M. M. REYNOLDS.

TELEPHONE ATTACHMENT.

APPLICATION FILED MAY 18, 1911.

1,047,293.

Patented Dec. 17, 1912.

2 SHEETS—SHEET 1.

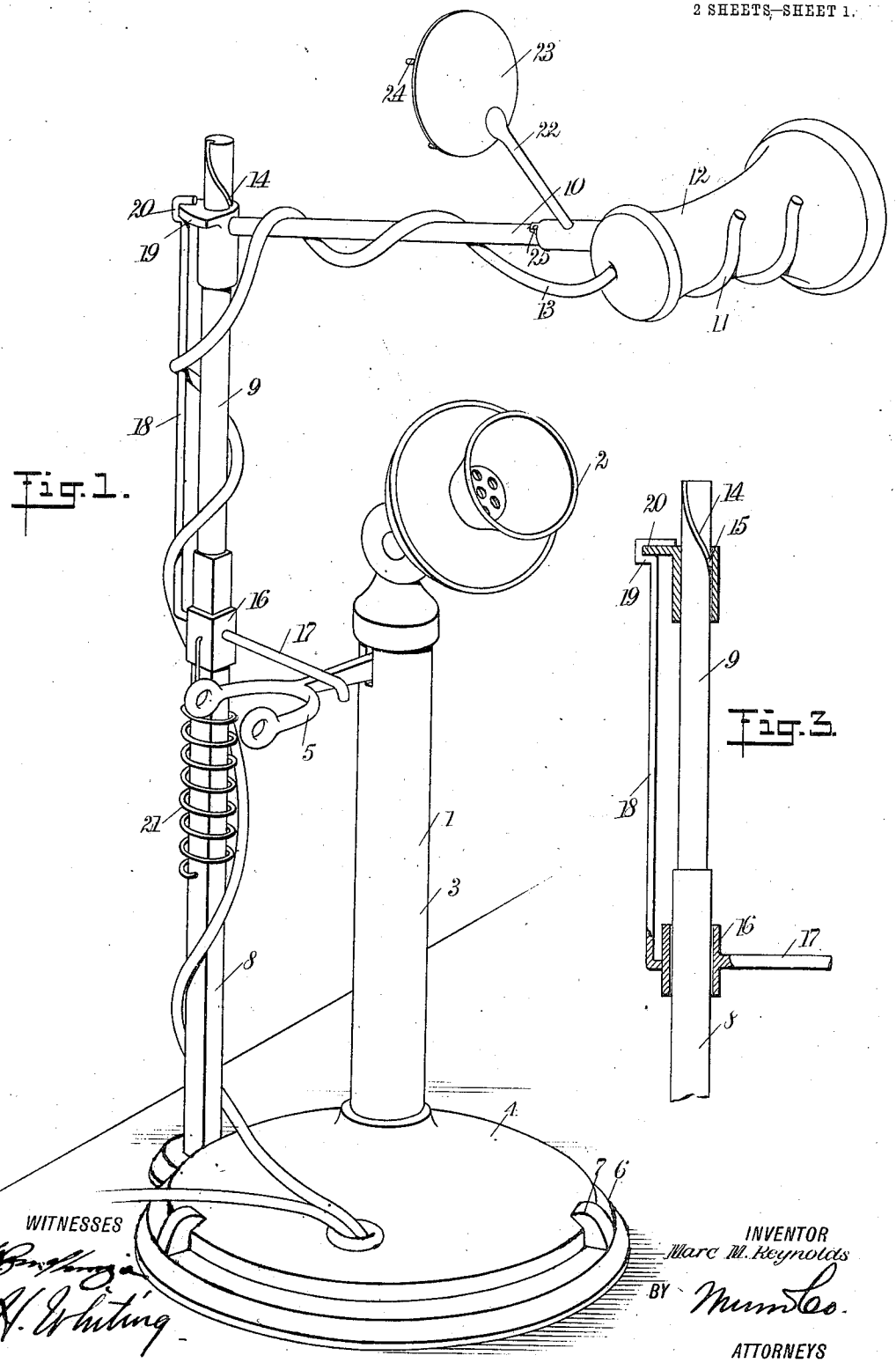

Fig. 1.

