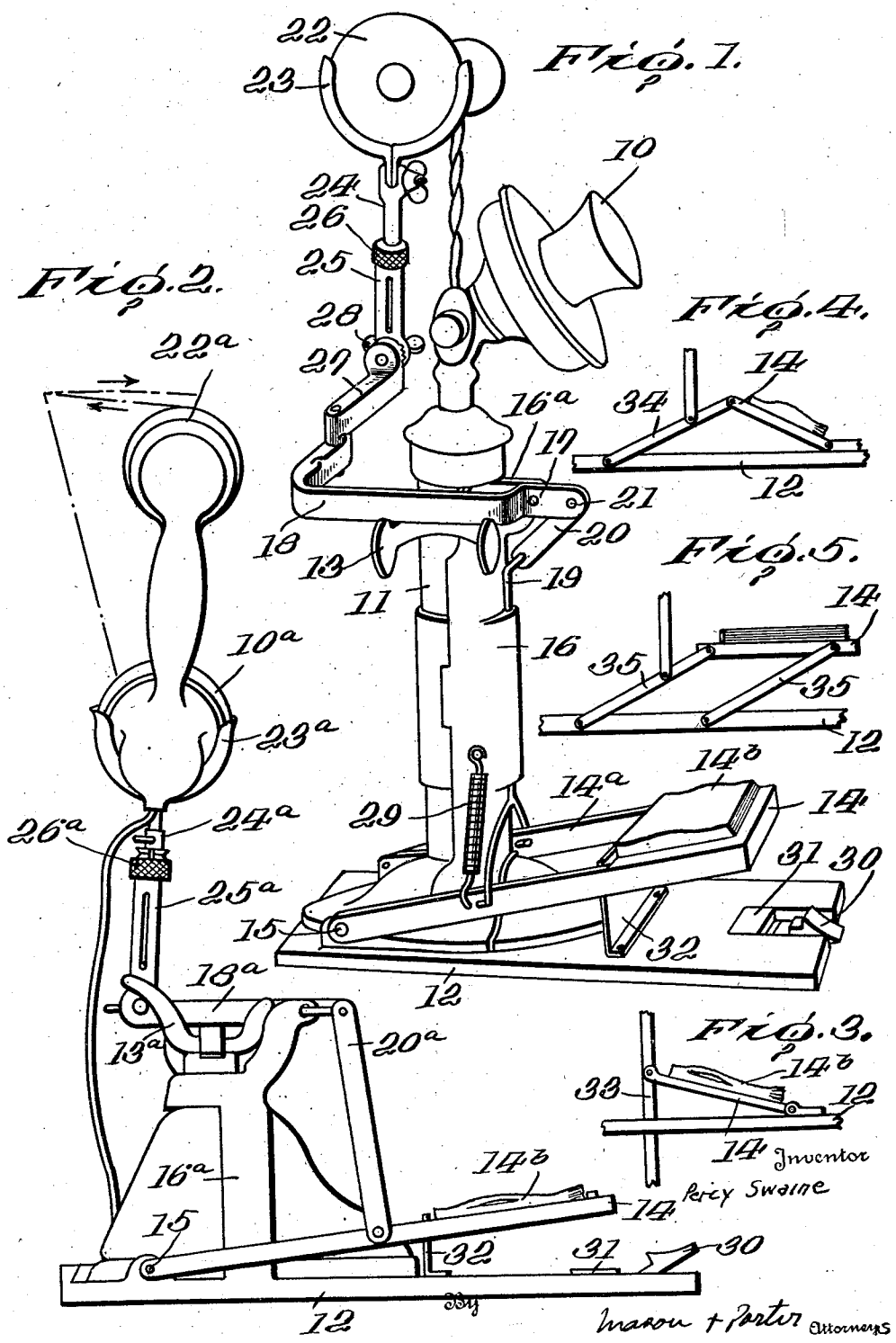
Nov. 12, 1935. P. SWAINE 2,020,527

TELEPHONE SET

Filed Oct. 30, 1934



Patented Nov. 12, 1935 2,020,527

UNITED STATES PATENT OFFICE

2,020,527

TELEPHONE SET

Percy Swaine, Scarborough, England

Application October 30, 1934, Serial No. 750,636
In Great Britain September 26, 1933

7 Claims. (Cl. 179—146)

The present invention relates to new and useful improvements in telephone sets or to attachments or accessories therefor of the type in which the receiver, which may or may not be incorporated with the mouthpiece, is moved from an inoperative to an operative position simultaneously with the establishment of the required electric circuit for the transmission or reception of a message without the necessity of hand control of said receiver by the user.

