D. SWOPE.

AUTOMATIC TAKE-UP ATTACHMENT FOR PORTABLE TELEPHONE CONDUCTORS.

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1,276,825. Patented Aug. 27, 1918

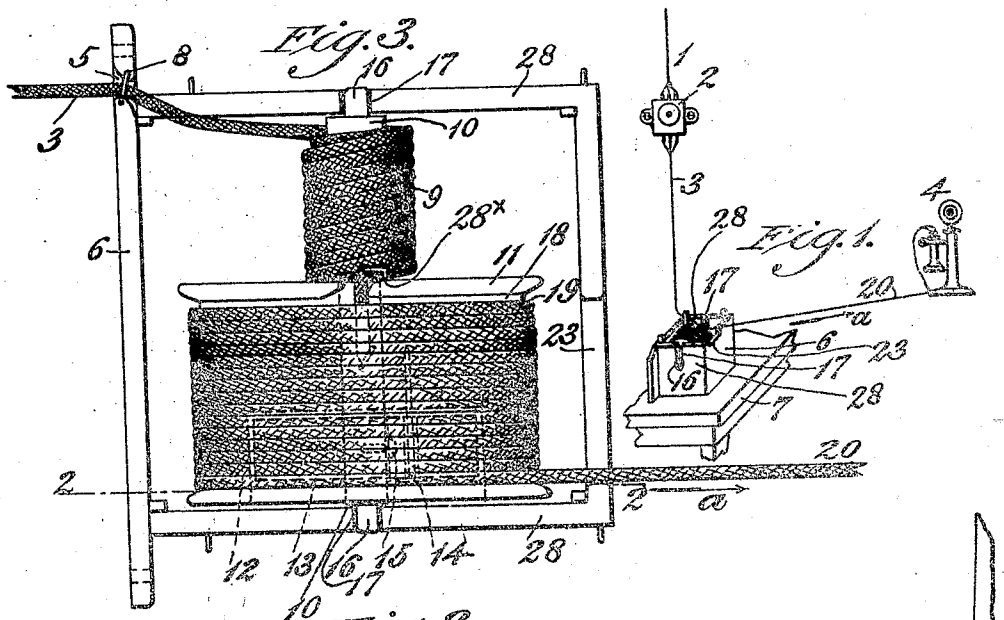


Fig. 3.

Fig. 1.

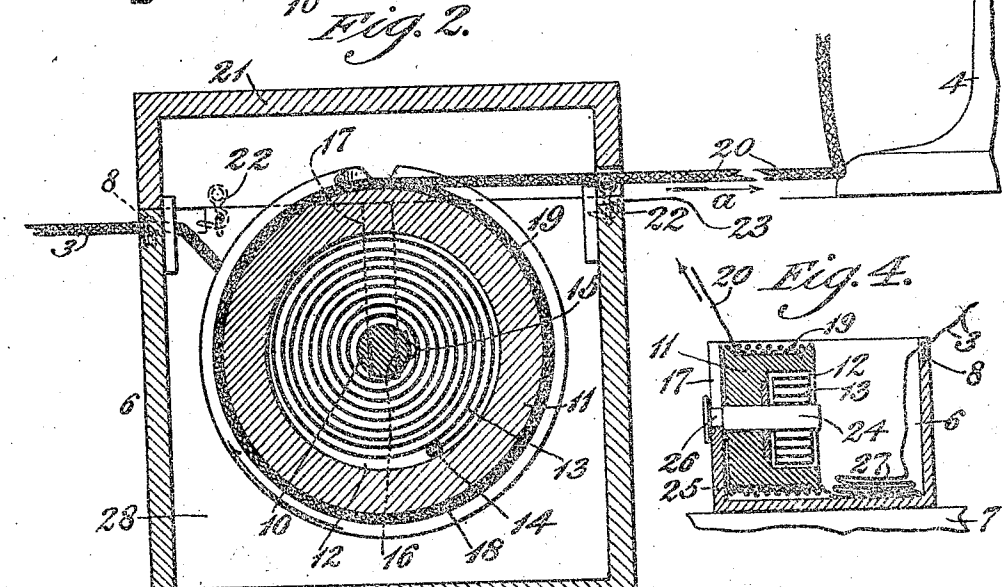


Fig. 2.

Fig. 4.

