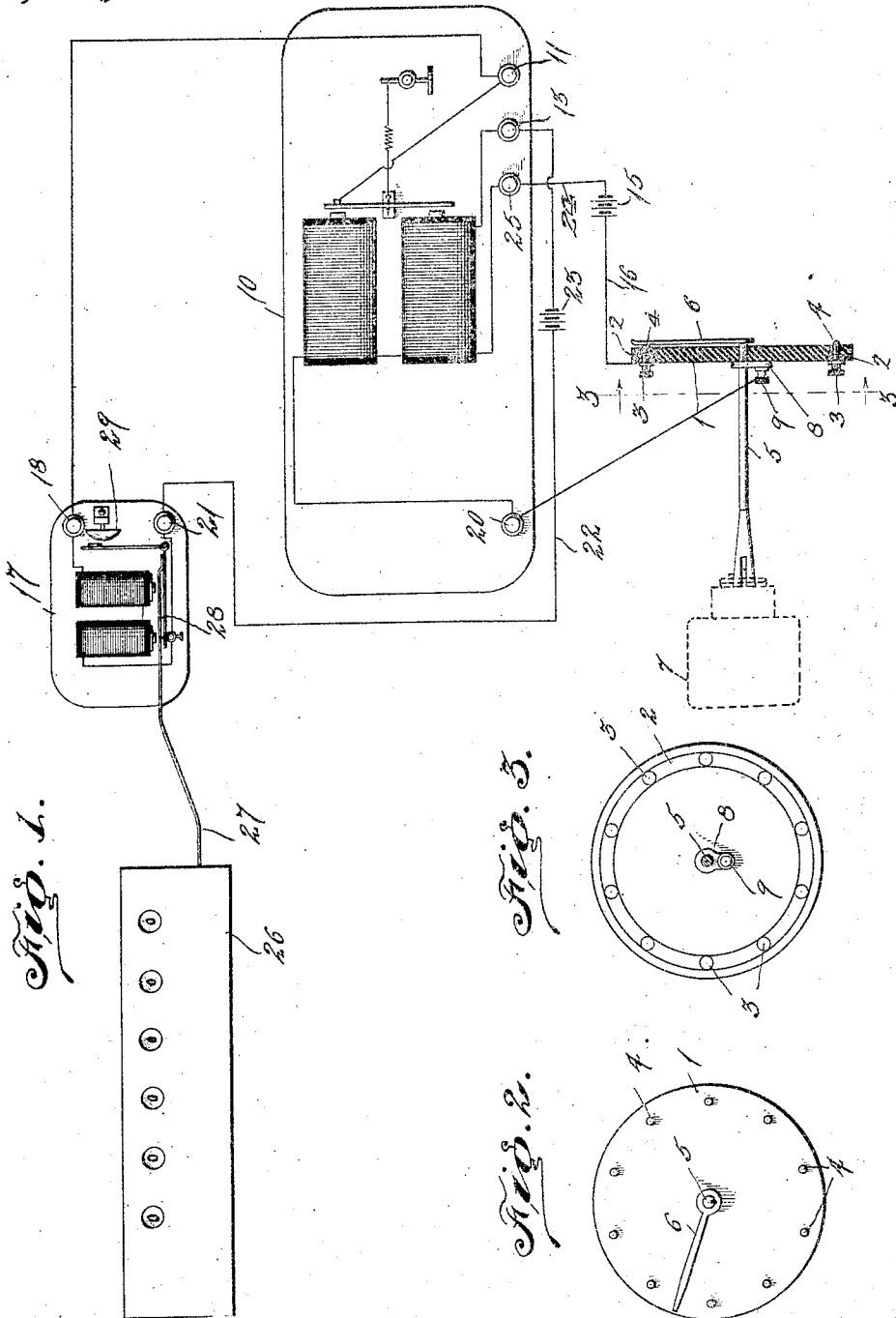


T. A. McCANNA & A. GREENE.  
ELECTRICALLY OPERATED ANNUNCIATOR.  
APPLICATION FILED APR. 14, 1911.

1,059,185.

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WITNESSES:  
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# UNITED STATES PATENT OFFICE.

THEODORE A. McCANNA AND ADDISON GREENE, OF FREEPORT, PENNSYLVANIA.