An object of the invention is to provide a device of the above character wherein means are provided for simultaneously establishing the required electric circuit and for moving the receiver to an operative position for the transmission of a message.

A further object of the invention is to provide a device of the above character wherein there is provided a movable platform and means connecting said platform with the receiver and the hook switch whereby upon the movement of said platform, the required electric circuit is established and the receiver is moved to an operative position for the transmission of a message.

The above and other objects of the invention will in part be obvious and will be hereinafter more fully pointed out.

In the drawing:

Fig. 1 is a perspective view of a telephone set of the type embodying a receiver and a mouthpiece as separate elements and showing the construction of the present invention applied thereto.

Fig. 2 is a side elevation of a telephone set embodying a receiver and a mouthpiece as a single unit and showing the construction of the present invention as applied thereto.

Figs. 3, 4 and 5 are detailed views showing modifications of the operating platform and the manner in which they are displaceable.

Referring more in detail to the accompanying drawing and particularly to Fig. 1, the mouthpiece 10 is connected to the usual standard 11 which is mounted on a base plate 12. Extending from the standard 11 is the usual hook switch 13 which establishes the necessary electric circuit. A platform 14 has side arms 14a which are pivotally mounted on the base plate 12 as at 15. A bracket member 16 is suitably secured to the standard 11 and has an outwardly projecting portion 16a to which is pivotally mounted at 17 a rocker arm 18. The arms 14a of the platform 14 are suitably connected to one end of the rocker arm 18. In this particular instance, the arms 14a are connected by a forked link 19 which in turn is connected to a second link 20 pivotally connected as at 21 to the rocker arm 18. The receiver 22 is carried by a spring clip 23 which is adjustably mounted on a post 24. The post 24 fits within a sleeve 25 and is adjustable vertically therein and is held in position by a knurled nut 26. The sleeve 25 is pivotally mounted for swinging movement on an arm 27 and is held in position by a wing nut 28. The arm 27 is pivotally mounted for horizontal turning movement on the rocker arm 18. It will thus be seen that the receiver 22 may be adjusted relative to the rocker arm 18 and is capable of a universal movement relative thereto.

As shown in Fig. 1, the rocker arm 18 is disposed over the hook 13 so that in this position the hook switch 13 is depressed and the circuit is closed. A spring 29 serves to normally hold the platform 14 in a raised position although the weight of the receiver on the rocker arm 18 may serve this purpose. It will be noted that when the platform 14 is depressed, the connecting links 19 and 20 will move downwardly thus causing the rocker arm 18 to move in a clockwise direction about its pivot 17 so that the hook switch will be permitted to ascend and thus establish the required electric circuit and at the same time the receiver 22 will be moved in a clockwise direction to an operative position relative to the mouthpiece 10 so that the operator does not need to hold the receiver at any time after it has once been adjusted.

A pivoted catch 30 on the base 12 may be employed for holding the platform 14 in its depressed position with the telephone set in an operative position with the circuit established. If it is desired to permit an operator at an exchange or some other remote point to control the set, an electromagnet 31 is provided which, when energized, exerts a pull on the catch 30 in a direction toward the platform 14 so as to hold the same in its depressed position. Should the circuit be broken by the operator, the magnet will be de-energized, and the spring catch 30 will move out of contact with the platform so as to release it.

A sign 32 is mounted on the base 12 and is normally disposed beneath the platform 14, but when the platform is depressed, the sign is disposed above the same so as to indicate to the observer that the set is in a position consistent with use. A writing pad or the like, 14b, may be mounted on the platform 14.

