W. KAISLING.

TELEPHONE SET.

APPLICATION FILED AUG. 1, 1908.

958,925. Patented May 24, 1910.

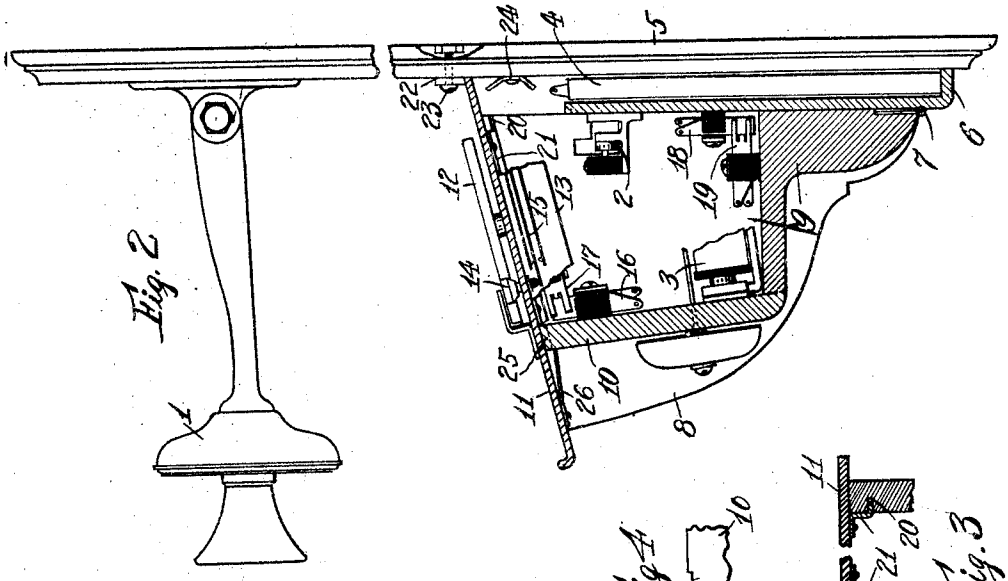

Fig. 2

Fig. 4

Fig. 3

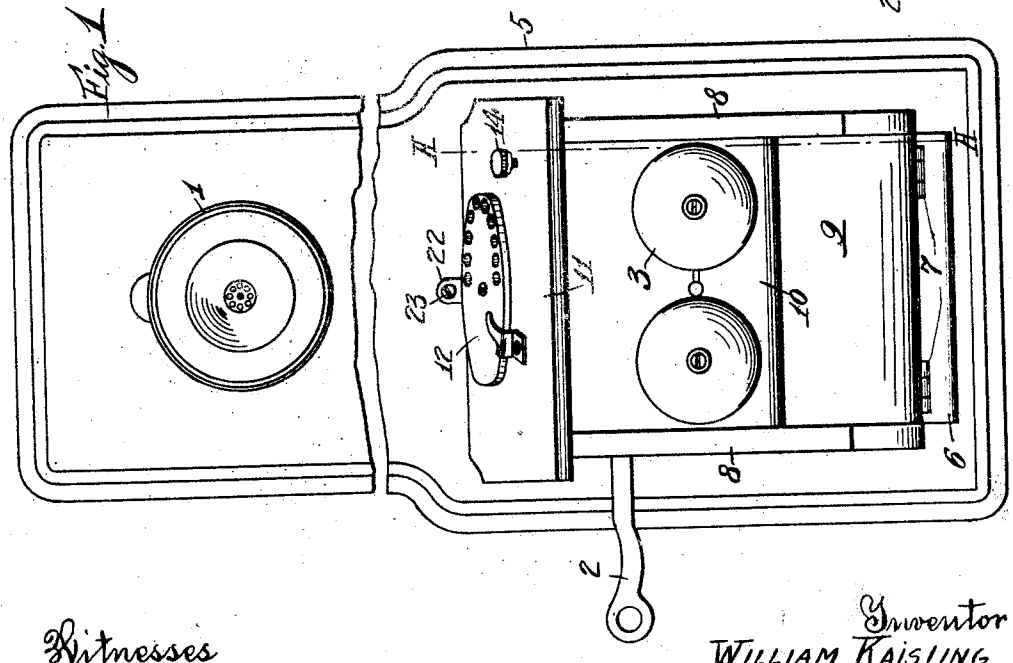

Fig. 1

Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM KAISLING, OF CHICAGO, ILLINOIS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO KELLOGG SWITCHBOARD & SUPPLY COMPANY, A CORPORATION OF ILLINOIS.

TELEPHONE SET.

958,925. Specification of Letters Patent. Patented May 24, 1910.

Application filed August 1, 1908. Serial No. 446,452.

To all whom it may concern:

Be it known that I, WILLIAM KAISLING, a citizen of the United States, residing in Chicago, county of Cook, and State of Illinois, have invented new and useful Improvements in Telephone Sets, of which the following is a specification.

An object of the present invention is to provide an improved arrangement in the mounting of the mechanism of a subscriber's telephone set, and one feature is found in the manner in which an impulse-controlling device, such as is used in automatic telephone systems, is mounted with relation to the remaining mechanism.

Another object of the invention is to provide improved means whereby the impulse-controlling device and the different parts may be connected without the use of the customary hinged connections.

Referring to the drawings, wherein like parts have like reference characters, Figure 1 is a front elevation of a wall-set arranged in accordance with the invention; Fig. 2 is a sectional view on line A—A of Fig. 1; Fig. 3 shows the detail of a preferred flange connection between the shelf and the inclosing case; and Fig. 4 shows a portion of the front wall of the case, including a slot provided for purposes hereinafter specified.

