No. 618,723. Patented Jan. 31, 1899.

H. W. PEIRCE.

SIGNAL MECHANISM.

(Application filed July 7, 1897.)

(No Model.)

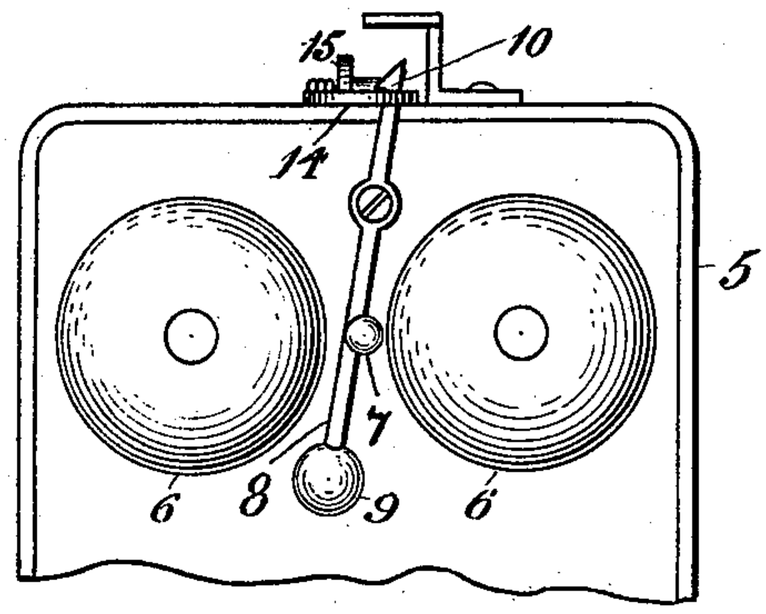

Fig. 1.

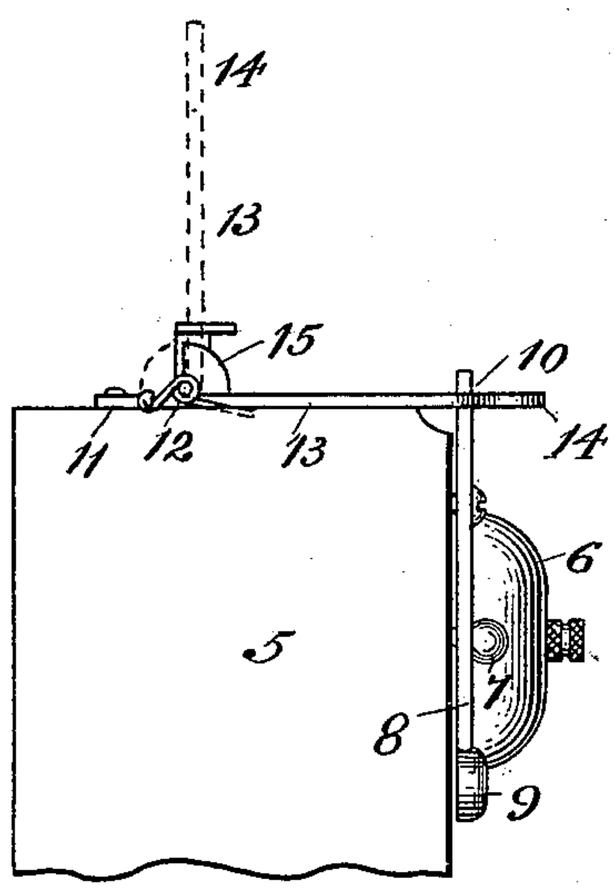

Fig. 2.

