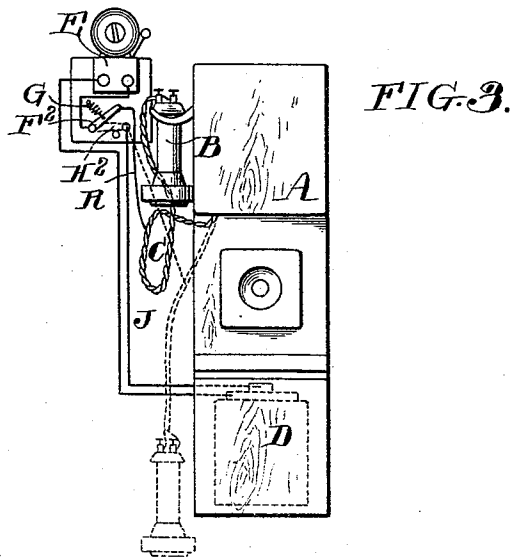
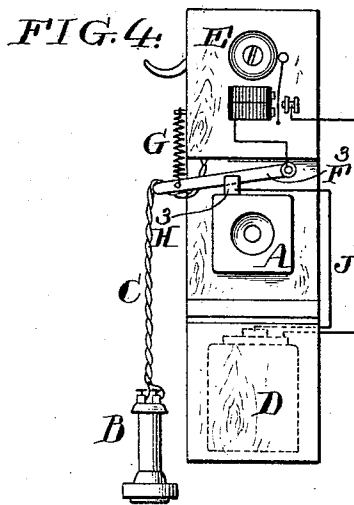
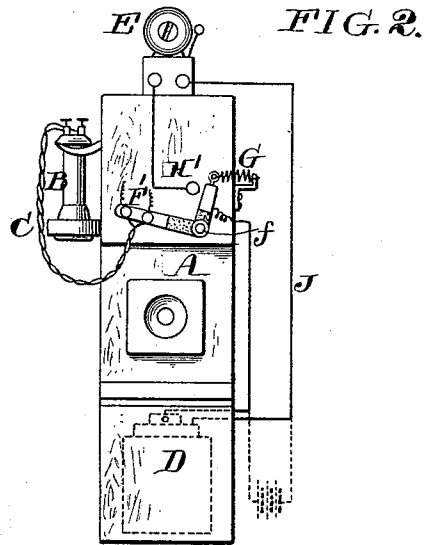
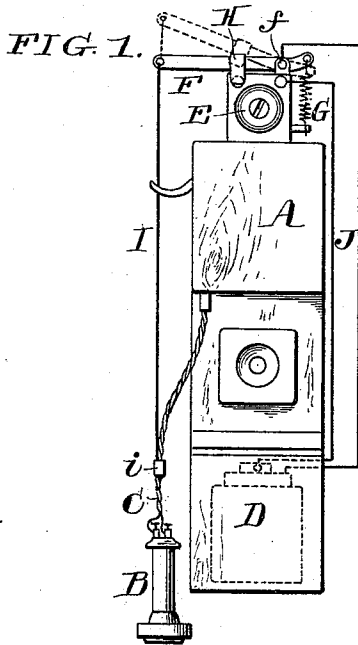


(No Model.)

W. B. ROBESON.
TELEPHONING APPARATUS.

No. 536,705.

Patented Apr. 2, 1895.



WITNESSES:

Henry D. Dwyer
H. L. Motherwell

INVENTOR:

Wm B. Robeson
By his atty
[Signature]

UNITED STATES PATENT OFFICE.

WILLIAM B. ROBESON, OF PHILADELPHIA, PENNSYLVANIA.

TELEPHONING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 536,705, dated April 2, 1895.

Application filed September 7, 1894. Serial No. 522,326. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. ROBESON, of the city and county of Philadelphia and State of Pennsylvania, have invented an Improvement in Telephoning Apparatus, of which the following is a specification.

My invention has reference to telephoning apparatus and consists of certain improvements which are fully set forth in the following specification and shown in the accompanying drawings which form a part thereof.

My invention comprehends in a telephone suitable devices or means for employing the weight of the telephone receiver when not hung upon the switch lever and when unsupported by the operator to operate switch devices to insure the call circuits being kept in operative condition.

My invention also comprehends broadly a signal device of any character or shape thrown into operation if the telephone receiver is not hung upon the switch lever after the operator has ceased using the telephone apparatus, for the purpose of directing his attention to the neglect on his part, and cause him to see that the instrument is left in proper operative condition.

The object of my invention is to prevent the signaling apparatus of the telephone from being left in a condition which will prevent a distance subscriber or central station operator from calling up the subscriber.

In carrying out one form of my invention I provide the telephone apparatus (which may be of any character desired) with a suitable signal or indicator, and a switch device to throw the signal or indicator into or out of operation controlled by the weight of the telephone receiver and operating to cause the signal or indicator to be operated in case the said telephone receiver should be permitted to hang down by its conducting cords.