Fig. 3.

WITNESSES

H. Whiting

INVENTOR

Marc M. Reynolds

BY Munn & Co.

ATTORNEYS

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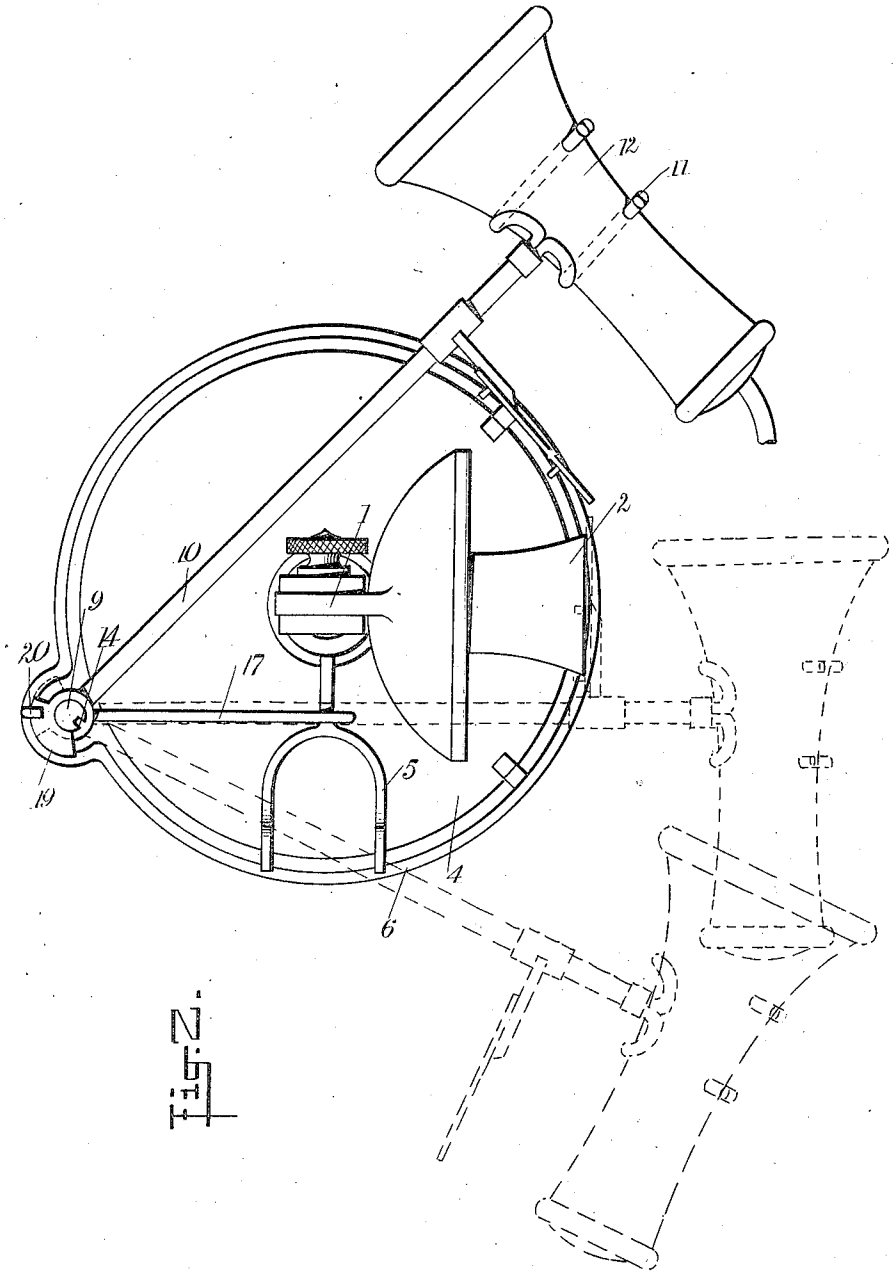

FIG. 2.

WITNESSES

W. Whiting

INVENTOR

Marc M. Reynolds

BY Munn & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

MARC M. REYNOLDS, OF NEW YORK, N. Y., ASSIGNOR TO AMERICAN INDEPENDENT TELEPHONE COMPANY, A CORPORATION OF ARIZONA.

