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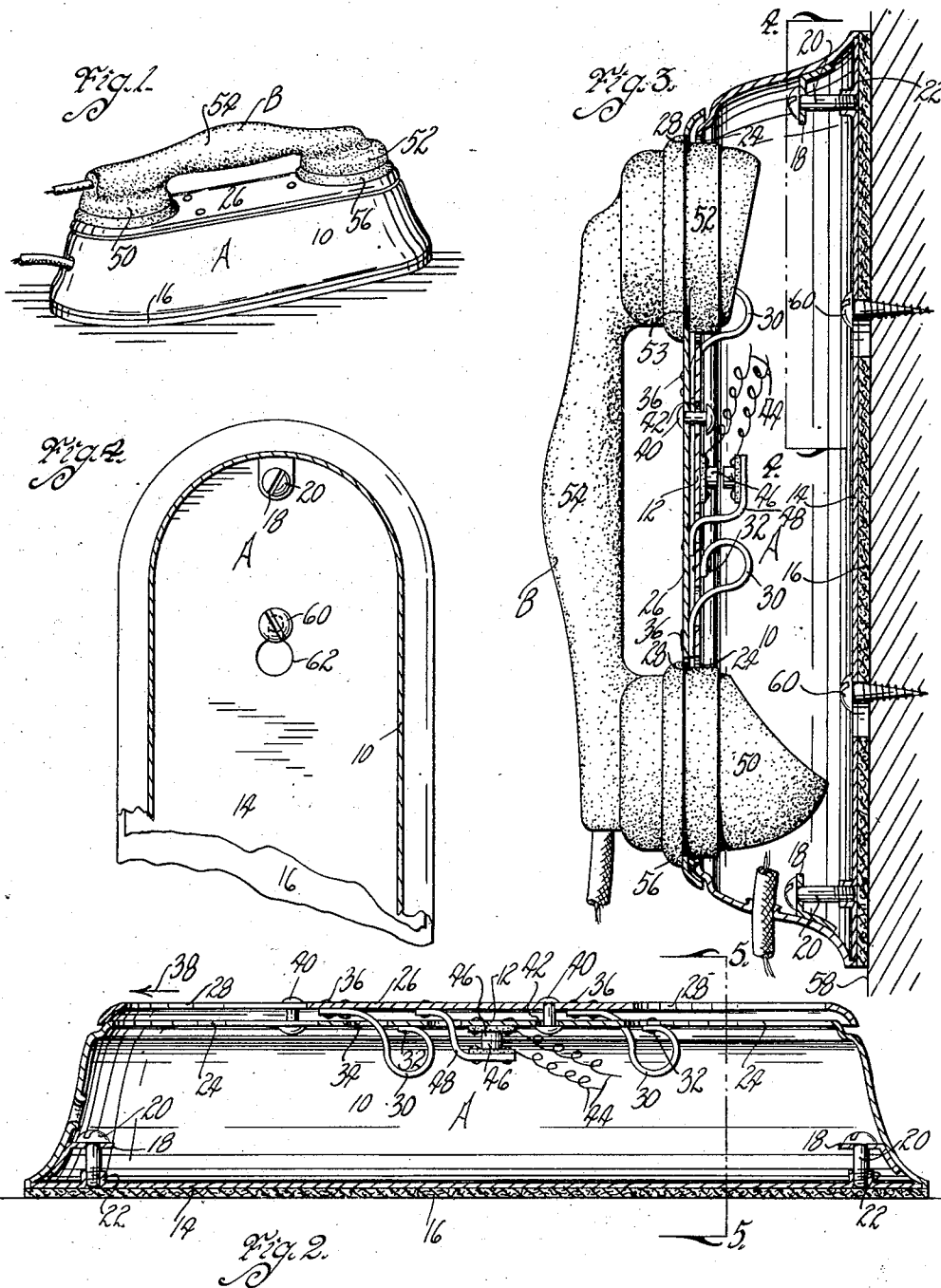
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1,819,362