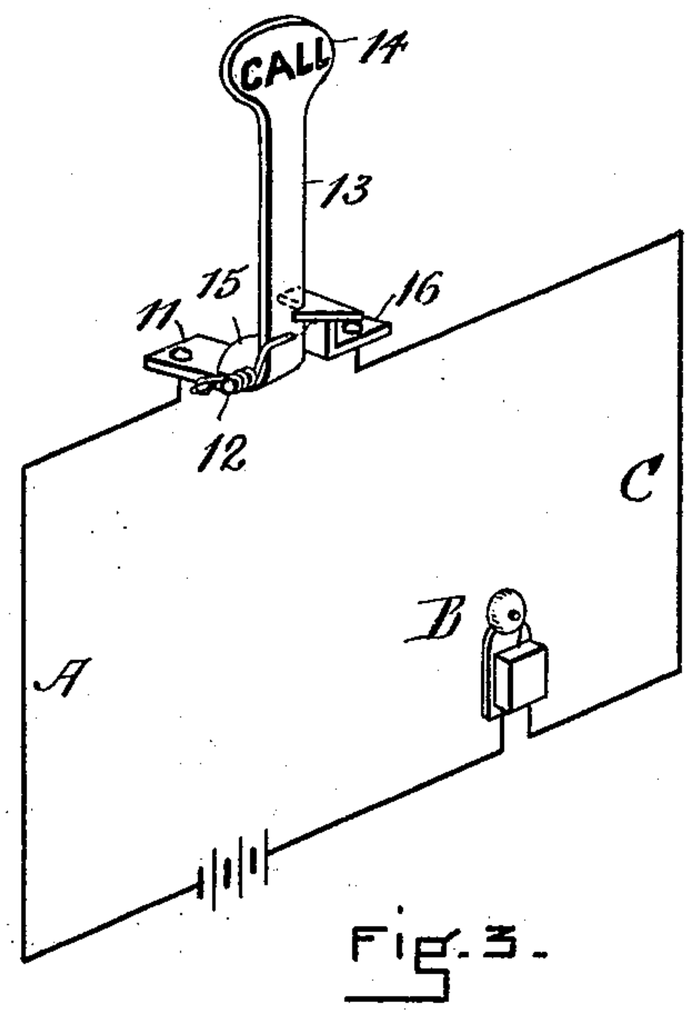

Fig. 3.

Fig. 4.

WITNESSES

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SIGNAL MECHANISM.

SPECIFICATION forming part of Letters Patent No. 618,723, dated January 31, 1899.

Application filed July 7, 1897. Serial No. 643,779. (No model.)

To all whom it may concern:

Be it known that I, HERBERT W. PEIRCE, of Waltham, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Signal Mechanism; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has reference to improvements in signal mechanism, and particularly in extension-signals beyond the main electric circuit.

The object of the invention is to so construct a signal mechanism that it may be brought into action by mechanical connection with the vibrator.

Another object is to provide a signal mechanism, including an electric circuit, so constructed that by mechanical connection with a vibrator in the main circuit the mechanism for establishing the secondary circuit is released and allowed to act.

Another object of the invention is to so construct a visual signal that the detainer therefor may be released by the mechanical contact of the vibrator.

The invention consists of the vibrator, the detent pivotally mounted adjacent to the vibrator and adapted to be moved thereby, and the signal-arm held in the closed position by the detent.

The invention also consists in the combination, with the magnetic or electric bell having a vibratile hammer, of a detent pivoted adjacent to said hammer, a circuit-closer normally held out of contact by the detent, a contact with which the closer is adapted to engage when released by the detent, said contact and closer being connected with the opposite arms of an electric circuit and the signal device in said circuit.

The invention likewise consists in such other novel features of construction and combination of parts as shall hereinafter be more fully described, and pointed out in the claim.

Figure 1 represents a front view of portions of a "telephone magneto call-box," so called, with the improved signal mounted thereon. Fig. 2 represents a side view of the same, one of the bells being removed. Fig. 3 represents a perspective view of the improved signal shown in electrical connection with a bell. Fig. 4 represents a perspective view of the spring-contact jack.

Similar letters and numbers of reference designate corresponding parts throughout.

This signal mechanism is particularly designed for use as an extension-call for telephone systems, although capable of use with any vibrator whether operated mechanically, electrically, or by means of a magneto. Its office is to complete an auxillary or secondary circuit, which includes an extension-signal, so that the extension-signal may be continuously operated until released. Another purpose is to provide a novel visual signal without reference to an extension-circuit.

The device is intended for use where an extension-call is necessary, or in factories, machine-shops, or other places where the surrounding noise has a tendency to drown the sound of the telephone-bell. It is also applicable to private lines having a number of stations, where it is not convenient to give immediate attention to the telephone-call, or when the person in charge of the particular station is called away from time to time and wishes to be notified of any call during his absence.

In the drawings, 5 represents the magneto-box of a telephone system, 6 6 being the bells thereof, and 7 the vibrator-hammer, having the usual connections whereby it may be caused to vibrate on the completion of a magnetic or electric circuit.

On the front of the box 5 is pivoted the detent 8, having the counterweight 9 and the latch-head 10, the construction and size of the detent being such that it may readily be swung on its pivot by the mechanical striking against it of the vibrator 7.

On the top of the box 5 is secured the plate 11, in connection with the arm A, of an electric circuit, which includes the bell B or other signal device. Pivoted to the plate 11 by means of the spring-hinge 12 is the circuit-closer arm 13, having the visual signal 14 and a stop, as 15, which limits the movement of the arm 13.

Adjacent to the plate 11 is mounted the spring-contact jack 16, which is connected with the arm C of the electric circuit, so that

when the arm 13 is released by the detent and is swung upward by its spring-hinge 12 it contacts with the jack 16 and completes the secondary circuit through the bell B.

The counterweights of the detents are designed to swing the upper portions of the same into positions to engage the circuit-closer 13, so that the device is readily set.

Where a visual signal only is desired, the secondary electric circuit may be dispensed with.

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

The combination with the box 5, and the vibrator 7 thereof, of the detent 8, pivoted to the box, having the weight 9 and the latch 10, the plate 11, secured to the top of the box and in electric connection with one arm of an electric circuit, the arm 13 pivotally connected to said plate by the spring-hinge 12, and adapted to be engaged by the detent, and the spring-jack 16, connected with the opposite arm of the circuit, and adapted to engage the arm 13, as described.

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Witnesses:
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