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A. LEVIN

TELEPHONE SUPPORT

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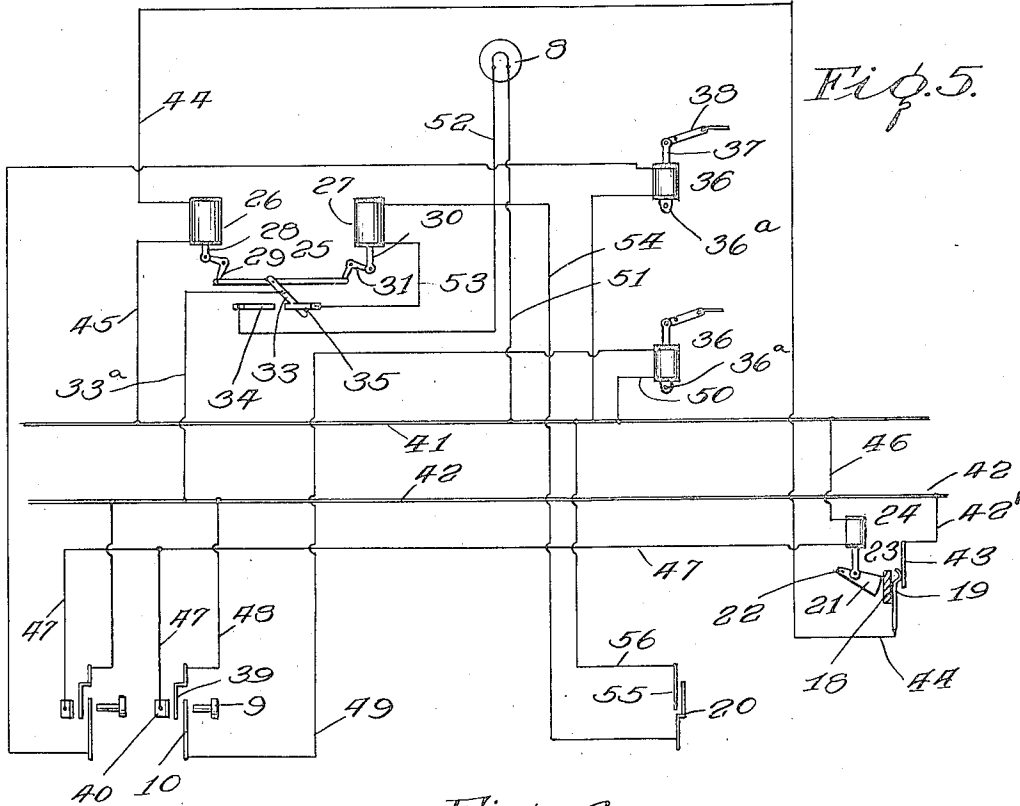
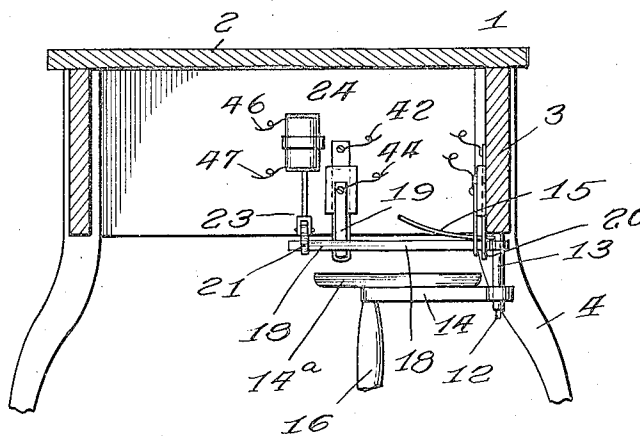


Fig. 6.



Inventor

A. Levin

By *[Signature]*

Attorney

UNITED STATES PATENT OFFICE.

ABRAHAM LEVIN, OF DALLAS, TEXAS.

TELEPHONE SUPPORT.

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To all whom it may concern:

Be it known that I, ABRAHAM LEVIN, a citizen of the United States, residing at 1216 Pecan Street, Dallas, in the county of Dallas and State of Texas, have invented certain new and useful Improvements in Telephone Supports, of which the following is a specification.

This invention relates to improvements in supports for telephones.

The object of the invention is to provide a telephone support having a seat arranged so as to be conveniently stored under the support when not in use, and adapted to be automatically released and automatically swung out to operative position when a person desires to use the telephone.

Another object of the invention is to provide a plurality of push buttons so disposed and arranged that by depressing any one of the buttons the seat for the user will be released and automatically positioned in front of the support, a lamp will be lighted and a leaf turner operated to assist the telephone user to locate the desired number of the party to be talked to.

A further object of the invention resides in the provision of an electrically operated index in connection with a mechanically operated seat positioned for the user of the telephone at the time a particular page in the index is opened.