TELEPHONE CONSTRUCTION

Filed Aug. 25, 1930

2 Sheets-Sheet 1



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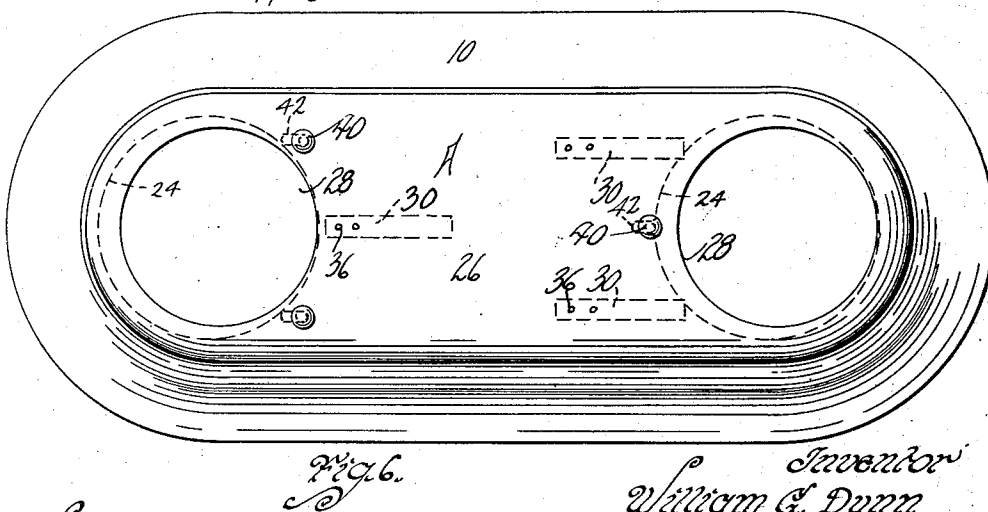
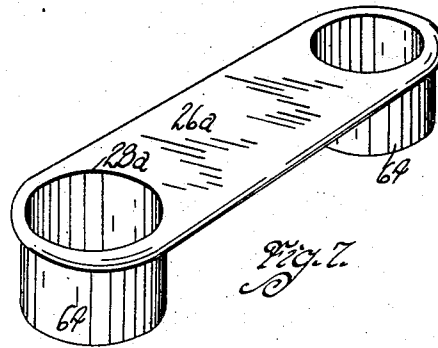
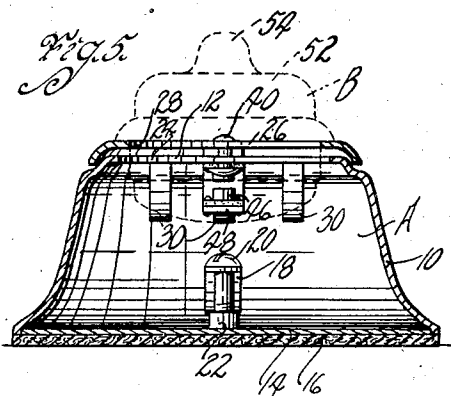
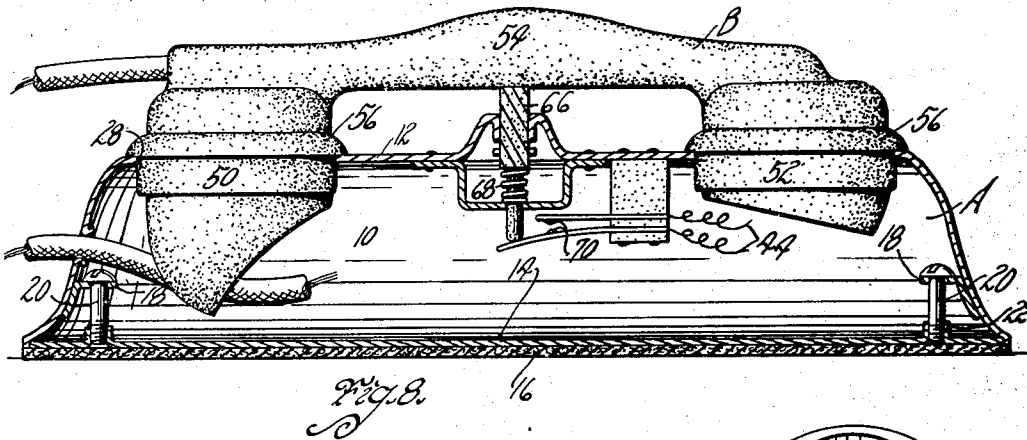
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TELEPHONE CONSTRUCTION