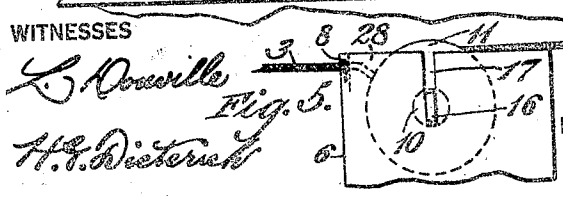


Fig. 5.

WITNESSES

L. Dowville

H. F. Dieterich

INVENTOR

David Swope,

BY Wedderburn & Graham

ATTORNEYS

UNITED STATES PATENT OFFICE.

DAVID SWOPE, OF MERCHANTVILLE, NEW JERSEY.

AUTOMATIC TAKE-UP ATTACHMENT FOR PORTABLE-TELEPHONE CONDUCTORS.

1,276,825. Specification of Letters Patent. Patented Aug. 27, 1918.

Application filed July 21, 1916. Serial No. 110,425.

To all whom it may concern:

Be it known that I, DAVID SWOPE, a citizen of the United States, residing at Merchantville, in the county of Camden, State of New Jersey, have invented a new and useful Automatic Take-Up Attachment for Portable-Telephone Conductors, of which the following is a specification.

In portable or extension telephones for offices, residences and other places which are adapted to be transported from one room to another or from one desk to another, or upstairs and downstairs, or vice versa, as in the case of an extension house 'phone, there is always a considerable length of loose cord or slack telephone wire intermediate the portable telephone and the signal box which is liable to be tripped over, or become entangled with various objects, and the object of my invention is to provide a novel, neat and simple appliance whereby said loose or slack wire or cord will be automatically kept taut or reeled up at all times and yet be capable of being readily unreeled when it is desired to move or change the position of the extension telephone, as from one desk to another, or from one room to another, provision being made for enabling said slack cord to be automatically wound upon a suitable reel without cutting or interfering in any way with the cord or installation of the telephone company, provision being made for the slack cord to be automatically kept taut, or wound up under a slight tension so that the telephone will not be moved from its temporary position and the liability of the breakage of the instrument or other object by the entanglement of the loose cord therewith is entirely obviated.

My novel take up device is entirely automatic in its operation, can be readily installed without the employment of an electrician or skilled labor, can be cheaply manufactured, as the number of parts is reduced to a minimum, is not liable to get out of order, and will be found to be efficient and serviceable under all conditions.

For the purpose of illustrating my invention, I have shown in the accompanying drawings one form thereof which is at present preferred by me, since the same will be found in practice to give satisfactory results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of these instrumentalities as herein shown and described.

Figure 1 represents a perspective view of an automatic take-up attachment for extension telephone embodying my invention.

Fig. 2 represents a section on line 2—2 of Fig. 3.

Fig. 3 represents a plan view of Fig. 2, the top of the box being removed.

Fig. 4 represents a sectional view partly in elevation of another embodiment of the principle of my invention.

Fig. 5 represents an end elevation of a portion of the box and reel seen in Fig. 3.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to drawings:—

1 designates the line wire which leads to the signal box 2 of a subscriber's desk and is of the usual construction, from which box leads the wire, conductor or cord of the extension telephone 4, which latter is of the usual construction and requires no detail description.

The cord 3 is dropped into a recess 5 in the box 6 which may be of rectangular or other shape supported upon a table as indicated at 7 or attached to a side wall or any other desired point. The cord 3 after being passed through the recess 5 is held in position from longitudinal movement by a staple 8 and then wound as indicated at 9 around the hub or spindle 10 which carries the hollow reel 11 of enlarged diameter.

Within the chamber 12 of the reel 11 is located the spring 13, which has one end as 14 secured to the reel 11, while the other end of said spring as 15 is secured to the spindle 10, as will be understood from Fig. 2.

The outer terminals 16 of the spindle 10 have their opposite sides flattened or parallel and are adapted to be dropped into the recesses 17 in the sides 28 of the box 6, so that it will be understood that after the cord has been loosely wound around the spindle 10, as indicated at the top of Fig. 3, and then wound in the reverse direction around the reel portion 18, as indicated at 19 in Figs. 2 and 3, the free end 20 of the cord will lead to the telephone stand 4. I preferably insert a staple or other fastening device, as indicated at 28^x in Fig. 3 into the reel body 18, so that an approximately predetermined fixed length of cord may be wound on the hub 10 and reel 18. The parts will

now appear as seen in Fig. 1, it being understood that the spindle 10 and the reel 11 are preferably removed or lifted upwardly from the box 6 during the act of winding up the slack cord upon the hub 10 and reel 18, the spindle portion 10 being held stationary in the hand of the user and the reel member 18 having been turned against the tension of the spring 13, so that when the spindle 10 is dropped into the box 6, as indicated in Figs. 2, 3 and 5, any pull upon the cord 20 in the direction of the arrow *a* will automatically permit the cord 19 to unreel from reel 18 and when the user is through talking on the telephone, and replaces it in its desired position, the tension of the spring 13 will be sufficient to reel up the cord 20, the spindle 10, reel 11 and the square terminals 16 operating in a manner somewhat similar to a curtain holder, and the tension of said spring being only sufficient to effect the desired reeling and unreeling of the cord or conductor 20.

