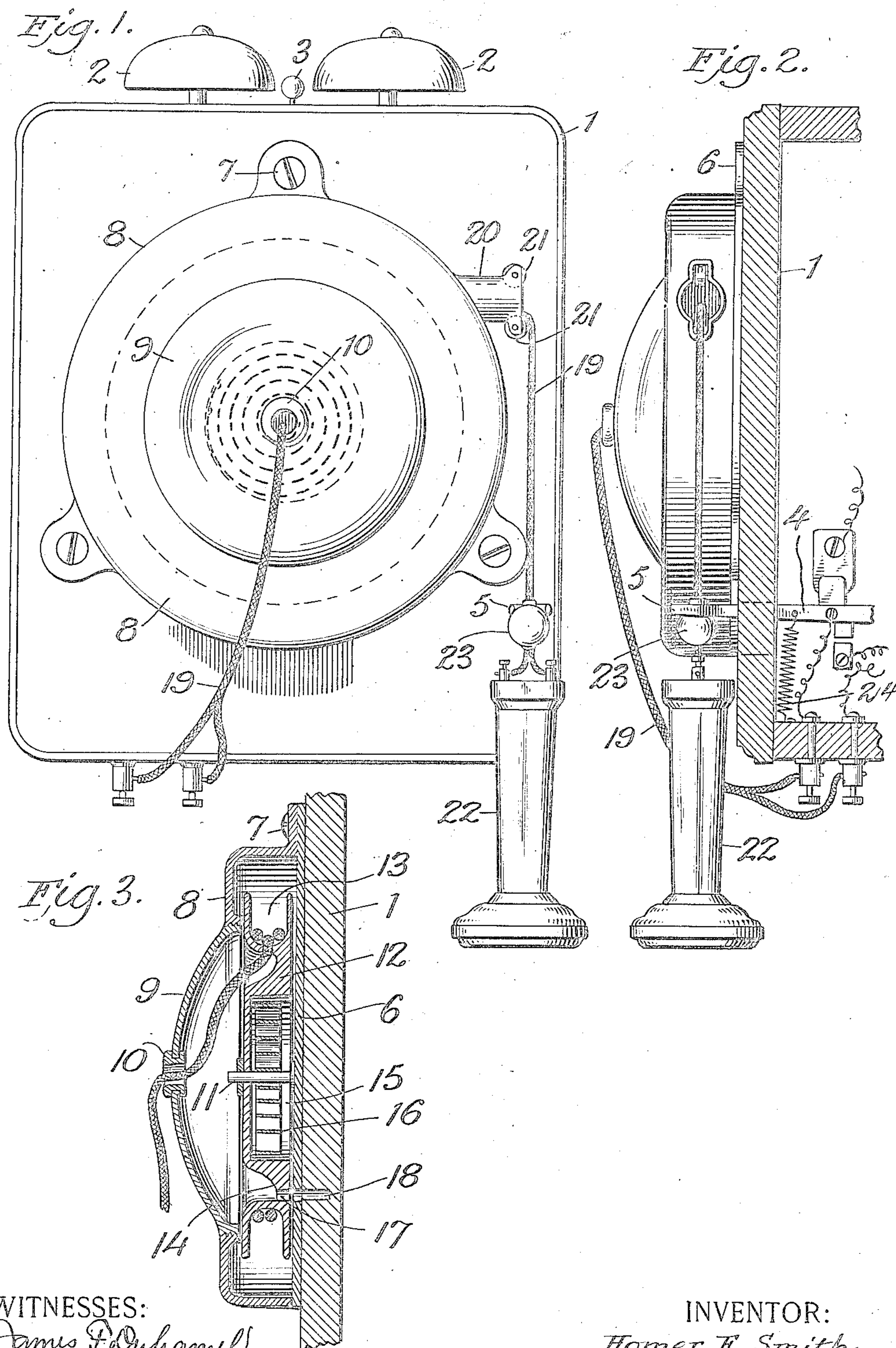


No. 827,576.

PATENTED JULY 31, 1906.

H. E. SMITH.  
TELEPHONE ATTACHMENT.  
APPLICATION FILED OCT. 17, 1905.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

HOMER ERASTUS SMITH, OF NORWICH, NEW YORK.

## TELEPHONE ATTACHMENT.

No. 827,576.

Specification of Letters Patent.

Patented July 31, 1906.

Application filed October 17, 1905. Serial No. 283,196.

*To all whom it may concern:*

Be it known that I, HOMER ERASTUS SMITH, a citizen of the United States, residing at Norwich, in the county of Chenango and State of New York, have invented new and useful Improvements in Telephone Attachments, of which the following is specification.

