May 22, 1951 H. SZABO 2,554,223

KEY OPERATED SWITCH

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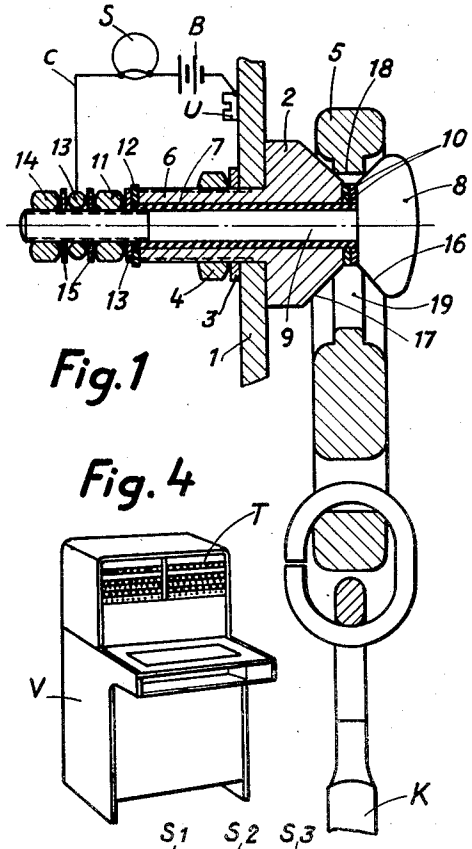


Fig. 1

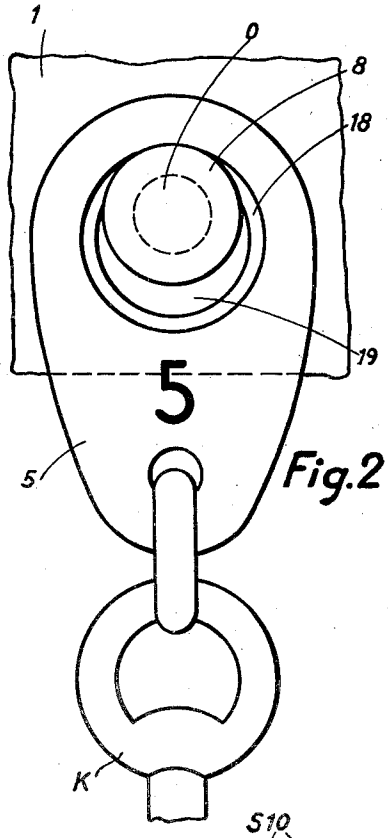


Fig. 2

Fig. 4

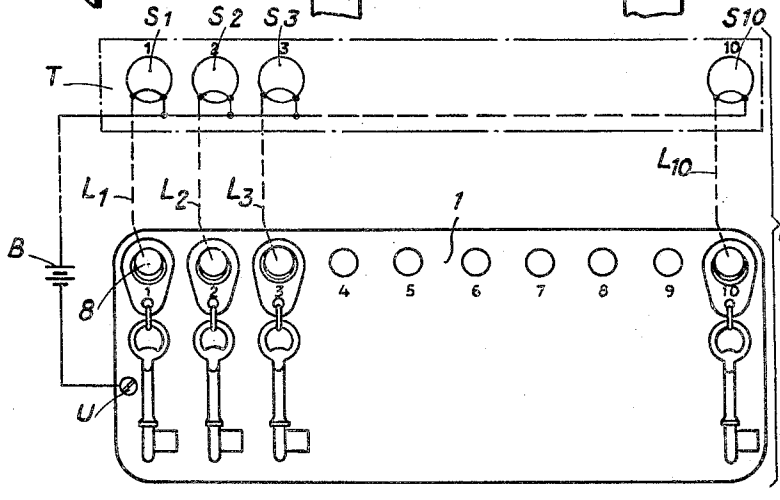


Fig. 3

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KEY OPERATED SWITCH

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2 Claims. (Cl. 200—52)