A still further object of the invention is the provision of a plurality of push buttons, each indicating a letter or group of letters of the alphabet and so arranged that when a selection is made a page in the index will be opened and through associated instrumentalities a seat for the telephone operator will be automatically positioned and a source of light created to assist the operator in selecting the desired name in the index.

Another object of the invention is the provision of means whereby when a person is through with the telephone and the seat is restored to normal position under the support, the light is extinguished, and the index actuating mechanism is positioned to be returned to normal position.

The invention also comprehends improvements in the details of construction and arrangement of parts which will be hereinafter described and particularly pointed out in the claims.

In the accompanying drawings:

Figure 1 is a perspective view of my improved telephone support, the seat being shown in operative position in front of the support and the index opened.

Figure 2 is a section on line 2—2, Figure 4.

Figure 3 is a section on line 3—3, Figure 4.

Figure 4 is a section on line 4—4, Figure 2.

Figure 5 is a diagram of the wiring.

Figure 6 is a section on line 6—6, of Figure 4.

The numeral 1 indicates a table or support, comprising a top 2, frame 3 and legs 4. A telephone of usual construction rests on the top 2, and in convenient relation to the telephone is a directory or index 5, composed of a plurality of leaves 7, and adjacent the directory is an electric lamp 8.

On the front panel of the frame 3, is a plurality of push buttons 9, the inner end of each of which is spaced from a contact 10. On the front of each push button is a letter, corresponding to the alphabet, or in lieu of a single letter each button may be provided with a group of letters to correspond with the alphabetical arrangement of the leaves of the directory on the support. These push buttons are so arranged that by depressing any one of them a circuit will be closed to release an operator's seat, which in turn closes an additional circuit which operates mechanism and opens the directory to the desired page on which appears the name of the party to be talked to and the number of his or her phone, and also operates a switch which lights the lamp.

Mounted on a post 12 depending from one corner of the top or frame of the support is a sleeve 13, from the lower end of which extends an arm 14, carrying a seat 14^a, at its free end. A spring 15 is provided to normally swing the arm and seat outwardly to a position to form a comfortable and convenient seat for a person about to use the telephone. Depending from the seat is a leg 16, having a roller 17 at its lower end to travel on the floor, the leg serving as a means for supporting the seat when in use. Extending from the sleeve 13, is a contact arm 18, arranged in the path of a contact 19, to be referred to later on.

Also arranged in the path of movement of the arm when the seat is swung out for use is a contact 20, also to be referred to later on.

5 The contact bar 18, is held in normal position by a latch 21 arranged in the path of movement of the bar and adjacent the contact 19. The latch is pivoted at 22, and at about its center is pivoted the lower end
10 23 of the core of a solenoid 24 mounted on the inside of the frame 3.

25 indicates a lighting switch comprising the solenoids 26 and 27, the core 28 of the solenoid 26 being pivoted to a crank lever
15 29, and the core 30 of solenoid 27 being pivoted to a crank lever 31. The free ends of the two bell crank levers 29 and 31, are connected together by a bar 32; pivoted intermediate the same is a lever 33, the lower
20 end of which operates between two contacts 34 and 35.

36 indicates one of a series of solenoids pivoted at 36^a for operating the pages of the directory, one for each push button,
25 two being shown in the diagram. To the core 37 of each solenoid 36, is pivoted a lever 38, pivoted in a slot in the top of the support, the free end of each lever being angularly bent to lie between the pages of
30 the directory.

Adjacent each contact 10, which cooperates with a push button is a contact 39 and adjacent thereto is another contact 40, so that upon actuation of a push button, con-
35 tact 10 is forced into engagement with contact 39 and this in turn engages contact 40.

41 and 42, indicate wires leading from a battery or other source of electrical energy to supply current to the various lines to operate the actuating mechanism. The wiring may be of any approved layout, but in Figure 5 I have illustrated a diagram which will serve the purpose of illustrating one way of accomplishing the desired result. A
40 wire 42', extends from the lead wire 42, and is connected to a contact 43, located adjacent to and is normally spaced from contact 19. From the contact 19, extends a wire 44, which leads to the solenoid 26, and from the latter leads a wire 45, which is
50 connected to lead wire 41. A wire 46 is connected to the lead wire 41, and is connected to the solenoid 24, and from the latter extends a wire 47, which leads to the con-
55 tacts 40, (but one being lettered in the diagram; but it is to be understood that all the contacts 40 are connected to this wire). From contact 39, leads a wire 48, which is connected to the lead wire 42. From the
60 contact 10, extends a wire 49, which leads to the solenoids 36, and from the latter extends a wire 50 connected to the lead wire 41.