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

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TELEPHONE CONSTRUCTION

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The object of my invention is to provide a telephone construction consisting of a base and a hand piece, the base being of simple, durable and comparatively inexpensive construction.

A further object is to provide a neat appearing base and hand piece type of telephone transmitter and receiver which is in keeping with the modern trend toward plain, smooth lines in all commodities.

A further object is to provide a telephone construction in which a base is provided with a pair of openings for the receiving and transmitting instruments of the hand piece to fit into, which makes for simplicity since there is an absence of any receiver hook or the like, and sanitation is promoted since the parts of the hand piece which are in contact with the mouth and ear of a user are always enclosed when not in use, and the telephone construction can be easily cleaned with a dust cloth.

Still a further object is to provide a telephone construction which can be mounted either on a wall or on a desk, plenty of space being provided within the base for mounting electrical connections, telephone bells, etc.

A further object is to provide a telephone construction which is compact and which, therefore, takes less desk or wall space than the ordinary type of telephone.

Still a further object is to provide a movable plate on the base and a telephone circuit switch operatively connected therewith, whereby the plate when moved by the weight of the hand piece and telephone instruments thereon will open the telephone circuit regardless of whether the device is mounted on a vertical wall surface or on a horizontal desk surface.

Still a further object is to provide a telephone construction which is trouble proof, there being no danger of pushing objects against or under the telephone circuit switch as in present types of telephones for thus closing the telephone circuit and placing the telephone out of order.

With these and other objects in view, my invention consists in the construction, arrangement and combination of the various

parts of my device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of a telephone construction embodying my invention, showing the base and hand piece associated together and illustrating them as they would appear on a desk surface for instance.

Figure 2 is a longitudinal, central sectional view of the same, showing the base member without the hand piece.

Figure 3 is a similar sectional view showing the hand piece in position and the telephone construction mounted on a vertical wall surface.

Figure 4 is a sectional view of the line 4—4 of Figure 3.

Figure 5 is a sectional view of the line 5—5 of Figure 2.

Figure 6 is a plan view of the base member without the hand piece.

Figure 7 is a perspective view of a modified form of plate on the base member; and

Figure 8 is a longitudinal sectional view of a base member of a modified construction, showing the hand piece associated therewith.

On the accompanying drawings I have used the reference character A to indicate a base member. The base member A is preferably of oblong construction, although other shapes may be provided if desired.

It consists of a wall member 10 and a top member 12. Associated with the base A is a base plate 14 preferably faced with felt or the like 16 to prevent scratching a desk surface.

Suitable means is provided for securing the base plate 14 and the base member A together, such as by means of ears 18, screws 20 and screw threaded bosses 22 as shown for instance in Figure 2 of the drawings.

The top 12 is provided with a pair of openings 24. A cover plate 26 is positioned above the top 12 and has openings 28 substantially in register with the openings 24. With respect to the openings 28, the openings 24 are slightly elongated as shown in dotted

lines in Figure 6, the purpose of which will hereinafter be obvious.

Springs 30 each have one end secured to the underside of the top 12 at 32 and its other end extended through a slot 34 in the top 12 and connected with the underside of the plate 26 at 36. The connections 32 and 36 are arranged obliquely with respect to each other, whereby any downward pressure on the plate 26 causes it to move also in the direction of the arrow 38 (see Figure 2).