TELEPHONE ATTACHMENT.

1,047,293. Specification of Letters Patent. Patented Dec. 17, 1912.

Application filed May 18, 1911. Serial No. 627,923.

To all whom it may concern:

Be it known that I, MARC M. REYNOLDS, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Telephone Attachment, of which the following is a full, clear, and exact description.

This invention relates to a new and improved attachment for a telephone, whereby the user will not be put to the inconvenience of holding the receiver while talking, and whereby he may have both of his hands free to take notes of the telephone conversation necessary.

An object of this invention is to provide an attachment for a telephone, whereby, when a person desires to use the same, the act of placing the receiver to the ear will relieve the pressure on the receiver hook, so that the electrical contact may be made within the telephone instrument, and the conversation carried on without the necessity of the user holding the receiver in his hand, the latter being automatically held in position against the ear by its normal tendency to return to its position when not in use.

A further object of this invention is to provide a telephone instrument with a support for the receiver, which is adapted to automatically return to its normal position when not in use, as soon as the telephone conversation is at an end and the user leaves the phone, with means for holding the receiver in its active position in juxtaposition to the mouthpiece or transmitter, in case the user desires to leave the phone for a minute, without cutting off the connection. This latter means can also be used to cut out the sounds surrounding the transmitter, whereby the party at the other end of the line may be cut off momentarily from conversation at the transmitter while the line is still held open.

These and further objects, together with the construction and combination of parts, will be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a perspective view; Fig. 2 is a top plan view, showing in full and dotted lines various positions of the receiver-holder; and Fig. 3 is a detail view in elevation, partly in section to show the underlying structure.

Referring more particularly to the separate parts of this invention as embodied in the form shown in the drawings, 1 indicates a telephone instrument, with which my device is shown in use, and which is provided with the usual transmitter or mouthpiece 2 supported on a standard 3 mounted on the base 4. The usual contacting lever 5 for making and breaking the circuit within the instrument is also shown in this case as to be in the form of a normal receiver hook. The attachment may be formed directly on the instrument 1, but in this instance, it is shown as being adapted to be attached thereto, and is provided with a base 6, which supports the instrument 1, and is held on the base 4 thereof by means of suitable overhanging lugs 7.

Extending upwardly from the base 6, there is provided an upright 8, which may be of any suitable form, and in this instance is shown in the form of an angular rod, projecting from the top of which is provided a spindle or shaft 9. Rotatably mounted on the shaft 9, there is provided a receiver holder 10, which is provided at its outer end with suitable hooks 11, adapted to conveniently support a receiver, indicated at 12. The wire from the receiver 12 to the instrument 1, which is indicated at 13, may be passed to the instrument in any suitable manner. A peculiar thing to be noted about the attachment of the receiver holder 10 to the shaft 9, forming a portion of the upright 8, is that it is rotatably supported thereon, but in such a manner that a relative rotation of the latter with respect to the shaft will cause a vertical movement of the holder. This may be accomplished in any suitable manner, and in this instance, I have shown a groove 14 in the form of a spiral or screw, which is engaged by a lug 15 on the holder 10. It will thus be seen that by swinging the receiver holder 10 from the position indicated in full lines in Fig. 2 to the position indicated in dotted lines in Fig. 2, that the holder, together with the receiver, must of necessity travel upward by virtue of the screw connection of the holder with the shaft 9 of the upright. This motion is the movement necessary to bring the receiver

from its position not in use to a position located slightly to the left of the mouthpiece 2, where it will be convenient to the ear of the user of the phone. For this purpose, the holder 10 need not be straight as indicated, but may have an angular form or curvature, to bring the open end of the receiver snugly and properly against the ear of the user as he speaks into the transmitter or mouthpiece 2.