Referring to Fig. 2, there is shown a telephone set of the type wherein the mouthpiece and re-

ceiver are a single unit. In this case, the platform 14 is pivoted to the base 12 in a manner similar to that shown in Fig. 1. A bracket 16a has pivotally mounted thereon a rocker arm 18a which is connected by a link 20a to the platform 14. The rocker arm 18a has mounted thereon for adjustment a sleeve 25a in which is mounted a post 24a which may be adjusted vertically and held by a knurled nut 26a. The post 24a carries a spring clip 23a in which the mouthpiece 10a of the telephone set is mounted. The rocker arm 18a extends over the hook switch 13a in a manner similar to that shown in Fig. 1. When the parts are in the position shown in Fig. 2, the hook switch 13a is depressed. When the platform 14 is moved downwardly, the connecting link 20a will cause the rocker arm 18a to move in clockwise direction, thus releasing the hook switch 13a and moving the receiver or ear piece 22a to an operative position.

In Fig. 3, the depression of the platform 14 may be through the medium of a foot rest (not shown) which is connected thereto by a link 33. This link 33 may be formed as an extension of the link 19 or the link 20a.

In Fig. 4, the platform 14 is pivotally connected to a link 34 which is pivoted at one end to the base 12 and intermediate its ends to the link 19 or 20a. In this form, the depression of the platform 14 causes the same to slide longitudinally of the base plate 12.

In Fig. 5, the platform 14 is shown mounted on a pair of links 35, one of which may be connected to the link 19 or 20a. In this form, the platform 14 remains parallel to the base 12 while it is being depressed.

It will be readily understood from the foregoing description, that the present invention provides an improved telephone set or an attachment therefor which operates to establish the required circuit and at the same time to move the receiver into an operative position so that the operator need not hold the receiver at any time, thus allowing free use of the hands for taking notes or the like.

I claim:

1. The combination with a telephone set having a circuit controlling switch, of a receiver, a movable platform, and means connecting said platform and said receiver for operating said switch and for moving said receiver from an inoperative to an operative position upon the establishment of the required circuit.

2. The combination with a telephone set having a circuit controlling switch, of a receiver, a holder therefor, a movable platform, and means connecting said holder and said platform for operating said switch and for moving said holder and receiver from an inoperative to an operative position upon the establishment of the required circuit.

3. The combination with a telephone set having a circuit controlling switch, of a receiver, a holder therefor, a depressible platform, a pivoted rocker arm supporting said holder and disposed over said switch, and means connecting said rocker arm with said platform whereby to operate said switch and move said receiver from inoperative to an operative position upon the establishment of the required circuit when the platform is depressed.

4. The combination with a telephone set having a circuit controlling switch, of a bracket member, a platform pivotally mounted adjacent the base of said set, a rocker arm pivotally mounted on said bracket and disposed over said switch, a link connecting said platform with one end of said rocker arm, a holder, means for mounting said holder on the opposite end of said rocker arm for universal adjustment with respect thereto, and a receiver carried by said holder whereby said switch may be opened and said receiver moved to an operative position when said platform is depressed.

5. The combination with a telephone set having a circuit controlling switch, of a receiver, a depressible platform, means connecting said platform and said receiver for operating said switch and for moving said receiver from an inoperative to an operative position upon the establishment of the required circuit, and means for holding said platform in its depressed position.

6. The combination with a telephone set having a circuit controlling switch, of a depressible platform carrying a pad, a bracket member carried by said telephone set and having a projecting portion adjacent said switch, a rocker arm pivotally mounted on said projecting portion and disposed over said switch for operating the same, a link connecting said platform with one end of said rocker arm, a receiver, means for mounting said receiver on the opposite end of said rocker arm whereby said receiver may be moved to an operative position when said platform is depressed for operating said switch.

7. The combination with a telephone set having a circuit controlling switch, of a depressible platform carrying a pad, a bracket member carried by said telephone set and having a projecting portion adjacent said switch, a rocker arm pivotally mounted on said projecting portion and disposed over said switch for operating the same, a link connecting said platform with one end of said rocker arm, a pivoted sleeve carried by the opposite end of said rocker arm, a spring clip having a post fitting within said sleeve, and a receiver carried by said spring clip whereby said receiver may be moved to an operative position when said platform is depressed to operate said switch.

PERCY SWAINE.