To limit the upward movement of the plate 26 as caused by the springs 30, headed rivets 40 may be provided which are suitably secured in the plate 26 and extend through slots 42 in the top 12 of the base A.

Thus, it will be seen that the springs 30 will normally maintain the plate 26 in raised position with the lower heads of the rivets 40 contacting with the undersurface of the top 12 as shown in Figure 2, but a weight on the plate will move it downwardly toward the left.

The purpose of the plate 26 being movable with respect to the base A is to break a telephone circuit through the wires 44 which are connected with the contacts 46. One of the contacts 46 is stationarily mounted on the top 12 while the other is supported by a bracket 48 secured to the plate 26.

From the foregoing construction it will be obvious that the weight of a hand piece B which includes a transmitting instrument 50, a receiving instrument 52 and a connecting handle 54 will, when placed with the instruments 50 and 52 inserted through the openings 28 and 24, separate the contacts 56 and thus break the telephone circuit through the wires 44 for opening the circuit from the telephone to central.

The instruments 50 and 52 are each provided with a flange 56 which fits down against the switch plate 26 to seal against the entrance of dust into the base when the hand piece B is in position thereon and to limit the entrance of the instruments 50 and 52 into the base. Instead of complete flanges 56, two or three lugs could be provided if desired.

As shown in Figure 3, my telephone construction can be mounted on a wall 58 by means of screws 60. Ordinary round openings may be provided for the screws 60, or key hole slots 62 as shown in Figure 4 may be provided so that by a slight raising of the base A with respect to the screws 60 the base may be disconnected from the wall 58 for use on a horizontal desk surface, or for otherwise changing the position of the telephone construction.

Since the plate 26 moves obliquely from closed to open circuit position the weight of the hand piece B when imposed thereon as shown in Figure 3, will cause a movement of the plate 26 downward and toward the right

for breaking the telephone circuit through the contacts 46.

Thus, it is obvious that by the type of resilient connection 30 provided between the top 12 and plate 26, it is adaptable for either horizontal or vertical mounting.

A slight notch 53 may be provided in the instrument 52 to insure against any likelihood of the hand piece B becoming disengaged from the plate 26. The opening 28 would be slightly elongated to allow first a reception movement of the instrument with respect to the base and then a slight dropping movement until the notch 53 is engaged under the lower edge of the upper opening 28.

In Figure 7 I have shown a modified form of plate 26a in which cup like receptors 64 extend downwardly from the openings 28a. This type of construction may be substituted for the plate 26 and more effectively guards against the entrance of any dust into the space around the transmitter and receiving instruments 50 and 52.

The base A is preferably flared so as to minimize the likelihood of pushing objects against the base which will upset it.

In other words, it would engage the bottom rather than the top, and there is no likelihood of upsetting the telephone construction when engaged at the bottom in this way.

The base is comparatively flat, which also makes it almost impossible to upset it or knock the hand piece B from the base A under ordinary circumstances.

In Figure 8, I have shown my telephone construction with a switch bar 66 to replace the plate 26. The cross bar 54 of the telephone instrument engages the switch bar 66 for depressing it against the action of a spring 68 and thereby separating the contacts 70. The switch bar 66 is suitably guided for sliding movement, as clearly shown on the drawings.

Some changes may be made in the construction, and arrangement of the parts of my device, without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claims, any modified forms of structure or use of mechanical equivalents, which may be reasonably included within their scope.

I claim as my invention:—

1. In a telephone construction, a base member, a switch associated therewith for opening and closing an electrical telephone circuit, a plate overlying said base member and having resilient connection therewith, said plate being capable of operating said switch when the plate is moved in either horizontal or a vertical direction.

2. A telephone construction having a base, a telephone circuit switch associated therewith, a hand instrument adapted to contact with said base whereby the weight of the hand instrument causes the switch to open

the telephone circuit when the base is in either a horizontal or vertical position.