In order that the bringing of the receiver to the proper position to use may simultaneously permit the contacting lever or receiver hook 5 to make the necessary connections in the instrument 1, as is common in telephone instruments, I have provided a connection between the receiver holder 10 and the hook or contacting lever 5. This may be of any suitable character, and in this instance, I have shown a collar 16 slidingly mounted on the square portion of the upright 8, so that it cannot rotate relative thereto, and having an arm 17, which projects over the hook 5 and comes in contact therewith on its upper side. The collar 16 is connected to the holder 10 by a rod 18, which is provided at its upper end with means for engaging an arcuate flange 19 on the holder 10. In this instance, this means is shown in the form of a hook 20 adapted to engage both the upper and lower faces of the flange 19, so that the movement of the rod 18 will be consentaneous with that of the holder, as to a vertical direction.

While gravity may be depended upon to return the holder and the parts connected thereto to their lower positions corresponding to the inactive condition of the telephone instrument 1, it may be also desirable to aid the action of gravity by a spring 21, secured at one end to the collar 16 and at the other end to the upright 8, and being of a retractile nature, so that it will pull the movable parts of the upright downwardly.

If it should be desired to leave the phone for a minute without cutting off communication with the party at the other end, it is merely necessary to maintain the holder in its active position by swinging down a guard or retaining device 22, which is rotatably mounted on the rod of the holder and is provided with a disk 23 at its outer end, so that it can entirely cover the opening of the mouthpiece and thus prevent any sound from entering the transmitter. The disk may be provided with a plurality of lugs 24, which engage the mouthpiece in such a manner as to prevent the guard from slipping off the mouthpiece. It will thus be seen that the guard acts as a strut between the holder and the transmitter, preventing the holder from returning to its lower and inactive position. The guard, when not in use, can be located in any suitable position, as for example by being swung up as shown in Fig. 2, so that a lug 24 thereon engages a lug 25 on the holder, maintaining the guard in an unobtrusive position.

The utility of the device will be readily understood when taken in connection with the above description. When it is desired to use the phone, it is merely necessary to swing the receiver holder from the full-line position indicated in Figs. 1 and 2 to the extreme dotted-line position indicated in Fig. 2, so that when the user places his mouth adjacent the mouthpiece, the receiver will be in proper position opposite his left ear. The position of the user's head prevents the receiver and the holder therefor from returning to its original position. The act of moving the receiver to a position to the left of the mouthpiece draws up on the collar 16 through the intermediary of the rod 18, thus relieving the downward pressure on the hook or contact lever 5, so that the connection is made in the instrument 1, permitting the conversation over the phone. In case the conversation should be interrupted for any reason, and the speaker should want to leave the phone for a minute without cutting off the party at the other end, it is merely necessary to swing the guard 22 down into such a position that the lugs 24 on the disk 23 engage the mouthpiece 2, while the disk 23 covers the mouthpiece, thereby holding the receiver holder in its active position. It will be noted, however, that if the user desires to continue his conversation, it is first necessary to remove the guard 22 from the transmitter before he can speak over the phone. In doing this, he relieves the instrument from this restraint, so that it is only the interposition of his head that prevents the holder and the receiver thereon from going back to its normal inactive position. As soon as the person using the phone ends his conversation, it is merely necessary for him to move his head from the position in opposition to the transmitter, when the receiver and the holder therefor will swing back by gravity, moving downwardly until the arm 17 forces the receiver hook or contacting lever 5 into its lowermost position. This action may be aided by the spring 21.

From an inspection of Fig. 2 it will be seen that when the telephone receiver is out of operative position it is located to one side of the mouthpiece 2. When swung to release the receiver hook 5 it moves past the mouthpiece 2 through an arc of nearly 90°; and when it is desired to prevent the receiver holder from swinging back to its inoperative position, should the person at the telephone find it necessary to leave the instrument for an instant, the position of the receiver holder which will enable the

guard 23 to engage the mouthpiece 2 will put the arm 10 in substantial alinement with the mouthpiece. This will be the intermediate position, as shown in dotted lines in the figure referred to.

While I have shown one embodiment of my invention, I do not wish to be limited to the specific details thereof, but desire to be protected in various changes, alterations and modifications which may come within the scope of the appended claims.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

1. The combination with a telephone instrument having a receiver hook and a mouth-piece, of a support, a receiver holder movably connected to said support and being normally out of operative relation to said mouth-piece, a connection between said receiver holder and said receiver hook, whereby the movement of said receiver holder will be accompanied by a movement of said receiver hook, the said receiver holder being so mounted as to be returnable to inoperative position when released, and a retaining device carried by said holder to engage the instrument and prevent the movement of said receiver holder to inoperative position.

