

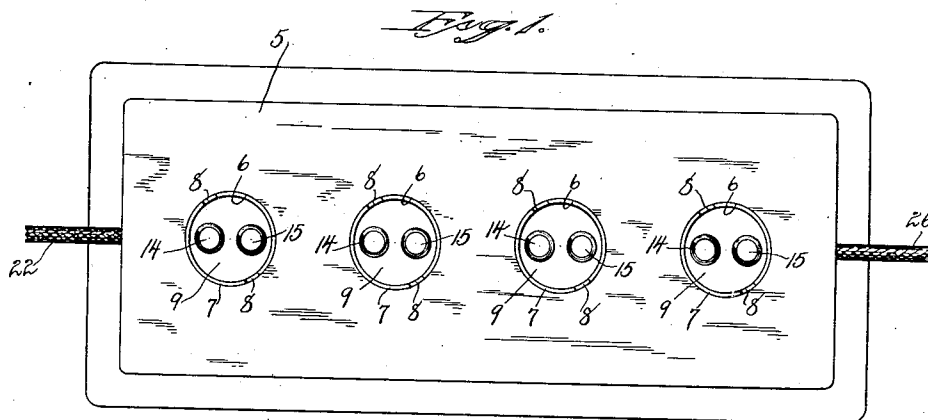
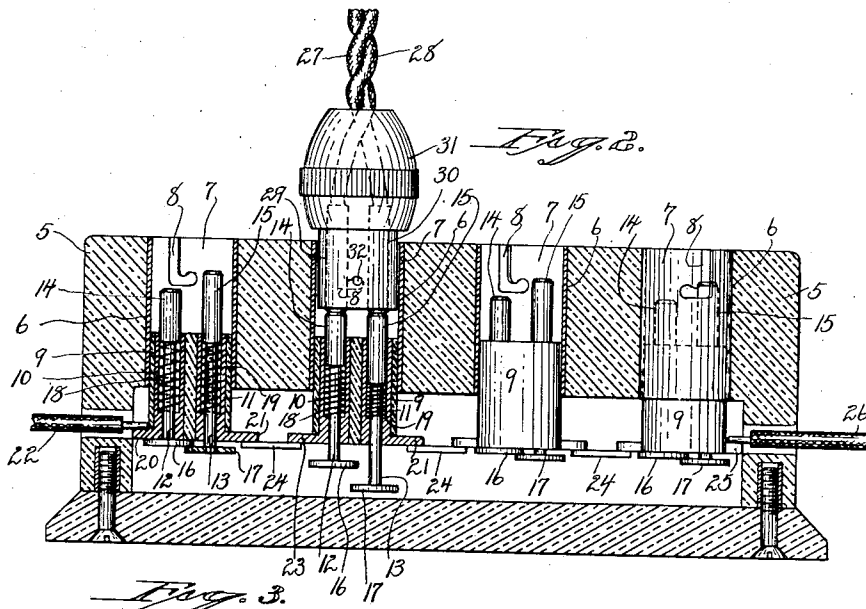
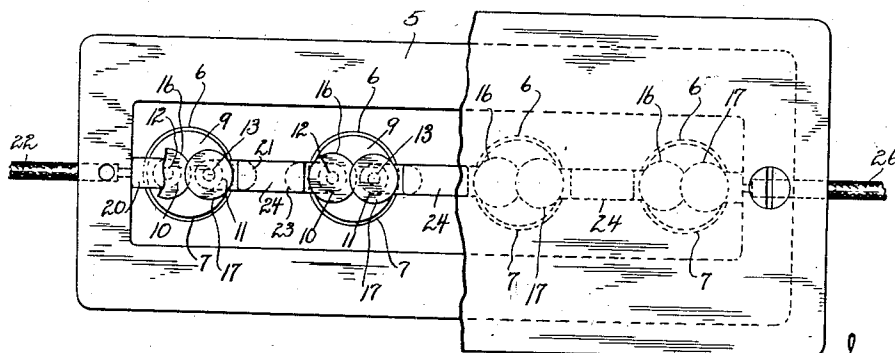
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C. H. KIMMEL

AUTOMATIC PHONE JACK FOR RADIO SETS

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UNITED STATES PATENT OFFICE.