A wire 51 extends from the lead wire 41, to the lamp 8 and from the lamp extends a
65 wire 52, which leads to the contact 34. From

contact 35, extends a wire 53, which leads to the solenoid 27, and from the latter extends a wire 54, which is connected to the contact 20. Normally spaced from the contact 20, is a contact 55, which is connected
70 by a wire 56 to the lead wire 41.

Assume the parts are in normal position. That is the directory is closed, the light is out and the seat is under the support. Under these circumstances the contact bar 18, is
75 up against the contact 19, and the latter is held in engagement with the contact 43, the contact bar being held in this position by the latch 21, the lower surface of which is inclined to readily permit the bar to displace
80 it in its movement toward the contact 18.

When any one of the push buttons is pressed in, the contacts 10-39 and 40 are engaged and the circuits are closed. Current then passes from lead wire 42 through
85 wire 48, contacts 39-40, wire 47, solenoid 24, to lead wire 41. When the solenoid 24 is energized it elevates the core 23 and raises the latch 21, and releases the contact bar 18, and under the influence of the spring 15, the
90 seat is automatically swung out to a position in front of the support. When the contact bar becomes disengaged from the contact 19, the latter springs from the contact 43, and opens the normally closed circuit
95 through wires 42, 44, solenoid 26, and wire 45. Actuation of a push button, in addition to closing the circuit to release the seat, closes a circuit through wire 49, solenoid 36, and wire 50, and causes the core 37 of the
100 solenoid to be depressed and consequently turns the lever 38 and opens the page in the directory corresponding to the letter on the face of the button.

When the seat swings out to operative
105 position the contact bar 18 strikes the contact 20 and causes it to engage the contact 55, which closes a circuit through wires 56, 54, solenoid 27, wire 53, contact 35, switch lever 33, and wire 33^a. This circuit causes
110 the core of solenoid 27 to be raised and through the connecting bar 32 the switch lever 33 is shifted to contact 34 and current then passes through wire 33^a, switch lever 32, contact 34, wire 52, lamp 8, wire 57 to
115 lead wire 41, and the lamp is lighted. Hence by pushing any one of the push buttons the seat is released and is automatically positioned in front of the support, the directory
120 is opened to the desired page where the party's name and number appears, and the lamp is lighted.

When the user of the telephone is through with the conversation, the seat is manually
125 returned to normal position, and the contact bar rides under the latch 21 and is held in position against the tension of spring 15. The contacts 19 and 43 are brought together and the solenoid 26 is energized and the
130 switch lever 33, is shifted from contact 35.

to contact 34, which extinguishes the light and sets the switch for the next successive operation.

It is to be understood that actuation of a push button only temporarily holds the contacts 10—39 and 40 in contact relation and when the seat is moved from the contacts 20 and 55 the circuit is open, correspondingly when the seat is returned to normal position the solenoids 27 and 36 are de-energized, hence the solenoid 26 is free to be operated and also the core of solenoid 36.

From the foregoing description it will be seen that I have provided simple and effective means for positioning a seat in front of a telephone stand, lighting a lamp and turning the pages of the directory to the letter of the name of the party, all the operations being accomplished by pushing a push button.

What I claim is:—

1. In a telephone support the combination of a seat, means for holding the seat in an inoperative position, automatic means for positioning the seat in front of the support when the seat is released, an index including folding leaves on the support, and electric means for simultaneously releasing the seat holding means and actuating the leaves of the directory.

2. In a telephone support the combination of a table, a seat pivoted to swing under the table, means for automatically swinging the seat to a position in front of the table, a contact member movable with the seat, a latch for holding the seat in locked position under the table, a solenoid for actuating the latch, and electrical means including a push button actuating the solenoid to release the seat.

3. In a telephone support the combination of a table, a seat pivoted to swing under the table, means for automatically swinging the seat to a position in front of the table, a contact member movable with the seat, a latch for holding the seat in locked position under the table, a solenoid for actuating the latch, a directory on the table, a plurality of solenoids for opening the pages of the directory, and electrical means including push buttons for actuating the solenoids to simultaneously release the seat and turn the pages of the directory.

4. A telephone support comprising a table, a movable seat, a directory, a plurality of push buttons, each having a designation thereon to indicate the pages of the directory, and electric circuits arranged between the push buttons, directory and seat, whereby upon depression of any one of the push buttons the seat will be positioned in front of the table and the directory opened to the page corresponding to the letter appearing on the push button.

5. A telephone support comprising a table,

a movable seat, a directory, a plurality of push buttons each having a designation to indicate the pages of the directory, a lamp, and electric circuits arranged between the push buttons, directory, lamp and seat, whereby upon depression of any one of the push buttons the seat will be positioned in the front of the table, the lamp lighted and the directory opened to the page corresponding to the letter appearing on the push button.