2. The combination with a telephone instrument having a receiver hook and a mouth-piece, of a support, a receiver holder movably connected to said support and being normally out of operative relation to said mouth-piece, a connection between said receiver holder and said receiver hook, whereby the movement of said receiver holder will be accompanied by a movement of said receiver hook, the said receiver holder being so mounted as to be returnable to inoperative position when released, and a guard carried by said holder to engage the instrument and prevent the movement of said receiver holder to inoperative position, said guard having means to fit over the entrance of said mouth-piece, to prevent the admission of sound thereinto.

3. The combination with a telephone instrument having a transmitter mouthpiece and a receiver hook, of an upright arranged in proximity to said instrument, a receiver holder rotatably supported by said upright, connections between said receiver holder and said upright constraining said receiver holder to move vertically during its rotary movement, and operative connections between said receiver holder and said receiver hook, whereby the movement of said receiver holder may be accompanied by a movement of said receiver hook.

4. The combination with a telephone instrument having a transmitter mouthpiece and a receiver hook, of an upright arranged in proximity to said instrument, a receiver holder rotatably supported by said upright, connections between said receiver holder and said upright, constraining said receiver holder to move vertically during its rotary movement, operative connections between said receiver holder and said receiver hook, whereby the movement of said receiver holder will be accompanied by a movement of said receiver hook, and a spring for moving said receiver holder.

5. The combination with a telephone instrument having a transmitter mouthpiece and a receiver hook, of an upright arranged in proximity to said instrument, a receiver holder rotatably supported by said upright, connections between said receiver holder and said upright, constraining said receiver holder to move vertically during its rotary movement, operative connections between said receiver holder and said receiver hook, whereby the movement of said receiver holder will be accompanied by a movement of said receiver hook, and a retaining device for preventing the movement of said receiver holder relative to said instrument.

6. The combination with a telephone instrument having a transmitter mouthpiece and a receiver hook, of an upright arranged in proximity to said instrument, a receiver holder rotatably supported by said upright, connections between said receiver holder and said upright, constraining said receiver holder to move vertically during its rotary movement, operative connections between said receiver holder and said receiver hook, whereby the movement of said receiver holder will be accompanied by a movement of said receiver hook, and a guard for preventing the movement of said receiver holder relative to said instrument, said guard having a disk thereon adapted to cover said mouthpiece, to prevent the intrusion of sound into said mouthpiece.

7. The combination with a telephone instrument having a transmitter mouthpiece and a receiver hook, of an upright arranged in proximity to said instrument, a receiver holder rotatably supported by said upright, connections between said receiver holder and said upright, constraining said receiver holder to move vertically during its rotary movement, operative connections between said receiver holder and said receiver hook, whereby the movement of said receiver holder will be accompanied by a movement of said receiver hook, a guard for preventing the movement of said receiver holder relative to said instrument, said guard having a disk thereon adapted to cover said mouthpiece, to prevent the intrusion of sound into said mouthpiece, and lugs on said disk adapted to position said guard on said mouthpiece.

8. The combination with a telephone instrument, having a transmitter mouthpiece and a receiver hook, of an upright adjacent

to said instrument, an arm movably connected to said upright and projecting over said receiver hook so as to operate said receiver hook, a receiver holder rotatably mounted on said upright and adapted to swing toward and from said mouthpiece, connections between said upright and said receiver holder for causing a vertical movement of said receiver holder simultaneous with its rotary motion, and operative connections between said receiver holder and said arm, so that the rotary motion of said receiver holder will cause a vertical motion of said arm, thereby resulting in a movement of said receiver hook.

9. The combination with a telephone instrument, having a transmitter mouthpiece and a receiver hook, of an upright located in proximity to said instrument, a collar slidingly mounted on said upright, an arm connected to said collar and projecting over said receiver hook so as to actuate the same, a receiver holder rotatably mounted on said upright and having a screw connection with said upright so that a rotary motion thereof will cause a vertical motion of the same, and operative connections between said receiver holder and said collar, whereby the motion of said receiver holder will cause a motion of said collar.

