

Automatic Electric Inc.

1033 West Van Buren Street
CHICAGO, U. S. A.

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Types of Automatic Electric Telephones

The Automatic Electric desk set consists of a pedestal type stand and a ringer box as shown below.

Desk Stand.

The attractive features of the exterior design of this instrument are the offset base and the goose-neck transmitter post. The offset base, besides enhancing the appearance of the stand and improving its balance, also affords excellent protection for the dial and facilitates its mounting. The stand is of such weight that it will not move when the dial is operated. The transmitter post is made of aluminum-bronze, finished in black enamel. The transmitter shell is fastened to the post by means of a hinge, having the appearance of a "ball and socket"

joint which permits an up and down movement of the transmitter. The transmitter is easily moved yet is firmly held in any position in which it is placed.

The receiver hook and spring assembly of the desk stand are interchangeable with the same parts of the wall telephone. On the desk stand, these parts are fastened to a plate which extends from the transmitter post to the base cover. By removing the single "non-loosable self-centering" screw which holds the base cover in place and loosening a screw above the hook, the hook and spring assembly may be partly withdrawn as shown at right.



Desk Stand and Ringer Box.

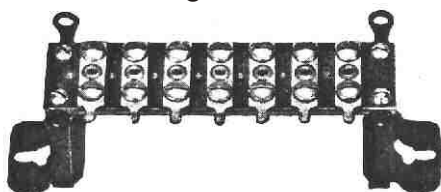
The desk stand stem and the base are made of brass heavily japanned. These parts are permanently fastened together thus obviating the possibility of their loosening in service. The base contains the dial, a terminal block and the local wiring. The desk stand base plate, which fits on the bottom of the base of the telephone, is of zinc-plated steel. This plate is covered with brown felt securely held in place by means of a zinc-plated steel clamping ring. The illustration at right shows the interior of the base of the desk stand and reveals many exclusive features of design and construction.

The complete desk stand is just heavy enough to keep it from sliding when dialling thereby eliminating the necessity of holding the stand with the other hand while doing so.

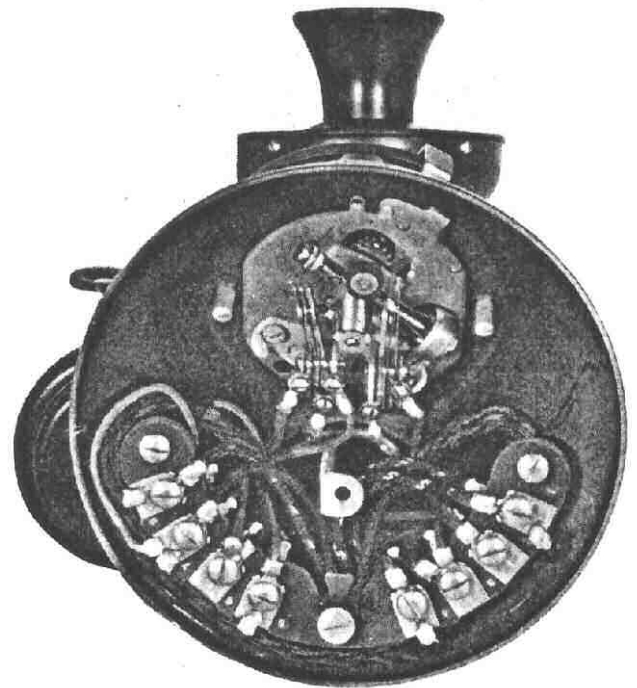
Ringer Box.

Like the desk stand, the ringer box possesses a number of important mechanical characteristics. In outward appearance a prominent feature of construction is the concealed gongs. Elongated slots in the bottom of the box allow the sound to emanate without being muffled. The base and front are each made of one piece of heavy gauge stamped steel which is parkerized and heavily finished in black japan. Upon the base is mounted the ringer, condenser and induction coil with terminal block.

The ringer is located at the bottom of the ringer box base. The gongs are mounted below the ringer movement with their open ends extending downwards. The ringer used can be of either the straight-line or the harmonic type and it is a simple matter to change the ringer type when required. The condenser is mounted at the top of the ringer box and is held in place by means of an iron strap secured by two machine screws. The induction coil, with terminal strip mounted on it, is fastened to the base midway between the condenser and the ringer movement.



Terminal Strip Mounting—
Without Induction Coil.

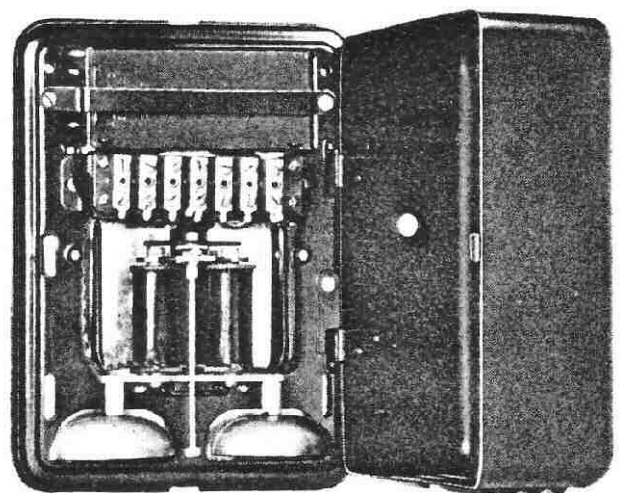


Interior of Desk Stand Base.

