(No Model.)

# J. H. TABONY.

## TELEPHONE TIME REGISTER.

No. 349,539. Patented Sept. 21, 1886.

*Fig. 1.*

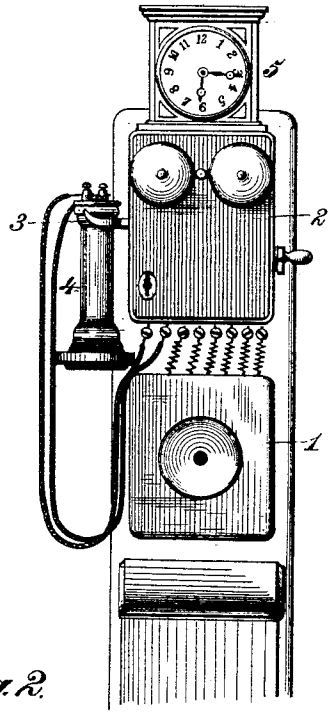



*Fig. 2.*

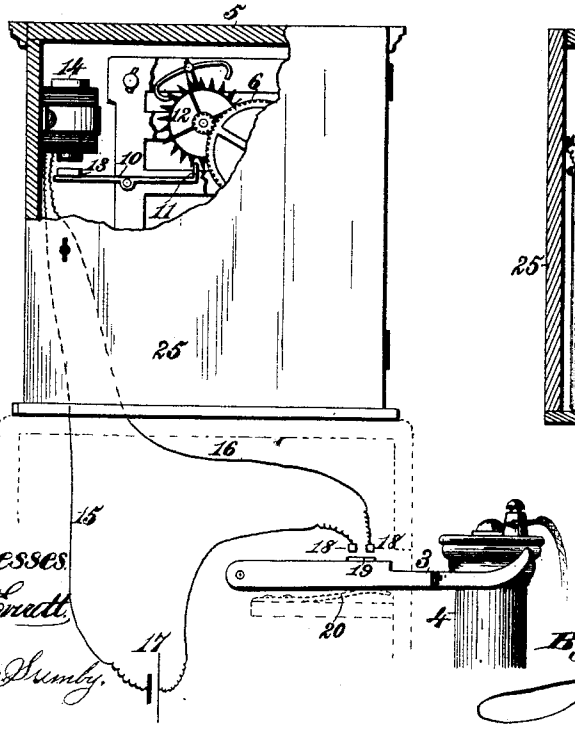
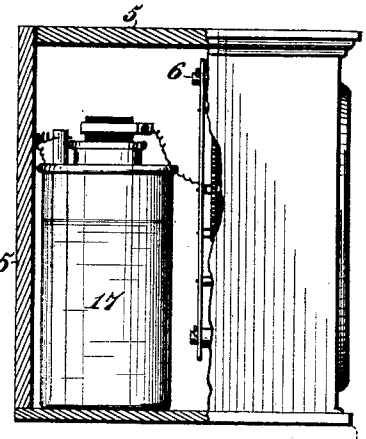



*Fig. 3.*




Witnesses.
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Dennis Sumby.

Inventor.
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By James L. Norris.
Atty.

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# UNITED STATES PATENT OFFICE.

JOSEPH H. TABONY, OF NEW ORLEANS, LOUISIANA, ASSIGNOR OF ONE-HALF TO ATWOOD VIOLETT, OF SAME PLACE.

## TELEPHONE TIME-REGISTER.

SPECIFICATION forming part of Letters Patent No. 349,539, dated September 21, 1886.

Application filed November 4, 1885. Serial No. 181,856. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH H. TABONY, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented new and useful Improvements in Telephonic Time-Registers, of which the following is a specification.

This invention has for its object to provide simple and reliable means for indicating the length of time telephonic transmitters are used by subscribers, whereby each local telephone system of a general or exchange system is placed under control of the proper inspecting authorities, to enable them to determine beyond a doubt the total amount of time the subscriber has had possession of the main line or has been using the transmitter, a contrivance of the above character being desired to enable a toll or charge to be collected for the precise period of time a local telephone-station has been in communication with the main line.

The invention consists in combining a suitable time-keeper with the devices belonging to a local telephone system, said time-keeper being so arranged that it will only keep time and move its indices over a suitable dial when the transmitter is in use or the local station is in communication with the main line of the exchange system. The time-keeper is held in an inactive state by means of a detent-lever engaging therewith, and said lever is released to start the time-keeper by means of an electro-magnet included in the circuit of a local battery. An open or closed circuit may be resorted to; but in either case the closing or breaking of such circuit is caused by the removal of the telephone-receiver from the ordinary "cut-out lever," which has a contact-plate engaging with the terminals of the local battery-wires.