I prefer to employ in practice an indicator or alarm in the form of an electric bell or indicator which may be operated by the current from the regular battery found in the telephone apparatus.

The alarm or indicator may be, if desired, the regular signaling bell of the telephone apparatus.

Any construction may be used in carrying out my invention where the weight of the tele-

phone receiver acting through the flexible conductor cords operates a switch to insure the call or signal apparatus of the telephone being kept in operative condition.

Referring to the accompanying drawings—Figures 1 to 4 illustrate elevations of telephonic apparatus using my improvements applied thereto and illustrating modifications of the same invention.

Referring to Fig. 1, A is the telephonic apparatus which may be of any suitable character either for operation from a central station or from individual subscribers.

B is the telephone receiver and is attached to the telephonic apparatus by the usual flexible conductors C.

E is an indicator or signal and may be formed of a small electric bell and is connected with the usual battery D of the telephonic apparatus by a circuit J.

F is a pivoted switch adapted to make contact with the contact piece H and is arranged in the circuit J so as to open or close the said circuit. The switch lever F may be pivoted at *f* and kept normally open by a spring G.

I is a small cord or chain connecting the free end of the switch F, and with a clip *i* on the flexible conductor cord C of the telephone receiver B. When the telephone receiver is hanging as indicated in the drawings tension is put upon the cord I and the switch lever F is drawn down and closes the circuit J. The alarm E is therefore sounded by the indicator and the operator is thereby informed that the receiver is out of position. The instant the receiver is hung upon the lever or held in the hand while in conversation the spring G keeps the switch F open and no alarm is given.

In the construction shown in Fig. 2 substantially the same general construction is employed but in a somewhat different manner. In this case a pivoted bell crank lever F' is used and is pivoted to the telephone apparatus as at *f*, and to one arm of the said lever is connected the upper end of the flexible conductor cord C of the telephone receiver B.

A spring G as before is employed to keep the lever F' in normal position, which will always be the same if the receiver is hung upon the pivoted supporting arm or held in the hand of the operator. If however, the receiver is permitted to hang down, it moves

the lever F' and closes the circuit J through H' causing the indicator E to sound an alarm. It is evident that a separate battery may be employed in any of these cases as indicated in dotted lines in this figure.

In the construction shown in Fig. 3 we have the indicator E provided with a separate switch F² H² normally held open by a spring G, and adapted to control a circuit J as before. The other end of the lever G is connected by a small cord or chain with the flexible conducting cord C of the telephone receiver B. If the receiver should be permitted to hang down its weight causes the switch F² to be closed and sounds the alarm.

In the construction shown in Fig. 4 the regular call bell of the telephone apparatus is utilized as the alarm and is provided with an additional circuit J from the battery D and controlled by a switch F³ H³ which is moved in one direction by a spring G to open it, and in the other direction by the weight of the telephone receiver B' to sound the alarm. The telephone receiver should never be allowed to hang in a manner that its weight is upon the flexible cord, and any apparatus adapted to sound an alarm or make an indication and controlled by the weight of the telephone receiver comes within the broad understanding of my invention. I therefore do not limit myself to any of the minor details herein set out.

Another advantage secured by my invention is that the local battery of the apparatus is prevented from remaining short circuited for it is cut out of circuit the moment the receiver B is hung bodily upon the switch lever or its weight made to act directly or indirectly upon said switch lever.

The details may be varied in many ways without departing from the principles of my invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. A telephone apparatus having an alarm

or indicator and a receiver, combined with means for operating said alarm or indicator, and a controlling device thrown into operation by the weight of the receiver when unsupported for putting the alarm or indicator into action.

2. A telephone apparatus having an alarm or indicator and a receiver, combined with means for operating said alarm or indicator, and a controlling device thrown into operation by the weight of the receiver for putting the alarm or indicator into action consisting of a switch device connected with the flexible conductor cord of the receiver whereby the weight of the receiver acting through the cord operates the switch device.

3. A telephone apparatus provided with an alarm or indicator, and a telephone receiver connected to the apparatus by a flexible conducting cord, in combination with an electric circuit, a source of electrical energy for operating the indicator or signal, and a controlling device for closing the electric circuit actuated by the weight of the telephone receiver when the same is permitted to hang down by its flexible conducting cord.

4. A telephone apparatus provided with an alarm or indicator, and a telephone receiver connected to the apparatus by a flexible conducting cord, in combination with an electric circuit, a source of electrical energy for operating the indicator or signal, a switch for opening or closing the electric circuit, and a flexible connection between the switch and telephone receiver whereby when the receiver is allowed to hang down by this flexible conducting cord the switch closes the electric circuit and sounds an alarm.

In testimony of which invention I have hereunto set my hand.

W. B. ROBESON.

Witnesses:

R. M. HUNTER,

C. H. NEWCOMB.