Feb. 5, 1929. 1,701,288

F. S. WERTHEIMER

TELEPHONE BUSY SIGNAL DEVICE

Filed Jan. 20, 1928

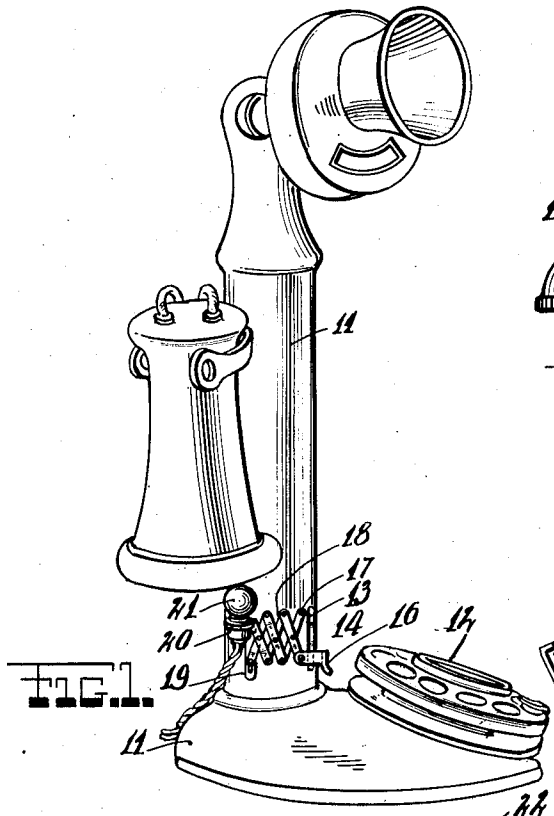


FIG. 1.

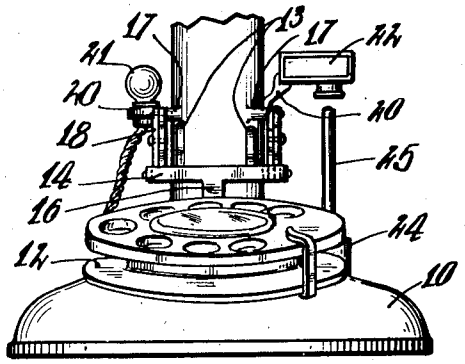


FIG. 2.

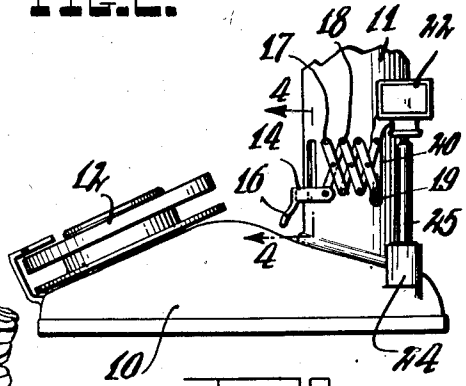


FIG. 3.

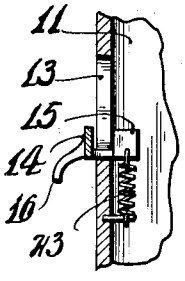


FIG. 4.

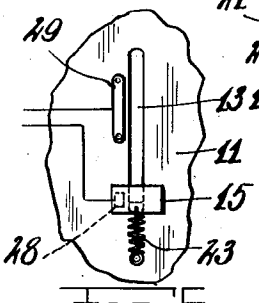


FIG. 5.

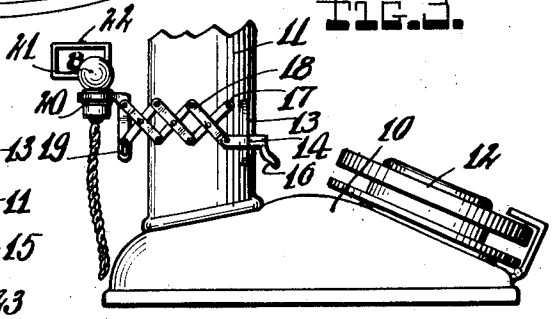


FIG. 6.

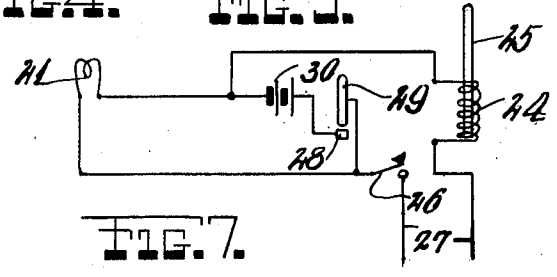


FIG. 7.

INVENTOR
Fred S. Wertheimer
BY
Zoltan Hollosy
ATTORNEY

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UNITED STATES PATENT OFFICE.

FRED S. WERTHEIMER, OF NEW YORK, N. Y.

TELEPHONE BUSY-SIGNAL DEVICE.

Application filed January 20, 1928. Serial No. 248,113.

This invention relates generally to telephones, and has more particular reference to a novel attachment therefor for notifying a user of the phone that another party desires connection with the same phone.

The invention has for an object the provision of a device of the class mentioned of simple construction, positive and efficient in operation, and which can be manufactured and sold at a reasonable cost.