The invention, briefly outlined in the above statement, will be hereinafter more fully described, and then set forth in the claims.

In the drawings, Figure 1 is a front view of the devices belonging to a local telephone system and showing my time-register surmounting the same. Fig. 2 illustrates the time-movement and means for arresting and starting the same, such figure being partly in elevation and section, and a diagrammatical view of the battery and circuit wires. Fig. 3 is a side view, partly in section, of the time-keeper casing and local battery placed therein.

The reference-numeral 1 designates a telephonic transmitter; 2, a call or signal box; 3, a cut-out or switch lever, and 4 a telephonic receiver adapted to be hung upon said lever. These devices constitute a local telephone system, completely inclosing under a compact and appropriate form all the parts necessary for signaling the central station and for telephonic communication. On the top of the call or signal box is placed a casing, 5, which contains a clock or time movement, 6, the dial and hands whereof are exposed or visible on the front of the casing, as is seen in Fig. 1.

This time-keeper is of any approved type. In the present instance I have shown an ordinary spring-motor clock having an ordinary dial and minute and hour hands; but I also contemplate using a mechanism which will move one of the hands the distance of one figure every twelve hours, the other hand moving in the ordinary way and indicating both hours and minutes.

It is the intention to maintain the time-keeper, no matter what type be used, in an inactive state until such time as the main line is placed in communication with the local telephone-station, when the time mechanism is started and made to run by virtue of its spring, weight, or other prime motor.

Referring to Fig. 2, it is seen that a lever, 10, centrally pivoted to the time-keeper frame, has a prong or hook, 11, at its forward end which engages with the escapement-wheel 12 of the time-keeper, and when in such position holds the prime motor of the time-keeper in check, or inoperative. The other end of the lever 10 carries an armature, 13, which is disposed in proper relation to an electro-magnet, 14, having its surrounding coil of wire included in the circuit of a local battery, 17. The circuit-wires 15 and 16, extending from the poles of said battery and leading into the electro-magnet, are separated, and have terminal contact-plates 18, adapted to make connection with an insulated contact-plate, 19, on the upper face of the switch-lever 3.

It is obvious that when the parts are in the position seen in Fig. 2—that is, when the telephonic receiver 4 is hung upon the switch-

lever—the circuit of the local battery 17 is broken, and the lever 10 holds the time-movement in a state of rest. When, however, the receiver 4 is removed from the lever 10, and the main line is in communication with the local station, the ordinary spring, 20, beneath the lever 3, throws the latter upward and closes the circuit of the local battery 17 by bringing the plates 18 and 19 in contact with each other. The action of the battery-current then effects a magnetization of the core of the electro-magnet, which serves to attract the armature 13, and in consequence whereof the lever 10 is vibrated and released from the escapement-wheel of the time-keeper, the latter then continuing to operate for moving the hands over the dial until such time as the local station is disconnected from the main line by again placing the receiver upon the switch-lever 3. The casing 5 is made sufficiently large to contain the voltaic battery of any approved type in rear of the time-keeper, and it has a door, 25, for closing the same, such door being securely locked so that it cannot be opened except by authorized persons.

It is obvious that instead of the open-circuit arrangement shown in the drawings, I may effect the liberation of the clock-movement by breaking a closed-battery circuit, a variation of the pivotal connection of the lever 10 and a properly-devised circuit-breaker being all that is required to produce the described result.

What I claim is—

1. The combination, with a local telephone system, of a time-keeper having a suitable prime motor, means for holding said time-keeper in an inactive state when the transmitter is not in use, and a local battery and circuit-connections for throwing the time-keeper into action when the transmitter is in use, substantially as described.

2. The combination, with a local telephone system, of a casing, a time-keeper, electro-magnet, battery, and electrically-controlled detent-lever inclosed in said casing, circuit-wires, and a cut-out lever adapted to support the telephonic receiver, substantially as described.

3. In a local telephone system, the combination of a cut-out lever having contact-plate 19, a local battery, circuit-wires having contact-plates 18, an electro-magnet located in the local-battery circuit, a clock-movement, and a detent-lever provided with an armature at one end and adapted at its other end to engage the escapement of the clock-movement, substantially as described.

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

JOSEPH H. TABONY.

Witnesses:
JAMES L. NORRIS,
JOS. L. COOMBS.