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The invention refers to improvements in indicators and proposes an indicator arrangement adapted to the needs of hotels or other establishments, wherein information as to the several guests of the hotel may be needed at the telephone operator's place. The telephone operator at a hotel has the duty to connect incoming calls to several guests. Before connecting a call to an inquired guest, however, the operator must make a separate call to e. g. the porter of the hotel to get information about whether the inquired guest has left the hotel or not, this being a tedious work. It is now an object of the present invention to facilitate the work of the operator. In hotels a field or table is usually provided, preferably located in the porter's room, said table being provided with a couple of supporting members for the keys to the guest-rooms, each supporting member carrying a number. When a guest leaves the hotel he hangs his key on one of said supporting members carrying the same number as his room. According to the present invention each of said supporting members is now provided with two electrical contact members forming an electrical contact, each of which being included in a circuit, containing also a source of current and a signalling device. Each of said signalling devices carries the same number as the corresponding number of the supporting member for the room-key. All the signalling devices are assembled in a panel or the like located at the telephone operator's place. Consequently the operator, before connecting a call to a guest, is able to see which of the guests has left the hotel.

The invention will be more closely described with reference to the accompanying drawing showing an embodiment thereof. Fig. 1 is a cross-section of a supporting member for a key, said member being fixed in a plate, the electrical connection being shown in a circuit diagram. Fig. 2 is a front view of the device and Fig. 3 is a schematic view showing a key-supporting panel and a lamp-panel located at the telephone-operator's place. Fig. 4 is a perspective view of the operator's switchboard.

The supporting members for the keys are fixed in a metallic plate 1. Each supporting member consists of a bushing 2 and a knob 8, said bushing having a sleeve-formed threaded part 6 being inserted in an opening O in the plate 1 and fixed to said plate by means of a nut 4 threaded on part 6, a washer 3 being placed between the nut 3 and the plate 1. The bushing 2 and the knob 8 constitute two contact members adapted

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to be bridged by the metallic key-plate 5 when the key is hung up. The knob 8 forms one end of a metallic pin 9 being threaded in its other end. The pin 9 is insulated from bushing 2 by means of an insulating sleeve 7 and two washers 10. Pin 9 with knob 8 is secured in position by means of a nut 11 threaded on the threaded part of pin 9, an insulating ring 12 being placed between a washer 13 and part 6. The surfaces 16 and 17, being directed against each other, are conically shaped so as to form an annular V-shaped groove for accommodating the inner edge 18 of the opening 19 in the key-plate 5, edge 18 thereby making electrical contact between said both surfaces 16 and 17. The two contact members 2 and 8 are contained in a circuit C containing a source of current B and a signalling lamp S, one end of circuit C being connected to a terminal U secured to the plate 1 and the other end of circuit C being connected to a metallic ring 13, which latter by means of nut 14 and two washers 15 is brought into contact with pin 9 and knob 8.

When the key K hangs on members 2 and 8, circuit C is closed and lamp S burns and when the key is lifted off, the lamp expires. As disclosed in Fig. 3 a number of supporting members 2, 8 for the keys are provided in the plate 1, wires (S_1 . . . S_{10}) from each of the knobs 8 being connected to a corresponding number of lamps L_1—L_{10}, said lamps being provided in an indicator-panel T which is located at the place of the telephone operator of the hotel. When a guest leaves the hotel he hangs the key to his room on a knob 8 having the same number as that of his room. Due to this, a corresponding lamp S_1 carrying the same number in the operator's indicating panel T is lighted, the telephone operator thus being able, in every moment, to see which of the guests has left the hotel. Before connecting an incoming call to a certain guest at the hotel, the telephone operator, who knows which room every guest disposes, looks at the indicating panel T and sees if the called guest has left the hotel or not. If the lamp corresponding to the called guest is lighted, the operator may connect the incoming call to the guest, but otherwise the operator may inform the calling party that the guest has left the hotel. As disclosed in Fig. 4 the panel T may form a part of the normal switchboard V for the telephone-operator of the hotel.

I claim:

1. A key-supporting member, serving as an electric circuit closer and comprising a pin means

including two axially displaced portions electrically insulated from each other, the facing surfaces of said portions being inclined so as to form a V-shaped groove for accommodating a key, both of said portions constituting electrical contacts and adapted to be bridged by said key when hung upon said pin.

2. A key-supporting member according to claim 1, wherein said surfaces are conically shaped so as to form an annular V-shaped groove for accommodating a key.

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