10. The combination with a telephone instrument, having a transmitter mouthpiece and a receiver hook, of an upright located in proximity to said instrument, a collar slidingly mounted on said upright, an arm connected to said collar and projecting over said receiver hook so as to actuate the same, a receiver holder rotatably mounted on said upright and having a screw connection with said upright so that a rotary motion thereof will cause a vertical motion of the same, operative connections between said receiver holder and said collar, whereby the motion of said receiver holder will cause a motion of said collar, and a spring connected to said collar, adapted to cause said receiver holder to automatically return to its inactive position.

11. The combination with a telephone instrument having a receiver hook and a mouth piece, of a support, a receiver holder movably connected to said support and normally located out of operative relation to said mouth-piece, said receiver holder having a retaining device serving, when the receiver holder is swung into operative position, to engage the mouth-piece and prevent the return of the receiver holder to inoperative position until the retaining device is disengaged, when the receiver holder is released.

12. The combination with a telephone instrument having a receiver hook and a mouth-piece, of a support, a receiver holder movably connected to said support and normally located out of operative relation to the mouth-piece, and a guard carried by said receiver holder to engage the mouth-piece and having means to fit over the entrance to said mouth-piece and prevent the admission of sound therethrough, said guard serving to prevent the return of the receiver holder to inoperative position before the guard is disengaged, when the receiver holder is released.

13. The combination with a telephone instrument having a receiver hook and a mouth-piece, of a support, a receiver holder rotatably mounted upon said support and connected thereto to move along the same when the receiver holder is rotated, and a connection between the receiver holder and the receiver hook, whereby the movement of said receiver holder will be accompanied by a movement of said receiver hook.

14. The combination with a telephone instrument having a receiver hook and a mouth-piece, of a support, a receiver holder rotatably mounted upon said support and connected thereto to move upward along the same when rotated, and a connection between the receiver holder and the receiver hook, whereby the movement of said receiver holder will be accompanied by a movement of the hook.

15. The combination with a telephone instrument having a receiver hook and a mouth-piece, of a support, a receiver holder rotatably mounted upon said support and connected thereto to move along the same when the receiver holder is rotated, a connection between the receiver holder and the receiver hook, whereby the movement of said receiver holder will be accompanied by a movement of said receiver hook, and means for retaining said receiver holder at one end of its movement when desired.

16. The combination with a telephone instrument having a receiver hook and a mouth-piece, of a support, a receiver holder rotatably mounted upon said support and connected thereto to move upward along the same when rotated, a connection between the receiver holder and the receiver hook, whereby the movement of said receiver holder will be accompanied by a movement of the hook, and means for retaining said receiver holder at one end of its movement when desired.

17. The combination with a telephone instrument having a receiver hook and a mouthpiece, of a support, a receiver holder movably mounted upon said support, and extending therefrom and carrying a receiver to one side of said mouthpiece when the receiver holder is in inoperative position, a connection between the receiver holder and the receiver hook, whereby when the receiver holder is swung past the mouthpiece to carry the receiver to the other side of the

same, the hook will be released, means carried by said receiver holder to engage the mouthpiece to hold the receiver holder in substantial alinement with the same and prevent the return movement thereof when the operator is obliged to leave the telephone for an instant, and means for automatically returning the receiver holder to its original position.

18. The combination with a telephone instrument having a receiver hook and a mouthpiece, of a support located adjacent the mouthpiece, a receiver-holding arm rotatably mounted upon said support in position to extend toward and beyond said mouthpiece, a receiver carried by the outer end of said arm, a connection between the receiver holder and the receiver hook, whereby when the arm is swung past the mouthpiece to carry the receiver from one side of the mouthpiece to the other side, the receiver hook will be released, a movable guard carried by the arm to engage the mouthpiece and hold the receiver holder in substantial alinement therewith to prevent its return in case the operator is obliged to leave the telephone for an instant, and means for automatically returning the receiver-holding arm to starting position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MARC M. REYNOLDS.

Witnesses:
H. WHITING,
PHILIP D. ROLLHAUS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."