This invention relates to telephone attachments.

It is well known that great annoyance and trouble is frequently experienced by the central operators of telephone systems through the carelessness of subscribers in neglecting to hang up the receiver when they have finished their conversation over the phone. Furthermore, this same carelessness constitutes one of the most serious objections to the introduction of automatic telephone systems intended to avoid the necessity for central offices.

The object of the present invention is to improve the construction of telephones in such manner as to cause the talking-circuit to be automatically broken as soon as the subscriber has finished his conversation, whereby the necessity of depending upon the subscriber to hang up his receiver is obviated.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed as a practical embodiment thereof.

In the accompanying drawings, forming part of this specification, Figure 1 is a front elevation of a telephone equipped with the improvements of the present invention. Fig. 2 is a view showing the telephone-casing in section and the improvements of the present invention in side elevation. Fig. 3 is a sectional view showing the improved attachment.

Like reference-numerals indicate corresponding parts in the different figures of the drawings.

The reference-numeral 1 indicates a telephone-casing having the bells 2 and the sounder 3, all of which may be of any suitable form and construction. The bell and talking circuits are arranged in the usual and well-known manner and are adapted to be controlled by the switch 4, which is formed at its outer end with an eye 5. The switch 4 preferably is so arranged that when it is in its upper position it closes the bell-circuit,

thus permitting the bell to be sounded from the central office, and when in its lower position it closes the talking-circuit in the old and well-known manner.

Resting against the casing 1 is a bed-plate 6, to which is secured, by means of screws or other suitable devices 7, a casing 8, having a removable cover 9, formed, preferably, in its center, with an opening having a bushing 10. Mounted within the casing 8 upon an axle or spindle 11 is a wheel 12, which is formed on its periphery with a groove 13 and on one of its sides with a groove 14. The wheel 12 is also formed at its central portion with an annular chamber 15, in which is mounted a coil or volute spring 16, secured at its inner end in any suitable manner to the spindle and at its outer end to the wheel 12. The wheel 12 preferably is formed with a lateral perforation 17, which is adapted to register at one point in the revolution of the wheel with a socket 18 in the bed-plate 6.

Connected with the casing 1 are the usual conductors, (indicated by 19,) which extend through the bushing 10 and into the groove 14, from which they pass through a suitable opening into the groove 13. After being wound several times around the wheel 12 the conductors 19 pass outward through a tangential extension 20 of the casing 8, said extension being provided, preferably, with rollers 21 to facilitate the improvement of the conductors. After leaving the extension 20 the conductors 19 pass downward through the eye 5 in the switch 4 and are connected in the usual manner with the telephone-receiver 22. Above the receiver 22 the conductors 19 preferably are provided with any suitable enlargement or ball, such as 23.

In assembling the different parts of the improved telephone attachment the wheel 12 preferably is rotated several times to place the spring 16 under the proper tension. An awl or other suitable implement is then passed through the opening 17 into the socket 18 to prevent the coil-spring 16 from unwinding. The conductors 19 are then threaded through the bushing 19 and are placed upon the wheel 12 in the manner described, after which the awl is removed, so as to permit the spring to unwind and take up all the slack in the conductors, thus bringing the enlargement 23 into contact with the eye 5 of the switch 4 and causing said switch to close the bell-circuit and open the talking-circuit in the old and well-known manner.

As soon as the receiver 22 is grasped in the action of using the phone the spring 24, which is connected with the switch 4, as shown in Fig. 2, is permitted to operate the  
5 switch in such manner as to open the bell-circuit and close the talking-circuit. In view of the fact that the coil-spring 16 will always act to draw the enlargement 23 into  
10 contact with the switch 4 as soon as the conversation has been finished the possibility of subjecting the central operator to annoyance and trouble by neglecting to hang up the receiver is effectually avoided.

Changes in the precise embodiment of in-  
15 vention illustrated and described may be made within the scope of the following claim without departing from the spirit of the invention or sacrificing any of its advantages.

Having thus described the invention, what  
20 is claimed as new is—

A combination with a telephone having a receiver and flexible conductors connected

therewith, of a switch having an eye to receive the flexible conductors, a casing having a tangential tubular extension, a removable cover having an opening in the center thereof, a wheel mounted in the casing and having a groove in its periphery and a groove in its side, and a coil-spring to operate the wheel, the flexible conductors of the tele-  
30 phone being threaded through the opening in the cover and extending into the groove into the side of the wheel, through an opening to the groove in the periphery of the wheel, and finally encircling the wheel and passing out  
35 through the tubular extension, substantially as described.

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

HOMER ERASTUS SMITH.

Witnesses:

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