L. P. MONTANEY.

TIME REGISTER FOR TELEPHONES.

APPLICATION FILED OCT. 18, 1917.

1,284,418. Patented Nov. 12, 1918.

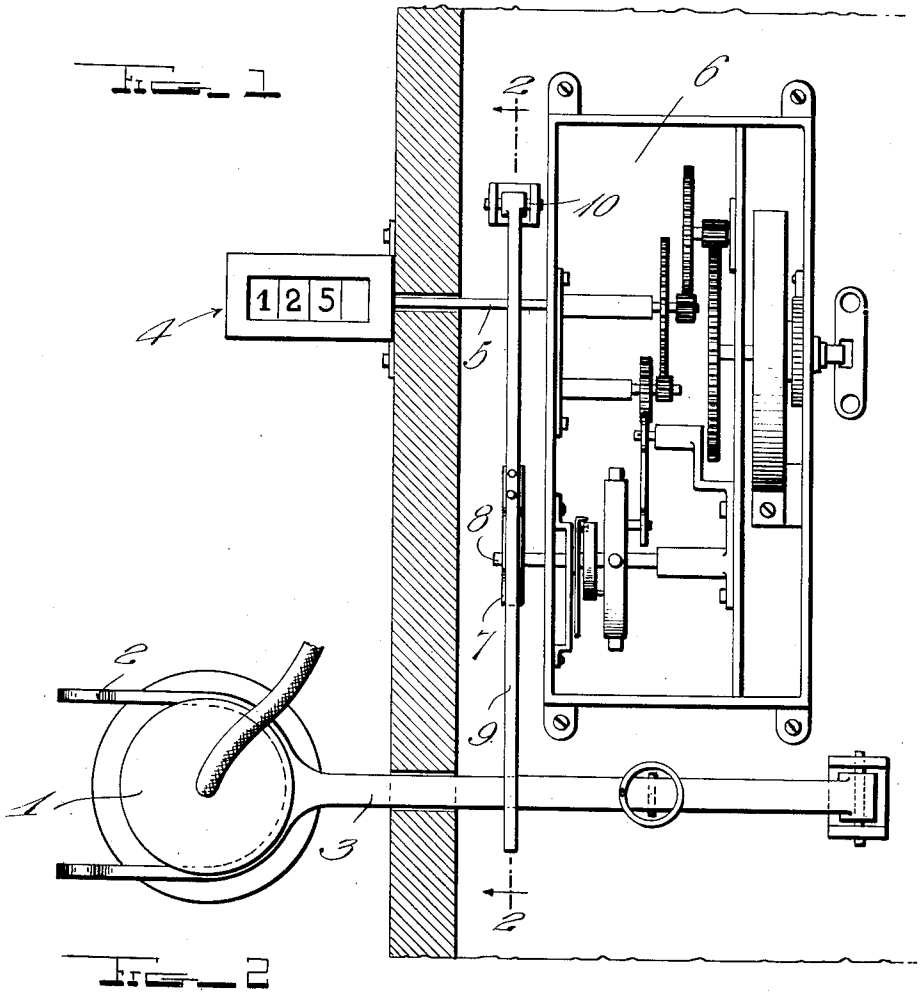


Fig. 1

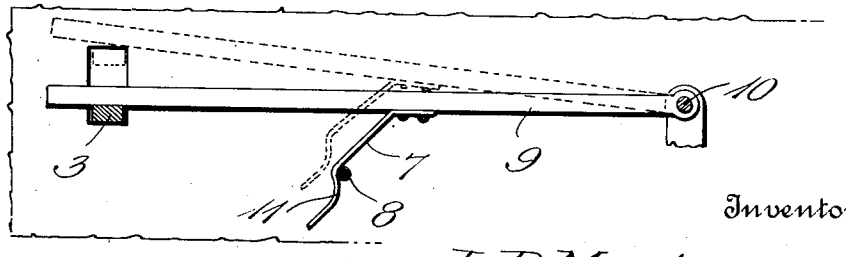


Fig. 2

Witness

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TIME-REGISTER FOR TELEPHONES.

1,284,418. Specification of Letters Patent. Patented Nov. 12, 1918.

Application filed October 18, 1917. Serial No. 197,337.

To all whom it may concern:

Be it known that I, LOUIS P. MONTANEY, a citizen of the United States, residing at Omak, in the county of Okanogan and State of Washington, have invented certain new and useful Improvements in Time-Registers for Telephones; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide a simply constructed and inexpensive, yet a highly efficient, durable, and easily installed device for registering the amount of time a telephone is in use within a given period, so that the telephone companies may charge according to the actual length of the conversations, thus preventing unnecessary calls and "listening in" to a large extent.

With the foregoing general object in view, the invention resides in the novel features of construction and unique combinations of parts to be hereinafter fully described and claimed, the descriptive matter being supplemented by the accompanying drawings which form a part of this specification and in which:

Figure 1 is a horizontal sectional view showing the application of my invention to a telephone; and

Fig. 2 is a vertical section of Fig. 1 on the plane of the line 2—2 thereof;

In the drawings above briefly described, the numeral 1 designates a telephone receiver, 2 the receiver hook on the usual vertically swinging arm 3, and 4 a suitable time register operated from a rotating shaft 5. A suitable spring motor 6 is employed for driving the shaft 5 automatically when the telephone is in use, and for the purpose of controlling this motor, that is initially starting the same when the telephone is in use and stopping it when the receiver is returned to the hook, I provide a resilient finger 7 which coöperates with the balance wheel staff or control shaft 8 of the motor 6.

The finger 7 is secured to and depends from a horizontal arm 9 having one end pivoted at 10 to permit vertical swinging of said arm, the other end of the arm overlying the hook arm 3 as shown clearly in the drawings. The arm 9 is spaced above the control shaft 8 and the flat resilient finger 7 inclines downwardly to said shaft, the lower end of said finger being preferably offset downwardly from the body portion thereof, in order to form a substantially vertical portion 11. This portion, when the arm 9 is raised by the ascent of the arm 3, will initially start the balance or control shaft 8, so that the motor 6 is set in motion to operate the register 4. The moment the receiver 1 is returned to the hook 2, however, the arm 9 lowers by gravity so that the finger 7 bears downwardly upon the staff 8 to hold the same against rotation until the phone is again used.

From the foregoing, taken in connection with the accompanying drawing, it will be obvious that I have provided a register which may be simply and inexpensively manufactured and marketed, yet one which will be highly efficient and durable for the purposes intended. The device may easily be installed upon numerous kinds of telephones by making slight alterations to the construction of the device, and I wish it understood that for these reasons I do not consider my invention limited to the specific construction shown and described.

I claim:

In combination with the vertically movable receiver-supporting switch arm of a telephone, registering means, a spring motor for operating said registering means, said motor including a control shaft spaced horizontally from and slightly below said switch arm, a horizontal self-lowering lever fulcrumed at one end to a fixed support and having its other end resting on said switch arm, whereby raising of the latter will correspondingly raise said lever, and an inclined spring secured at its upper end to said lever, said spring resting near its lower end on said control shaft to normally hold the latter against rotation and having a substantially vertical portion to engage and initially rotate said shaft when said lever is raised.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

LOUIS P. MONTANEY.

Witnesses:
L. S. OVERHOLT,
SARAH ROSS.