The instrument includes a backboard or plate 5, upon which the transmitter 1 is adjustably mounted as usual. To the backboard 5, an angular piece 6 is rigidly fastened to form a well or box for the condenser 4. Hinged at 7 to the piece 6, is the base 9 of the containing-box, to which is attached the front 10 of the box, the side walls 8—8 being fastened to base 9 and front 10. The top of the containing-box is formed of the plate 11 which is provided with angular flange members 21 adapted to slide in the slots 20 provided in the opposed side walls 8—8. The top 11 has an upturned piece 22, pierced to receive the screw 23, and toward the distant side, the spring member 26, arranged to coöperate with the front 10 as a holding device, as later explained.

In mounting the apparatus, the backboard and condenser-well having been assembled, the containing-box without the top may be hinged to the well and allowed to drop forward upon the hinges. The top 11, which in addition to the parts already mentioned has fastened to it a calling device including a dial 12 (which may be of the ordinary Strowger type, provided with an actuating shaft extending to the case 13 containing the usual impulse-controlling mechanism) is then placed so that its sides rest upon the front 10 and the side walls 8, the flange members 21 being in alinement with the slots 20 in side walls 8—8. The top plate 11 is then drawn forward or to the left as viewed in Fig. 2, the flange members 21 sliding into the slots 20; and when the flanges 21 engage the front 10, the spring member 26 will have passed through the slot 25 in the front 10 and will snap down to the position shown in Fig. 2 to hold the top in adjusted position when the now complete containing-box is turned upward on the hinges and the screw 23 is inserted through the piece 22 and backboard 5 and screwed into the fixed nut shown. In case of trouble in the calling device mechanism, it is only necessary for the repair man to unscrew 23, lower the box about the hinges, press up spring 26 so that it lies along the top 11, and slide the top plate back until the flanges 21 disengage the slots 20 when the top plate and calling device may be lifted free and replaced by a new top plate with its properly adjusted mechanism.

The present invention is not concerned with any specific circuit arrangement to be employed, as obviously any of the well-known local battery or common battery circuits may be used.

At 24, I have indicated terminals to which the line and ground wires may be led. To provide for such connections as may be necessary from the apparatus fixed in position with respect to the backboard, I provide a set of stationary spring members 18, which will be of any required number and are insulatingly mounted upon the piece 6. To these, will be connected the conductors required to be led from the backboard to the mechanism mounted upon the hinged box and the top plate. The forked jack springs 19, insulatingly mounted upon the base 9, have their respective middle tines bent slightly out of alinement with their outer tines. When the box is turned down on its hinges, the jack springs 19 will be withdrawn from engagement with their respective springs 18, and when the box is again returned to its adjusted operative position, the jack springs 19 will slide into engage-

ment with the respective springs 18, each spring 18 being firmly held between the middle and outer tines of the appropriate jack spring 19. Further, spring members 16 are insulatingly mounted upon the front plate 10 for engagement with the forked jack springs 17, supported by the top plate 11, so that when one top plate with its calling mechanism is removed and another substituted, each jack spring 17, supported by the new top plate, will engage its proper terminal 16 and necessary connections will be established by the act of sliding a new top plate into position.

Connections required to be extended from the terminals 24 to the mechanism supported by the top plate 11, will of course be led through contacts 18—19, thence by soldered connections to the terminals 16, and so through the jack springs 17 to the calling device and the customary ringing key spring 15, for operating which the button 14 is inserted through plate 11.

Obviously the invention is not limited to the precise arrangement of the apparatus or to the precise locations, as illustrated, of the signaling and switching elements. Also various modifications may be made in the precise arrangement of the parts, by which the calling device supporting member is connected with the other apparatus. For example, the holding member 26 may be actuated by gravity to assume its holding position, and various modifications of the slide structure may be made. The claims are therefore not to be limited to the precise arrangement shown, but

What I claim is:—

1. A telephone set including a back plate, a hinged containing box supported thereby, an impulse controlling device, a slidably removable cover for said box supporting said device and a catch for locking said cover in adjusted position.

2. A telephone set including a containing box, jack members mounted within said box, a slidably adjustable cover for said box, impulse controlling mechanism fastened to said cover and coöperating jack members connected with said mechanism adapted to register with said first mentioned members when the cover is placed in adjusted position.

3. A telephone set including a containing box having integrally formed guides, a calling device, a cover for said box having flange members to slide within said guides, said cover supporting said device, a catch member supported by said cover, a wall for said box affording passage way for said member, whereby said member passes through said way as the cover reaches adjusted position to assume its holding relation.

4. A telephone set including a containing box having separable walls, an impulse controlling device, a slidable removable cover for said box supporting said device, and spring jacks on one of said walls and on said cover registering when said box is closed.

5. A telephone set including a relatively stationary back plate, stationary jack members supported by said plate, a relatively movable containing box hinged and supported by said back plate, jack members fastened to said box to register with said first mentioned jack members when said box is in adjusted position, an impulse controlling device, a slidable removable cover for said box supporting said device, and jack members on one of said walls and on said cover registering when said box is closed.

6. A telephone set including a containing box having a back wall and guides, a cover for said box slidable in said guides to a closing position, a calling device supported by said cover, and holding means for removably securing said cover to the back wall of said box.

In witness whereof, I hereunto subscribe my name this 28th day of July, 1908.

WILLIAM KAISLING.

Witnesses:

G. E. MUELLER,

J. G. KELLOGG.