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AUTOMATIC PHONE JACK FOR RADIO SETS.

Application filed February 21, 1923. Serial No. 620,366.

To all whom it may concern:

Be it known that I, CLARENCE H. KIMMEL, a citizen of the United States, residing at Meriden, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Automatic Phone Jacks for Radio Sets; and I do hereby declare the following, when taken in connection with the accompanying drawings and the characters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this application, and represent, in—

Fig. 1, a top or plan view of an automatic phone jack for radio sets constructed in accordance with my invention.

Fig. 2, an irregular, transverse, vertical section, showing one head-set block in position.

Fig. 3, a broken, underside view of the device.

This invention relates to improvement in automatic phone jacks, or switch blocks, particularly adapted for radio receiving stations; the object being to provide a block with which a number of head-sets may be independently connected, the connection of one set not interfering in any way with the connection of the others, and the invention consists in the construction as hereinafter described and particularly recited in the claims.

In carrying out my invention, I employ a block 5 formed with a series of chambers 6, each provided with a lining 7 formed with bayonet slots 8. Located in each of the chambers 6 and within the lining 7 are blocks 9 of insulating material, and in these blocks are metal bushings 10 and 11, through which pins 12 and 13 extend, the contact-heads 14 and 15 being of unequal length, and projecting upward into the chamber 6. On the end of the pin 12 is a disk 16, and on the end of the pin 13 is a disk 17, and around the pins are springs 18 and 19, which tend to force the pins upward and the disks 16 and 17 into contact with each other. The bushing 10 has an outwardly-projecting lip 20, and the bushing 11 a corresponding lip 21. The lip 20 is adapted to have one wire 22 of the circuit connected with it, and the lip 21 is electrically connected with the lip 23 of the next block by a link 24. Each of the succeeding elements are the same, the last one having its lip 25 connected

with a circuit wire 26. To connect one or more head-sets with the jack, the head-set wires 27 and 28 are connected with pins 29 and 30 in a plug 31, which is adapted to enter the lining 7, the plug being provided with a transverse pin 32, the ends of which enter and engage with the bayonet slots 8, whereby the plugs are locked in position, so that the pins 29 and 30 will come in line with the heads 14 and 15, so as to depress them, and move the disks 16 and 17 out of engagement with each other. Before the head-sets are engaged, the circuit passes from the wire 22 to the bushing 10, thence to the pin 12, through the disk 16 to the disk 17, through the pin 13 to the bushing 11, through the lip 21 and link 24 to the lip 23 of the next unit, and so on through the jack to the wire 26. If a single head-set is connected, as shown in Figure 2 of the drawings, the entrance of the plug separates the disks 16 and 17, so that the circuit entering the bushing 10 passes through the pin 12 to the contact 29 through the wire 27 to the receiver not shown, back through the wire 28 to the contact 30, pin 13, bushing 11, and thence to the next coupling element. Thus, a head-set may be connected with either one of the several sockets, or head-sets may be connected with all of the sockets and hence be connected in series, so that one will not interfere with the other, the entrance of the plug automatically breaking the circuit directly through the device, but completing it through the head-set.

I thus provide, in a very simple manner, a jack adapted to permit the connection of a plurality of head-sets.

I claim:

1. An automatic phone jack for radio sets, comprising a block, a series of chambers therein, a block in each chamber, two metal bushings in each block, spring pins mounted in said bushings, and provided at their lower ends with disks normally in engagement with each other, the end bushings connected with circuit-wires, and the intermediate bushings electrically connected together, and a plug provided with two contacts adapted to engage with and depress the ends of said pins.

2. An automatic phone jack for radio sets, comprising a block formed with a series of recesses, metal linings in said recesses, formed at their upper ends with bayonet slots, blocks mounted in said linings, two

bushings in each block, spring pins mounted in said bushings and provided at their upper ends with contact heads of different lengths, and at their lower ends with contact disks, the outer bushings connected with circuit wires and the intermediate bushings electrically connected together, combined with a plug adapted to be entered into and locked with the said lining and provided with contacts adapted to engage with and

depress said pins, whereby the disks are separated.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

CLARENCE H. KIMMEL.

Witnesses:

WILBUR W. FINNEGORDEN,
ANNE M. CLARK.