E. A. CALAHAN.

Improvement in Signal Apparatus for District Telegraphs.

No. 129,526. Patented July 16, 1872.

Fig. 1.

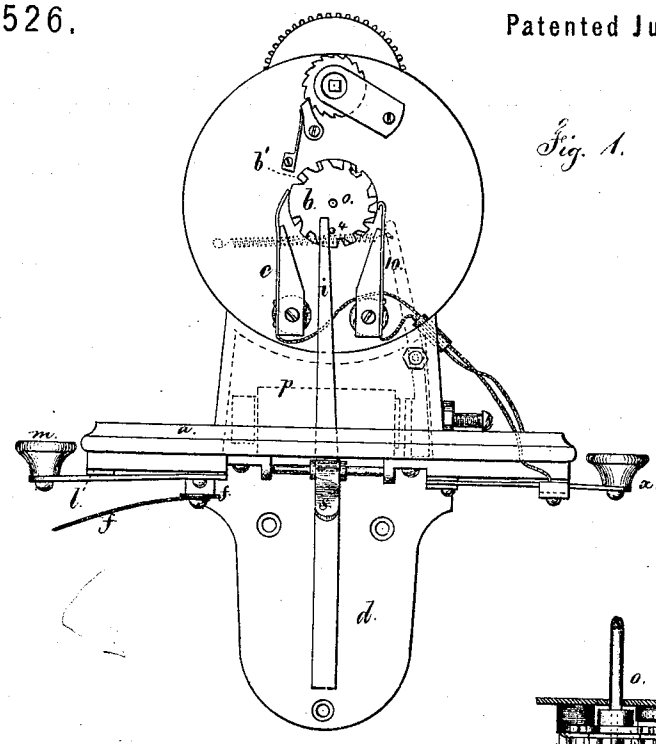


Fig. 3.

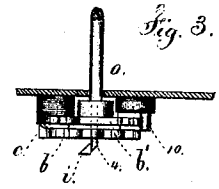
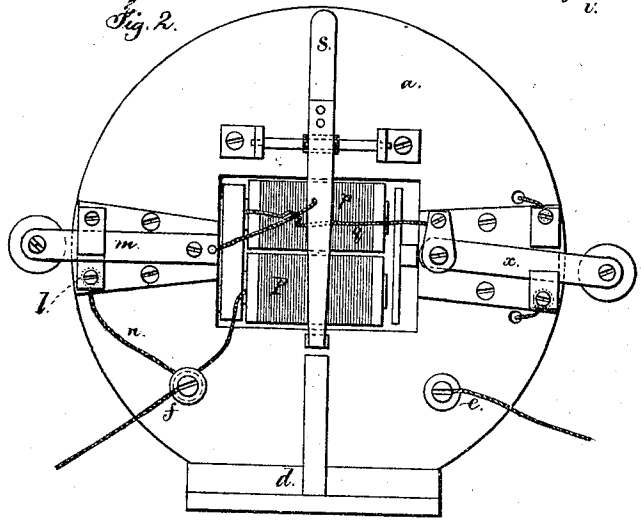


Fig. 2.



INVENTOR

Witnesses.

Chas. H. Smith

Geo. D. Walker

Edward A. Calahan,

Per. Lemuel W. Serrell

ATTY.

AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

EDWARD A. CALAHAN, OF BROOKLYN, ASSIGNOR TO THE AMERICAN DISTRICT TELEGRAPH COMPANY, OF NEW YORK, N. Y.

IMPROVEMENT IN SIGNAL APPARATUS FOR DISTRICT TELEGRAPHS.

Specification forming part of Letters Patent No. 129,526, dated July 16, 1872.

To all whom it may concern:

Be it known that I, EDWARD A. CALAHAN, of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Telegraphic Apparatus; and the following is declared to be a correct description thereof.

This invention is for sending pulsations from a house or building to a central station, indicating the need of assistance, such as in cases of fire, robbery, sickness, &c., by giving a series of strokes on a bell, or moving a pointer, to indicate numbers. My invention consists in two or more circuit-breaking wheels upon one shaft, with springs and a switch to bring into action one of said wheels and indicate at the distant station the number desired. Each machine is made to indicate different numbers, and the machines at a number of dwellings are placed in the same circuit, and the different numbers of the respective instruments are understood as indicating "messenger" or "police." At any instrument where assistance is required, the circuit with the number desired is closed by the switch, and the circuit-breaking wheel revolved by clock-work, when disengaged from a stop, so that the number will be indicated at the central receiving-station and denote what is wanted. Two or more of these circuit-closing wheels being provided on each instrument, the central station can be apprised, by the number, the place sending and what is wanted there.

In the drawing, Figure 1 is an elevation of the machine. Fig. 2 is an inverted plan of the same, and Fig. 3 is a plan of the circuit-wheels.

The bed of the machine is of any suitable character. I have shown a circular bed, *a*, upon a bracket, *d*, that can be attached against a wall or in any convenient position, and a glass shade may be provided to cover the mechanism; such shade resting upon the bed *a*. The clock-work that is employed to revolve the shaft *o* of the circuit-wheels *b b'*, may be of any desired character, and provided with a fly or other means for regulating the movement. These circuit-wheels are made with notches or non-conducting and conducting peripheries, and the long portions cause the indication of the number.

Suppose the wheel *b* by one rotation to indicate 152 and the wheel *b'* to indicate 153, and at the police or central station No. 152 meant police and 153 messenger for a certain house, the occupants of that house, by the switch *x*, would throw the circuit through either the wheel *b* or *b'*, according to what was wanted; then, by depressing the key *m*, the circuit in the line will pass from the binding-screw *f* through the magnet *p*, wire *q*, switch *x*, spring *c* or 10, wheel *b* or *b'*, and clock-work, to the bed *a* and binding-screw *e*. If the line is in use by any other person the magnet *p* will indicate the same by the sound from the armature, and the person must wait; otherwise he depresses the finger-key *s*, which draws the dog *i* from contact with the stop-pin 4, allowing the wheels *b b'* to rotate and a signal to be given through *f*, *p*, *q*, *s*, *c* or 10, *b* or *b'*, *a*, and *e*, and the person sending knows that the message has been transmitted by his own magnet responding.

When the instrument is not in use the magnet *p* is not energized because the current is shunted or short-circuited through *f*, *n*, *l*, *m*, *s*, *i*, 4, *b*, *a*, *e*.

It is to be understood that the springs *c* and 10 and lever *s* are insulated.

I claim as my invention—

1. Two circuit-breaking wheels, *b* and *b'*, upon the same shaft, in combination with the circuit-closing springs *c* and 10 and a switch, *x*, arranged substantially as specified, so as to give one of two signals at the distant station, substantially as set forth.

2. The finger-key *s* and stop 4 in combination with the circuit-breaking wheels and their springs, substantially as and for the purposes set forth.

3. The key *m*, in the shunt of the main line, in combination with the electro-magnet, also in the main line, and the circuit-closing wheels *b b'*, substantially as set forth, for testing whether the main line is clear without interrupting the same, substantially as specified.

Signed by me this 23d day of April, A. D. 1872.

EDWD. A. CALAHAN.

Witnesses:
H. L. HOTCHKISS,
GEO. D. WALKER.