ELECTRICALLY-OPERATED ANNUNCIATOR.

1,059,185.

Specification of Letters Patent.

Patented Apr. 15, 1913.

Application filed April 14, 1911. Serial No. 621,147.

*To all whom it may concern:*

Be it known that we, THEODORE A. McCANNA and ADDISON GREENE, citizens of the United States of America, residing at 5 Freeport, in the county of Armstrong and State of Pennsylvania, have invented certain new and useful Improvements in Electrically-Operated Annunciators, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to an electrically operated annunciator for gas meters and similar devices.

15 The object of our invention is to provide a simple and inexpensive device that can be easily operated by the index finger of an ordinary gas meter or other registering device, to indicate at a point removed from the gas 20 meter the amount of gas passing through the meter. To this end, we have devised an electrical device embodying a plurality of elements that can be easily and quickly assembled to cooperate with the gas meter, and the construction and arrangement of 25 these elements will be hereinafter specifically described and then claimed.

Reference will now be had to the drawing, wherein:—

30 Figure 1 is a front elevation of our device. Fig. 2 is a front elevation of a contact dial, and Fig. 3 is a rear elevation of the same taken on the line 11—11 of Fig. 1.

35 Like numerals of reference designate corresponding parts throughout the several views.

40 The reference numeral 1 denotes a disk of insulation, preferably made of fiber. Mounted in the rear side of the disk 1 is an annular metallic member 2, preferably constructed of copper and extending through said member 2 is a circular row of binding posts 3, these latter at the front side of the disk 1 being provided with platinum 45 points 4.

50 5 denotes a shaft journaled in the disk 1, said shaft having the forward end thereof provided with a resilient contact arm 6 adapted to engage or wipe the platinum points 4. The rear end of the shaft 5 is adapted to be coupled to the index finger operating shaft of a gas meter or other registering device 7.

55 8 denotes a contact plate mounted upon the rear side of the disk 1 and frictionally

engaging the shaft 5, said plate having a binding post 9.

10 denotes a relay of the ordinary and well known type having one of the binding posts 11 thereof connected by a wire 12 to the binding post 9. Another binding post 13 of the relay is connected by a wire 14 to a suitable source of electrical energy, as a battery 15, and said battery is connected by a wire 16 to one of the binding posts 3 65 of the copper plate 2.

17 denotes an electromagnet having one of the binding posts 18 thereof connected by a wire 19 to a binding post 20 of the relay. The other binding post 21 of the electro- 70 magnet is connected by a wire 22 to a suitable source of electrical energy, as a battery 23, and said battery is connected by a wire 24 to another binding post 25 of the relay 10.

26 denotes an indicator of a conventional form adapted to be actuated by an extension 27 of an armature 28 of the electromagnet 17.

29 denotes an audible signal, as a bell carried by the electromagnet 17 and adapted 80 to be actuated when said electromagnet is energized.

As the shaft 5 is revolved or intermittently moved by the gas meter, the contact arm 6 engages the platinum points 4 and 85 completes electric circuits that energize the electromagnet 17 and the pulsations of said electromagnet actuates the annunciator.

From the foregoing it will be observed that the disk or contact dial 1 serves functionally as a commutator and that the annunciator can be located at some remote point relatively to the gas meter.

What we claim is:—

In combination a gas meter, a source of 95 electrical energy, a disk of insulation, a shaft having its outer end portion journaled in said disk centrally thereof, said shaft projecting forwardly and rearwardly from said disk and having its rear end enlarged and bifurcated for coupling it to the pointer of a gas meter whereby the shaft will be shifted during movement of the pointer, an annular metallic member mounted in the rear face of said disk in proximity to its edges, a circular row of spaced binding posts extending through said disk and member having their outer ends provided with platinum points, a contact arm carried upon the outer end of said shaft and 110

capable of engaging said platinum points when the shaft is shifted to close a circuit, a plate carried by said shaft inwardly of the disk, a relay in circuit with said source and member, electrical connections between said source and said plate, an electromagnet in circuit with said relay, an indicator, and an operative connection between the indicator and said magnet for operating the indi-

cator when the magnet is energized by closing the circuit. 10

In testimony whereof we affix our signatures in the presence of two witnesses.

THEODORE A. McCANNA.

ADDISON GREENE.

Witnesses:

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W. M. BOYD.