part D swings the end or ends of the spring A, resting on this swinging part D, will not slide on the same, but the spring will receive a greater curvature. The free and rapid operation of the pendulous electrode is greatly facilitated if the end or ends of the spring A do not slide on the swinging part D.

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

1. In a contact-telephone, the combination, with the diaphragm and a pendulous electrode, of a spring attached to the fixed part of the conductor for conducting the current to the pendulous electrode, and having its free end resting on the hinged part of the conductor, to which hinged part the pendulous electrode is attached, substantially as herein shown and described, and for the purpose set forth.

2. In a contact-telephone, the combination, with the diaphragm and a pendulous electrode, of a forked spring attached to the fixed part of the conductor for conducting the current to the pendulous electrode, and having the ends of the shanks of the fork resting on the hinged part of the conductor, to which hinged part of the conductor the pendulous electrode is attached, substantially as herein shown and described, and for the purpose set forth.

ROBERT D. WOODWORTH.

Witnesses:

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