6. A telephone table, a seat, means for moving the seat to an operative relation to the support, means for holding the seat in an inoperative support, a plurality of telephone directory leaf turners, and means for selectively operating said leaf turners, said means automatically releasing the seat holding means.

7. A telephone table, a seat, means for moving the seat to an operative relation to the support, means for holding the seat in an inoperative support, a plurality of telephone directory leaf turners, and electrically operated means for selectively actuating said leaf turners, said means automatically releasing the seat holding means.

8. A telephone table, a seat normally held in inoperative relation to the table, means for moving the seat to an operative relation to the table, a series of leaf turners for a telephone directory, selective means for operating the leaf turners and simultaneously releasing the seat, a source of illumination and a circuit therefor, and circuit closing means operated in the movement of the seat.

9. A telephone table, a seat normally held in inoperative relation to the table, means for moving the seat to an operative relation to the table, a series of leaf turners for a telephone directory, selective means for operating the leaf turners and simultaneously releasing the seat, a source of illumination and a circuit therefor, circuit closing means operated in the movement of the seat, and circuit breaking means operated in the return of the seat to normal position.

10. A telephone table, a seat normally held in inoperative relation to the table, means for moving the seat to an inoperative relation to the table, means for turning the pages of a telephone directory, electrically controlled means for operating the turning means, electrically controlled means for operating the seat holding means, mechanism for simultaneously energizing both said electrically controlled means, a lamp circuit, and means for controlling the lamp circuit in the movements of the seat.

11. A telephone table, a seat, electrically controlled means for normally holding the seat in inoperative relation to the table, means for projecting the seat to an operative relation to the table, a series of telephone directory leaf turners, electrically operated

means for each of said leaf turners, a manually operable switch for controlling each of the electrically operated means of the leaf turners, said switch energizing the seat holding means to release the seat.

12. A telephone table, a seat movable to and from an operative relation to the table, means for holding the seat in inoperative relation to the table, a solenoid and circuit therefor for releasing the seat holding means, a plurality of telephone directory leaf turners, a solenoid for operating each leaf turner, a circuit for each of said solenoids, a switch for each of said circuits, and means whereby the operation of any one of said switches will energize the solenoid for releasing the seat holding means.

13. A telephone table, a seat movable to and from an operative relation to the table, electrically controlled means for holding the seat in inoperative relation to the table, a plurality of telephone directory leaf turners, electrically operated means for actuating each of said leaf turners, a switch governing each of said last named means, and a circuit common to all of such switches for energizing the electrically controlled seat holding means.

14. A telephone table, a seat movable to and from an operative relation to the table, electrically controlled means for holding the seat in inoperative relation to the table, a plurality of telephone directory leaf turners, electrically operated means for actuating each of said leaf turners, a switch governing each of said last named means, a circuit common to all of such switches for energizing the electrically controlling seat holding means, a lamp energizing circuit, a switch therefor, and means governed in the movement of the seat for controlling said last named switch.

15. A telephone table, a seat movable to and from an operative relation to the table, electrically controlled means for holding the seat in inoperative relation to the table, a plurality of telephone directory leaf turners, electrically operated means for actuating each of said leaf turners, a switch governing each of said last named means, a circuit common to all of such switches for energizing the electrically controlled seat holding means, a lamp circuit, a switch therefor, electrically operated means for con-

trolling the switch of the lamp circuit, and contacts operated in the movement of the seat for controlling said last named electrically operated means.

16. A telephone table, a seat movable to and from an operative relation to the table, electrically controlled means for holding the seat in inoperative relation to the table, a plurality of telephone directory leaf turners, electrically operated means for actuating each of said leaf turners, a switch governing each of said last named means, a circuit common to all of such switches for energizing the electrically controlled seat holding means, a lamp circuit, a switch therefor, solenoids for controlling said switch, and contacts operated in the movement of the seat for energizing said solenoids.

17. A telephone table, a series of telephone directory leaf turners, means for selectively operating said leaf turners, a seat, means for normally holding the seat in an inoperative position, a lamp circuit, and electrical connections whereby the seat holding means and lamp circuit energization is responsive to the actuation of any of said selective means.

18. A telephone table, a series of telephone directory leaf turners, electrically operated means for each leaf turner, means for selectively energizing said electrically operated means, a seat, means for normally holding the seat in an inoperative position, a release circuit for the holding means, said circuit being responsively controlled by any of said selective means, and a lamp circuit automatically controlled by and in the movement of the seat.

19. A telephone table, a series of telephone directory leaf turners, electrically operated means for each leaf turner, means for selectively energizing said electrically operated means, a seat, means for normally holding the seat in an inoperative position, a release circuit for the holding means, said circuit being energized by any of said selective means, a lamp circuit, and means for controlling the energization and deenergization of said circuit in and by the movement of the seat.

In testimony whereof I affix my signature.

ABRAHAM LEVIN.