

(No Model.)

W. GRAY.

SIGNAL DEVICE FOR TELEPHONE PAY STATIONS.

No. 462,813.

Patented Nov. 10, 1891.

Fig. 2.

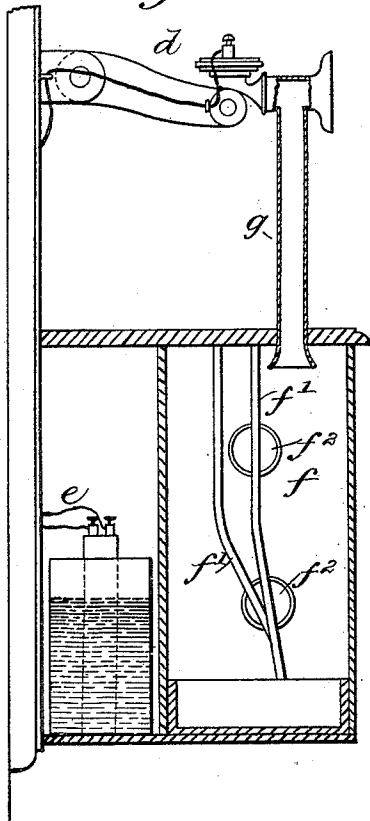


Fig. 1.

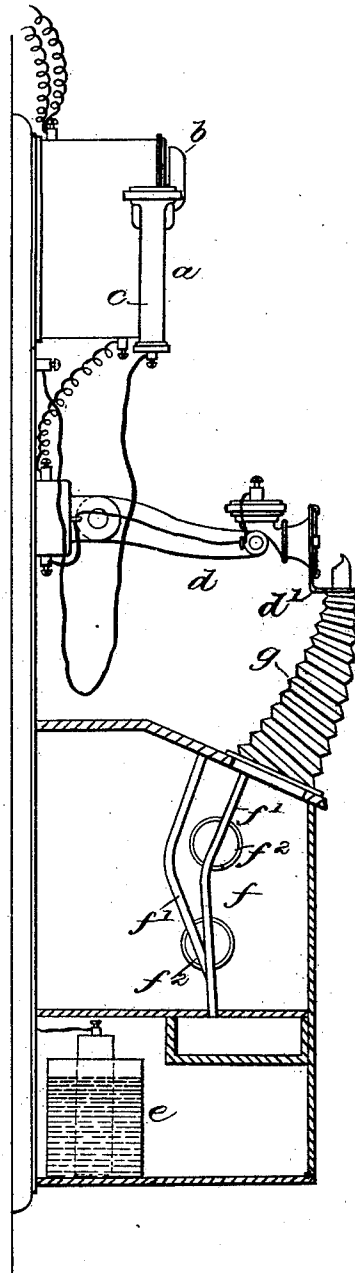
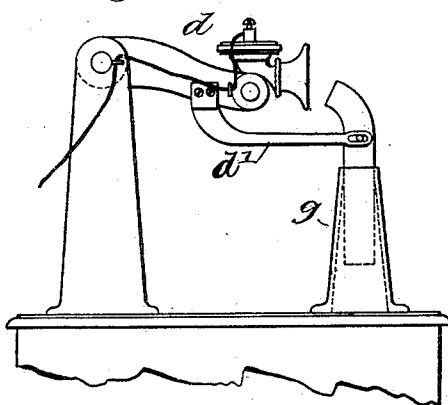


Fig. 3.



WITNESSES:

Wm. Musser.
A. S. Jenkins,

INVENTOR,
William Gray.
BY
Simonds & Burdett
ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM GRAY, OF HARTFORD, CONNECTICUT.

SIGNAL DEVICE FOR TELEPHONE PAY-STATIONS.

SPECIFICATION forming part of Letters Patent No. 462,813, dated November 10, 1891.

Application filed December 15, 1890. Serial No. 374,687. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM GRAY, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Signal Devices for Telephone Pay-Station, of which the following is a full, clear, and exact description, whereby any one skilled in the art can make and use the same.

My invention relates to the class of devices that are adapted for use at a telephone call-station for the purpose of providing for the automatic collection of a toll for the use of the telephone; and my object is to provide a device that will facilitate the sending of the sound-signals that denotes at the pay-station the payment of a prescribed fee or toll.

To this end my invention consists in details of construction of the several parts making up the apparatus as a whole and in their combination, as more particularly herein-after described, and pointed out in the claims.

Referring to the drawings, Figure 1 is a detail view in side elevation of a set of telephone-instruments with part cut away to show construction. Fig. 2 is a detail view in side elevation of one form of extensible deflector-tube. Fig. 3 is a detail view in side elevation of a modified form of deflector-tube.

In the accompanying drawings, the letter *a* denotes a set of telephone-instruments, and by this I mean the call-bell *b*, telephone *c*, transmitter *d*, and battery *e* that are in ordinary use. In addition to this ordinary outfit I provide a signal-box *f*, that in the drawings is shown as composed of a set of coin channels or chutes *f'*, arranged so that the coin in its falling will strike against the bells *f''* that are arranged in proper position opposite openings in the wall of the channels. Other forms of signal devices may be used so long as the sound is produced at the call-station within hearing of the person using the telephone, and in which, preferably, mechanical devices as opposed to electrical are employed in sending a signal, the use of which is controlled by a coin dropped into a chute or channel. The transmitter *d* is adjustable, and in order to make sure that the sound of the signal shall be conveyed to the transmitter an extensible connection *g* is provided. This consists of a tube that extends from the signal-box to a point near the transmitter, and preferably closely connected to the parts

so that the transmitter may be adjusted vertically without destroying the connection between the deflector or connection and the signal-box. One form of this extensible or tubular deflector is shown in Fig. 1, where the tubular connection is made of a flexible material arranged to fold and unfold so as to permit of a vertical movement of the transmitter to which it is connected without severing its connection with the box. An arm *d'* is attached to the transmitter-bracket, and is connected to the upper portion of this deflector so as to hold the latter in the proper position and to cause it to follow the movement of the transmitter in its vertical play. In another form this arm *d'* is connected to the upper end of the deflector or connection that is telescopic, being made of sections that slide one within the other, and in another form a single tubular connection is made by attaching the deflector to the transmitter back of the mouth-piece and allowing the connection to slide up and down in an opening made through the signal-box.

It is obvious that other forms of tubular connections that are flexible or extensible may be used without departing from my invention that is present in a structure where a tubular transmitter is connected to the signal-box so as to provide for the certain transmission through the tubular connection of the sound of the signal to the transmitter, and I do not limit myself to the special form of the device herein described.

I claim as my invention—

1. In a telephone toll-collector, in combination, a signal-box, a signal-sounding device located therein, an adjustable transmitter, and the extensible tubular connection extending from the signal-box to the transmitter, all substantially as described.

2. In a telephone toll-collector, in combination, a signal-box, a signal-sounding device located within the box, an adjustable transmitter, an arm extending from the transmitter-bracket to the top of a tubular deflector or connection, and the extensible connection extending from the signal-box to the transmitter, all substantially as described.

WILLIAM GRAY.

Witnesses:

A. B. JENKINS,
ROBERT F. RICE.