

April 6, 1954

A. A. LAMBERT
SIGNALING SYSTEM SWITCH

2,674,675

Filed June 14, 1951

2 Sheets-Sheet 1

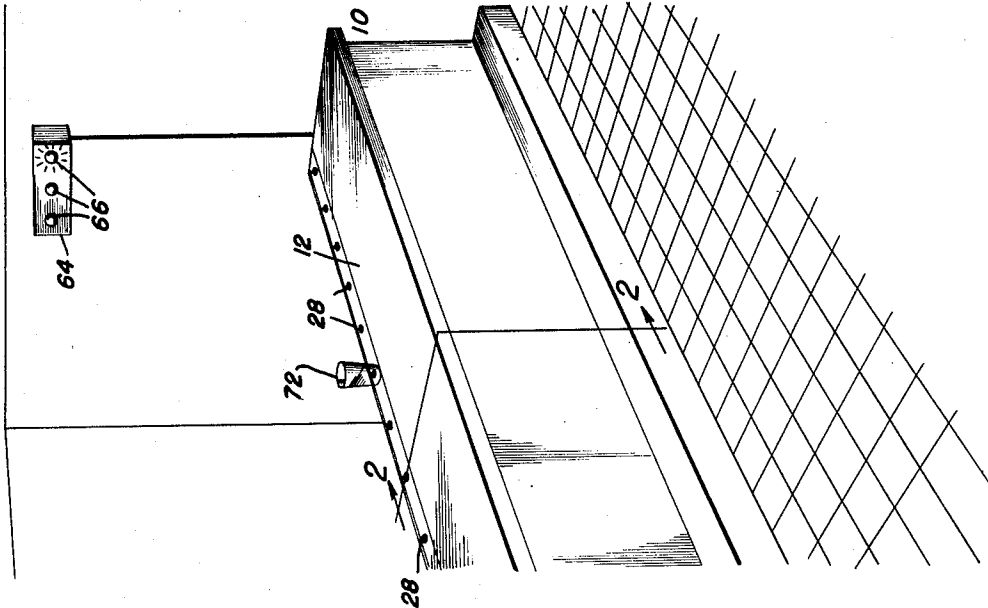


Fig. 1

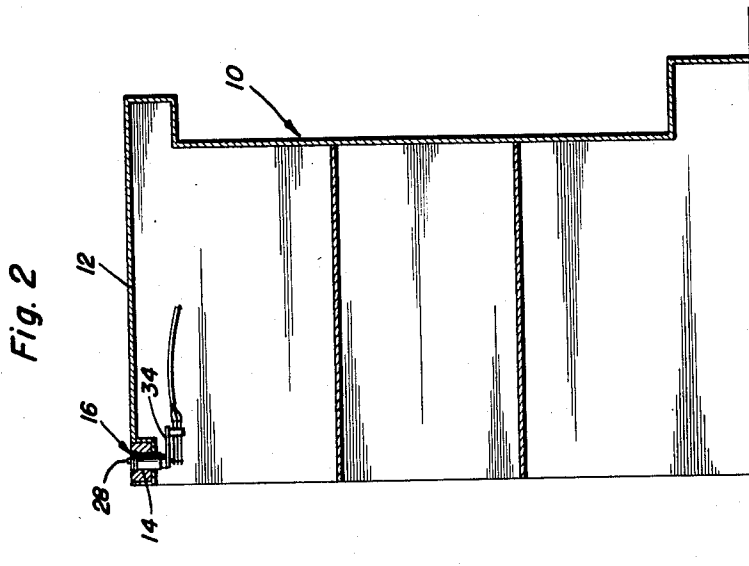


Fig. 2

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Fig. 3

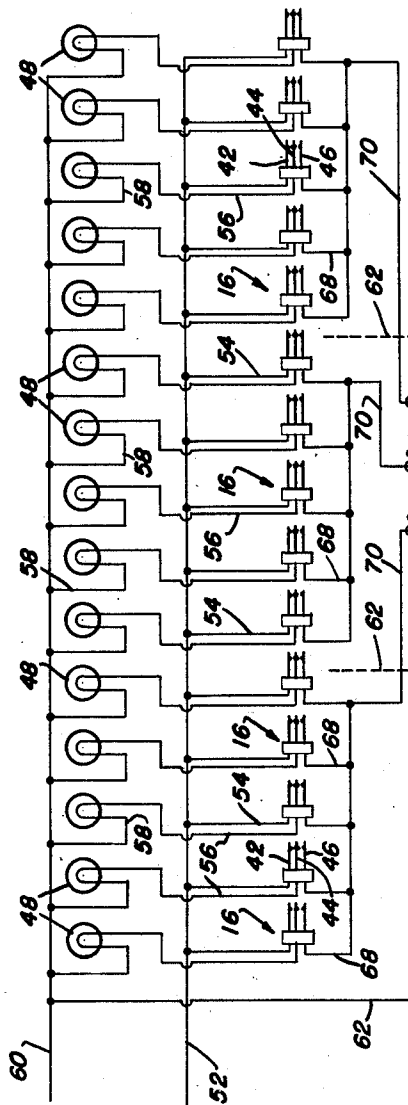


Fig. 4

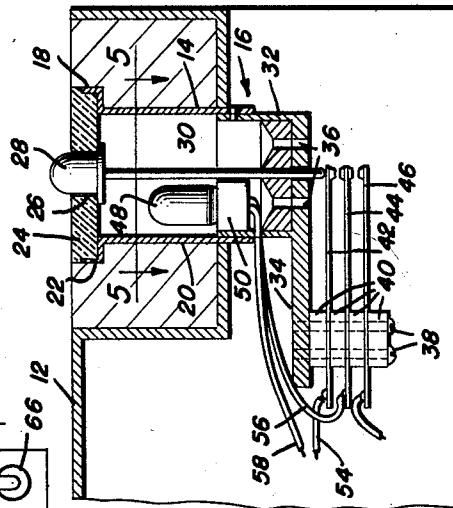
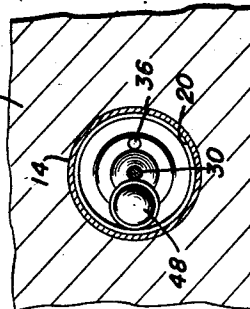


Fig. 5



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SIGNALING SYSTEM SWITCH

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Application June 14, 1951, Serial No. 231,463

1 Claim. (Cl. 200-167)

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This invention relates to new and useful improvements and structural refinements in signaling systems, more particularly, signalling apparatus such as may be conveniently and effectively employed at bars, counters, or the like, and the principal object of the invention is to facilitate the attracting of an attendant when any one of several persons at the bar or counter desires to be served.

An important feature of the invention resides in the provision of a plurality of actuating switches, one for each patron, which switches are conveniently mounted within the bar or counter itself and are adapted to be actuated or closed by the placing of a glass, saucer, etc. thereon, the switches being provided with individual pilot lamps which become energized as soon as the switch is depressed, while a set of signal lamps on the master indicator panel are individually connected to respective groups into which the several switches are separated. In this manner, the actuation of any one switch in any one particular group energizes the signal lamp for that group to initially attract the attendant, while at the same time the particular pilot lamp of the actuated switch indicates to the attendant the exact location of the patron who is to be served.

Some of the advantages of the invention reside in its simplicity of construction, in its efficient and expeditious operation, and in its adaptability to economical manufacture and installation.

With the above more important objects and features in view, and such other objects and features as may become apparent as this specification proceeds, the invention consists essentially of the arrangement and construction of parts as illustrated in the accompanying drawings, in which:

Figure 1 is a fragmentary perspective view of a bar or counter, showing the invention associated therewith;

Figure 2 is a vertical sectional view taken substantially in the plane of the line 2-2 in Figure 1;

Figure 3 is a wiring diagram of the components of the invention;

Figure 4 is a fragmentary sectional view of the individual switch and pilot lamp unit; and

Figure 5 is a fragmentary sectional detail, taken substantially in the plane of the line 5-5 in Figure 4.

Like characters of reference are employed to designate like parts in the specification and throughout the several views.

Referring now to the accompanying drawings

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in detail, the general reference character 10 designates a counter or bar having a top 12 provided with a row of vertical bores or recesses 14 to accommodate a plurality of switches designated generally by the reference character 16.