3. In a telephone construction having a pair of instruments, a bar connecting said instruments together, a base adapted to receive and partially enclose said instruments, and means associated with the instruments and the base whereby the instruments are prevented from entering the base beyond a predetermined distance.

4. In a telephone construction having a hand piece containing a telephone instrument, a base member having an opening adapted to receive and partially enclose the hand piece, said hand piece having a projecting portion adapted to overlie the base member, whereby the hand piece is prevented from entering the base member beyond a predetermined distance.

5. In a telephone construction of the character disclosed, the combination of a base member having an opening therein and a hand piece containing a telephone instrument which is adapted to enter the opening in said base.

6. In a telephone construction of the character disclosed, the combination of a base member having an opening therein, a hand piece containing a telephone instrument which is adapted to enter the opening in said base, and stop means to limit the degree of entrance of the instrument into the opening in said base member.

7. In a telephone construction of the character disclosed, the combination of a base member having an opening therein, a hand piece containing a telephone instrument which is adapted to enter the opening in said base, and a telephone circuit switch adapted to be engaged and opened by the weight of said hand piece.

8. In a telephone construction of the character disclosed, the combination of a base member having an opening therein, a plate movable relative to said base member and having an opening therein in substantial register with the opening in said base member and a hand piece containing a telephone instrument which is adapted to enter said openings.

9. In a telephone construction of the character disclosed, the combination of a base member having an opening therein, a plate movable relative to said base member and having an opening therein in substantial register with the opening in said base member, an enclosing cup extending from the opening in said plate and through the opening in said base member and a hand piece having a telephone instrument adapted to be received in said cup.

10. In a telephone construction of the character disclosed, the combination of a base member having an opening therein, a plate movable relative to said base member and

having an opening therein in substantial register with the opening in said base member, a hand piece containing a telephone instrument which is adapted to enter said openings, and a telephone circuit switch operatively connected with said movable plate.

11. In a telephone construction, a base member, a plate movable relative thereto, a hand piece having transmitter and receiver instruments thereon, said base member and plate having openings to receive said instruments whereby they are housed in the base, and a telephone circuit switch operatively connected with said plate.

12. In a telephone construction, a base member, a plate movable relative thereto, a hand piece having transmitter and receiver instruments thereon, said base member and plate having openings to receive said instruments whereby they are housed in the base, and a telephone circuit switch operatively connected with said plate, said plate being movable obliquely relative to said base whereby the weight of said hand piece on said plate will open said switch regardless of whether the base member is arranged horizontally or vertically.

13. In a telephone construction, a base member, a plate movable relative thereto, resilient means for moving said plate in one direction, stop means for limiting such movement, a hand piece having transmitter and receiver instruments thereon, said base member and plate having openings to receive said instruments whereby they are housed in the base and a telephone circuit switch operatively connected with said plate.

14. In a telephone construction, a base member, a plate movable relative thereto, resilient means for moving said plate in one direction, stop means for limiting such movement, a hand piece having transmitter and receiver instruments thereon, said base member and plate having openings to receive said instruments whereby they are housed in the base, and a telephone circuit switch operatively connected with said plate, said plate being movable obliquely relative to said base whereby the weight of said hand piece on said plate will open said switch regardless of whether the base member is arranged horizontally or vertically.

15. In a telephone construction, a base member, a plate movable relative thereto, a hand piece having transmitter and receiver instruments thereon, said base member having openings to receive said instruments whereby they are housed in the base, a telephone circuit switch operatively connected with said plate, and means on said instruments to limit the degree of their reception into said base.

16. In a telephone construction, a base member, a second member attached to the

base and movable relative thereto, a hand
piece having transmitter and receiver instru-
ments thereon, said base member having
openings to receive said instruments therein,
a telephone circuit switch operatively con-
nected with said second member, and means
on said instruments to limit the degree of re-
ception into said base.

Des Moines, Iowa, July 30, 1930.

WILLIAM G. DUNN.

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