It will thus be seen that under all conditions my novel device is automatic in its operation and can be attached to any telephone having an extension cord without cutting or interfering in any way with the connection or installation of the telephone company, the slack cord at all times being capable of being unreeled, according to requirements, and being automatically reeled or wound up and kept sufficiently taut without requiring any attention on the part of the operator.

In practice, I cover the box 6 containing the take-up mechanism with a suitable cover 21, which can be secured in position by suitable latching or locking devices 22, said box having an elongated slot 23 therein to permit of the necessary lateral unreeling of the cord 20.

In the construction seen in Fig. 4, I have shown another embodiment of the principle of my invention, wherein the spindle 24 is shown, as formed of a shaft supported from the side 25 of the box 6 at the point 26, the general manner of constructing and collocating the spring 13 with respect to the reel 11 being as already described, the cord from the signal box or subscriber's desk being indicated in Fig. 4 as 3, the slack cord as 27, the cord on the reel as 19, and the cord leading from the reel to the telephone as 20, as already described with reference to Figs. 2 and 3.

The manner of operation of the structure seen in Fig. 4 will be readily apparent to those skilled in the art from the foregoing description, as it will be apparent that a pull on the cord 20 will serve to unwind the reel 11, whereupon when the cord 20 is released, said cord will be automatically wound on the reel and kept taut as is evident.

It will be understood that a suitable cover or top can be provided as in Fig. 2, as already explained with reference to Figs. 2 and 3, and that in all the embodiments of my invention, my novel take-up device dispenses with complicated and expensive gearing which is liable to get out of order and can be readily attached to or used in conjunction with any extension telephone having an extension cord, without necessitating the employment of an electrician or skilled labor, and without necessitating the cutting of the slack cord or interfering with the installation put in by the telephone company.

It will be seen from the foregoing that my novel device can be readily attached to the slack cord of any extension telephone, without cutting or in any way interfering with the telephone company's installation.

It is further entirely automatic in its action, and the box containing the mechanism can be fastened out of the way to a wall, desk, table or other support.

It will be further apparent that the reel 18, which is of considerably larger diameter than the spindle 10, can be so proportioned as to have wound thereon a greater or less length of cord 19, according to the length of cord which it is desired to unreel. My device is especially useful in extension telephones for residences, where families at night on retiring take the telephone upstairs, in which case unless a device of the character of my invention is employed, there is liable to be a considerable length of slack cord, which is liable to be tripped over in the dark, all of which is obviated by my invention.

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

1. In an automatic take-up device for the cord of an extension telephone, a spindle, a reel rotatably mounted on said spindle, a spring intermediate said reel and spindle, a telephone cord wound on said reel in one direction and having an extended spare length wound in the reverse direction on said spindle, whereby a predetermined length of cord may be unreeled, and a telephone connected to the outer end of said cord extending from said reel.

2. In an automatic take-up device for the cord of an extension telephone, a spindle, means for preventing said spindle from rotation, a reel rotatably mounted on said spindle, a spring intermediate said reel and spindle, a telephone cord wound on said reel in one direction and having an extended spare length wound in the reverse direction on said spindle, whereby said telephone may be readily moved toward and away from said reel, and a fastening device for said cord intermediate said reel and spindle, and secured to said reel body, whereby a pre-

determined length of cord may be unreeled from said reel.

3. In an automatic take-up device for the cord of an extension telephone, a box having a reel therein, a spindle for said reel, tension devices intermediate said reel and spindle, and a telephone cord wound on said reel in one direction and having an extended spare length wound in the reverse direction on said spindle, whereby a predetermined length of cord may be unreeled from said reel, said box having an inlet opening for the cord wound on said spindle, and an outlet opening for the cord extending from said reel, said latter cord being connected to said telephone.

DAVID SWOPE.

Witnesses:
E. HAYWARD FAIRBANKS,
H. S. FAIRBANKS.