The recesses 14 are counterbored at the upper end thereof as at 18 (see Figure 4) and each switch includes a cylindrical housing 20, provided at its upper end with a diametrically enlarged portion 22 which is seated in the counter-bore 18. The latter also accommodates a transparent or translucent disc 24 formed with a central aperture 26, so as to accommodate a depressible switch actuating button 28. The disc 24 is substantially flush with the upper surface of the counter top 12 while the button 28 projects above the counter top, so that it may be readily depressed when a glass or cup and saucer is positioned thereon.

The button 28 is mounted at the upper end of a stem 30 which extends slidably and downwardly through a lower portion or member 32 of the switch housing 20, as is clearly shown in Figure 4. A laterally projecting support arm or bracket 34 is secured by fastener elements 36 to the switch housing member 32 and carries, by means of insulated studs and blocks 38, 40 respectively, a set of three contacts, namely an upper contact 42, an intermediate contact 44 and a lower contact 46. These contacts are preferably of a resilient construction so that they are normally spaced apart as shown in Figure 4, but when the button 28 is fully depressed, the contacts 42, 44, 46 are brought together.

The switch housing 20 also accommodates a pilot lamp 48 mounted in a socket 50, it being noted that when the pilot lamp is energized, light rays emanate therefrom and are visible through the transparent or translucent disc 24 in the counter top 12.

Referring now to the wiring diagram illustrated in Figure 3, it will be observed that a common feed wire of conductor 52 is connected by several leads 54 to the upper contacts 42 of the several switches 16, while the intermediate contacts 44 of the several switches are connected by a plurality of conductors 56 to the sockets 50 of the respective pilot lamps 48. The sockets 50 are also connected by additional conductors 58 to a common ground or return wire 60, a branch or extension 62 of which will be hereinafter described.

The row of switches 16 is separated into a plurality of sections or groups, such for example as is indicated by the dotted lines 62 in Figure 3,

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and there is provided at a remote point from the counter 10 a master indicator panel 64 provided with a plurality of signal lamps 66. The number of these lamps corresponds to the number of groups of switches.

The lower contacts 46 of the switches in each group are connected by suitable leads 68 to common conductors 70 leading to the respective indicator lamps 66 which are grounded to the common return wire 62 extending from the wire 60. The indicator panel 64 is preferably mounted upon a wall, or the like, so that it may be readily observed from a considerable distance.

When the invention is placed in use and a patron places a glass 12, for example, upon the actuating button 28 of one of the switches 16, the contacts 42, 44, 46 of that particular switch are immediately brought together and the pilot lamp 48 is energized, thus primarily indicating to the patron that the signalling system is in operation. Moreover, the signalling lamp (66) connected to the particular group of switches wherein the actuated switch is located will become energized as shown in Figure 1, thus calling the attendant behind the bar or counter by a visual signal, indicative of the particular section of the bar where his services are desired. Moreover, after the attendant has observed the particular section of the bar, he can readily notice the energized pilot lamp of the depressed switch, thus unmistakably designating the exact location of the patron who wishes to be served.

Needless to say, an audible signalling device such as a bell, may be connected to the master panel 64 and used in addition to the signalling lamps 66, if so desired.

It is believed that the advantages and use of the invention will be clearly understood from the foregoing disclosure and accordingly, further description thereof at this point is deemed unnecessary.

While in the foregoing there has been shown and described the preferred embodiment of this invention, it is to be understood that minor changes in the details of construction, combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as claimed.

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Having described the invention, what is claimed as new is:

A signal switch structure comprising a horizontal support member having a flat upper surface and provided with an open ended vertical bore and with a counterbore at the upper end of said bore, a tubular housing positioned in said bore and projecting downwardly therefrom, an outturned rim provided at the upper end of said housing and seated in said counterbore, a translucent disc mounted in said rim flush with the upper surface of said support member and provided with a central opening, a tubular adapter secured in and depending from the downwardly projecting portion of said housing, said adapter having a bottom plate provided with a passage coaxial with said opening, an electric switch secured to said bottom plate, a vertically slidable actuating rod extending through said passage into said housing and having its lower end in operative engagement with the switch for closing the latter when the rod is slid downwardly, said switch including resilient means for sliding the rod upwardly, a knob provided at the upper end of said rod and slidable in said opening to a projected position above the upper surface of said support member, an annular shoulder provided at the lower end of said knob and engageable with the lower surface of said disc to limit upward movement of the knob, and means for supporting an electric lamp said last recited means being mounted in said housing and electrically connected to said switch.

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