The device has a signal attached to a telephone, and operable to notify a user of the phone that another party desires connection with the same phone. This feature is particularly useful in cases where a person phones a second person and indulges into an extended conversation, and a third person desires to connect with one of the said two phones. Preferably the telephone operator flashes the said signal to notify the talking persons that another person is waiting for connection. An indicator for recording the number of times that the signal is operated, is also attached to the telephone. Normally the indicator may be so positioned that the readings thereof are hidden behind the post of the telephone. In this position the indicator is supported, and the signal is positioned on the diametrically opposite side of the post, both the signal and indicator are supported by means of lazy tongs attached to these parts and to a bar slidably arranged on the post. The bar is normally urged downwards by a spring, and may be manually moved upwards to extend the lazy tongs to move the indicator and signal so that the signal in this particular case necessarily is a lamp, shines upon the indicator and lights same so as to be readable even though the phone may be in a badly lighted room.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

Referring to the accompanying drawing, forming a material part of this disclosure:—

Fig. 1 is a perspective view of a telephone provided with the invention device.

Fig. 2 is a fragmentary front view thereof.

Fig. 3 is a fragmentary side view thereof, looking from the right in Fig. 2.

Fig. 4 is a fragmentary vertical sectional view, taken on the line 4—4 of Fig. 3.

Fig. 5 is a fragmentary elevational view, looking from the right in Fig. 4.

Fig. 6 is a fragmentary side view looking from the left in Fig. 2, the lazy tongs are in extended positions.

Fig. 7 is a schematic wiring diagram of the device.

The reference numeral 10 indicates generally the base of a telephone having a mouth supporting post 11, the telephone itself is of any design or construction. The base 10 is shown as provided with a customary base dial 12.

The post 11 is formed with vertical slots 13, and a bar 14 is vertically slidably mounted to the post by means of slide members 15 attached to the bar and engaged in the slots. A finger 16 for manually moving the bar, projects from the bar.

The post 11 is provided with projections 17 to which the top free ends of one of the ends of lazy tongs 18 are pivotally attached, the bottom free ends are pivotally connected to the bar 14. The opposite ends of the lazy tongs slidably engage in slots 19 formed in brackets 20. One of the brackets 20 supports a signal lamp 21, and the other an indicating device 22. The slide members are normally urged into down positions by tension springs 23, which acts to position the lazy tongs into retracted positions.

A solenoid 24 with a long projecting core 25 is positioned on the base 10, directly beneath the indicator 22. The solenoid core moves upwards, when the solenoid is energized, and acts against the indicator to advance the indicator reading one consecutive number for each upward motion of the solenoid. The design and construction of the indicator may be any of the common numbering devices in which an upward motion of a rod operates the same.

The schematic wiring arrangement of the device consists in solenoid 24, lamp 21 and switch 26 connected in series with an independent set of power leads 27. One slide member 15 is provided with a contact 28 engageable upon raising of the slide member, with a second contact 29 supported from the post 11. The contacts 28 and 29, and a battery 30 are shunted across the lamp 21.

In the installation of the device the lamp 21, battery 30, contacts 28 and 29, and sole-

noid 24 are located in proximity of the subscriber's telephone, while the switch 26 is located in proximity of the telephone company's operator. In operation, a telephone operator may close the switch 26 to signal to the phone user that some party is seeking connection with the phone. The lamp 21 lights indicating this message, and the solenoid is energized to advance the indicator. The user of the phone keeps a record of the indicator for reading, and when an outsider calls the said phone in the absence of the owner thereof, the owner can upon arrival inspect the indicator and note that a call, or calls were made. The indicator may be inspected by manually raising the bar 14 to extend both the lamp and indicator to viewable conditions, the lamp lighting at the same time since 28 and 29 engage to form a complete circuit with battery 30.

While I have shown and described a preferred embodiment of my invention, it is to be understood that I do not limit myself to the precise construction herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new and desire to secure by United States Letters Patent is:

1. In a device of the class described, the combination with a post having vertical slots, of a bar vertically slidably arranged on the post by slide members therefrom engaging in the said slots, a spring for normally urging said bar to bottom position, lazy tongs supported on the post and connected to the bar so as to normally seek retracted positions, lighting means supported on one of the lazy tongs, and indicator means supported on another lazy tong so that upon manual raising of the car, the lazy tongs are extended positioning the lighting means to illuminate the indicator.

2. In a device of the class described, the combination with a post of a bar vertically slidably arranged on the post, means for normally urging said bar to bottom position, lazy tongs supported on the post and connected to the bar so as to normally seek retracted positions, lighting means supported on one of the lazy tongs, and indicator means supported on another lazy tong so that upon manual raising of the bar, the lazy tongs are extended positioning the lighting means to illuminate the indicator.

3. In a device of the class described, the combination with a post having vertical slots, of a bar vertically slidably arranged on the post by slide members therefrom engaging in the said slots, means for normally urging said bar to bottom position, lazy tongs supported on the post and connected to the bar so as to normally seek retracted positions, lighting means supported on one of the lazy tongs, and indicator means supported on another lazy tong so that upon manual raising of the bar, the lazy tongs are extended positioning the lighting means to illuminate the indicator.

In testimony whereof I have affixed my signature.

FRED S. WERTHEIMER.