One feature of the construction of the bell box is that the entire base and interior assembly is interchangeable with that of the wall telephone. A ringer box can be converted to a telephone by merely changing the cover assembly.

In each case the cover is fastened to the base by means of one-piece "hook-and-slot" hinges which allows the cover to be removed by loosening a screw on the hinged plate, moving the plate aside, opening the cover wide and lifting it slightly. A view of the ringer box open is given below showing the location of the various components.

Two telephone circuits are standard for the desk set - the booster circuit and the series circuit.



Interior of Ringer Box.

Wall Set.

Since the Automatic Electric wall set, illustrated at right, is composed of the same parts and is of the same construction as the bell box, what has been said of these parts in the bell box also applies to the wall telephone.

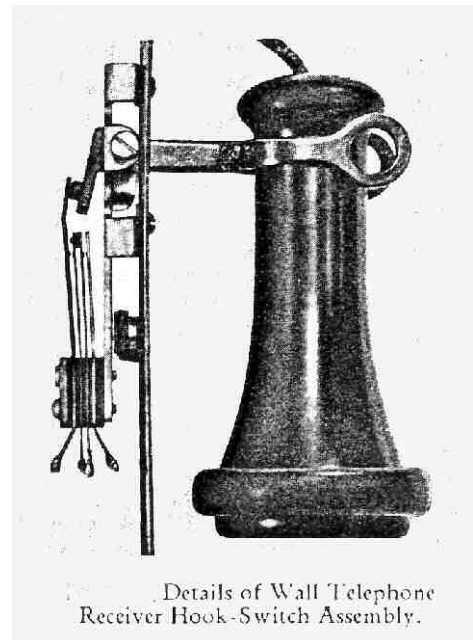
The wall telephone cover is the same as the bell box cover but with the addition of a receiver, hook-switch, transmitter, dial with its mounting and an extra terminal block for interconnecting the various parts.

The transmitter is mounted above the dial by means of a concealed "ball-and-socket" hinge similar to that mentioned under the Desk Stand. The dial is mounted at an angle so that the telephone user will have an unobstructed view of the dial numerals without having to stoop. The receiver hook-switch, shown at right is essentially the same as the one used on the Desk Stand. The terminal block, mounted inside the cover, is identical to the one used in the wall telephone base. A directory hook which can be fastened to the bottom of the telephone is furnished with the instrument. The interior view of the telephone is shown in the illustration below.

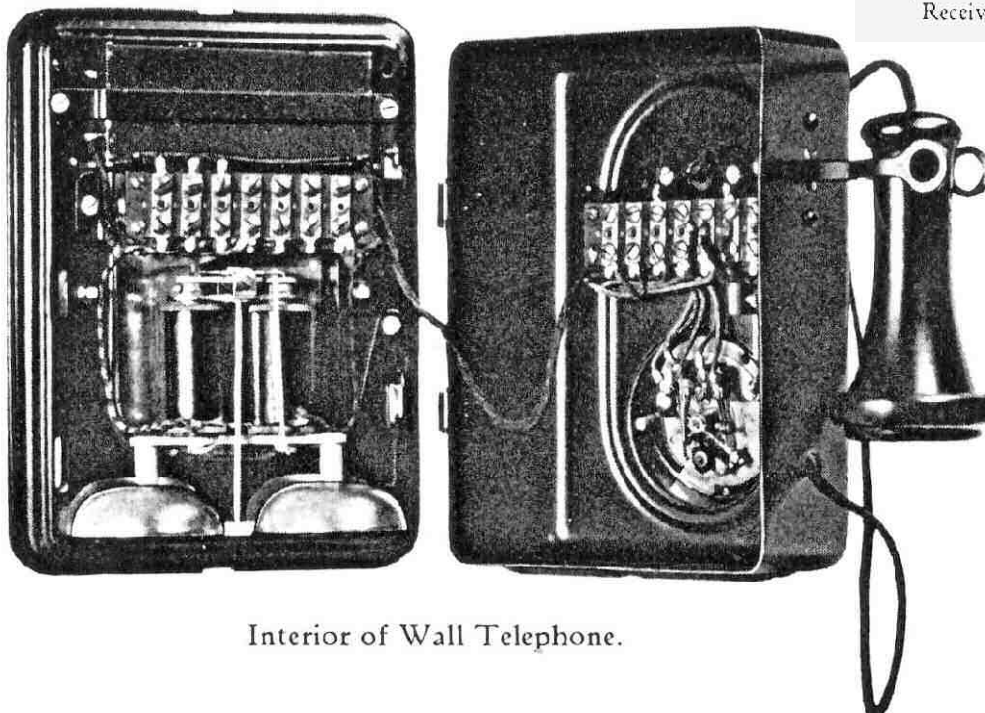
As with the Desk Set, the wall set can be supplied with either the Booster or Series circuits.



Front View of Wall Telephone.



Details of Wall Telephone Receiver Hook-Switch Assembly.



Interior of Wall Telephone.

Parkerizing, **bonderizing**, **phosphating**, or **phosphatizing** is a method of protecting a steel surface from corrosion and increasing its resistance to wear through the application of an electrochemical phosphate conversion coating.