

Sept. 21, 1937.

F. A. KUNTZ

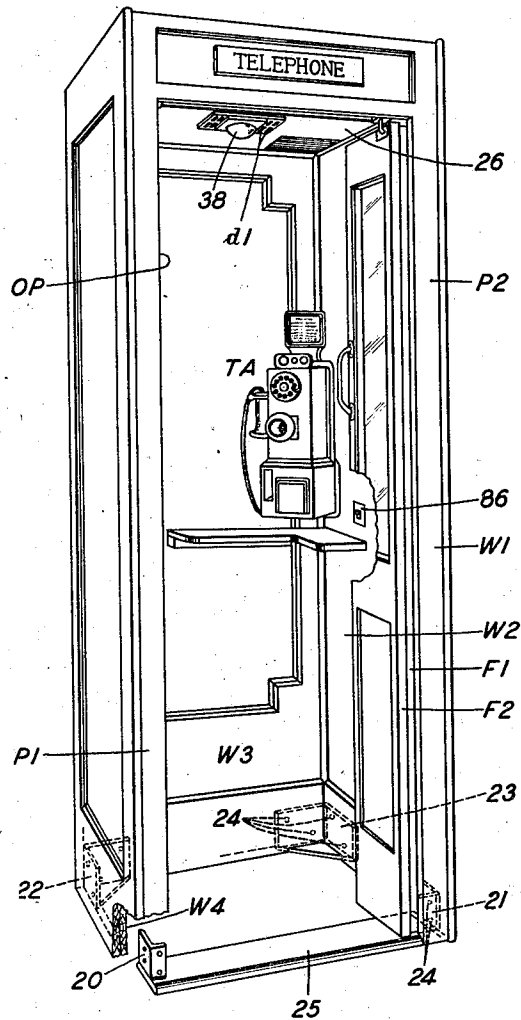
2,093,679

TELEPHONE BOOTH

Filed Nov. 10, 1934

4 Sheets-Sheet 1

FIG. 1



INVENTOR
F. A. KUNTZ
BY *J. MacDonald*
ATTORNEY

Sept. 21, 1937.

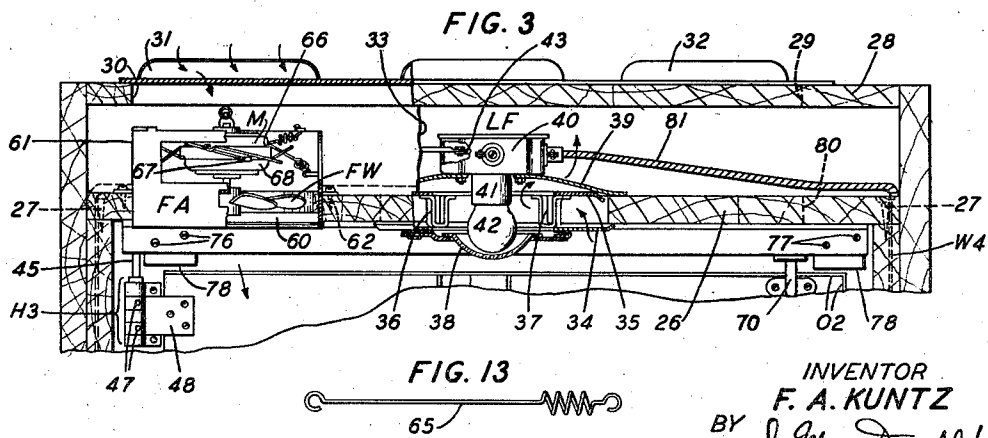
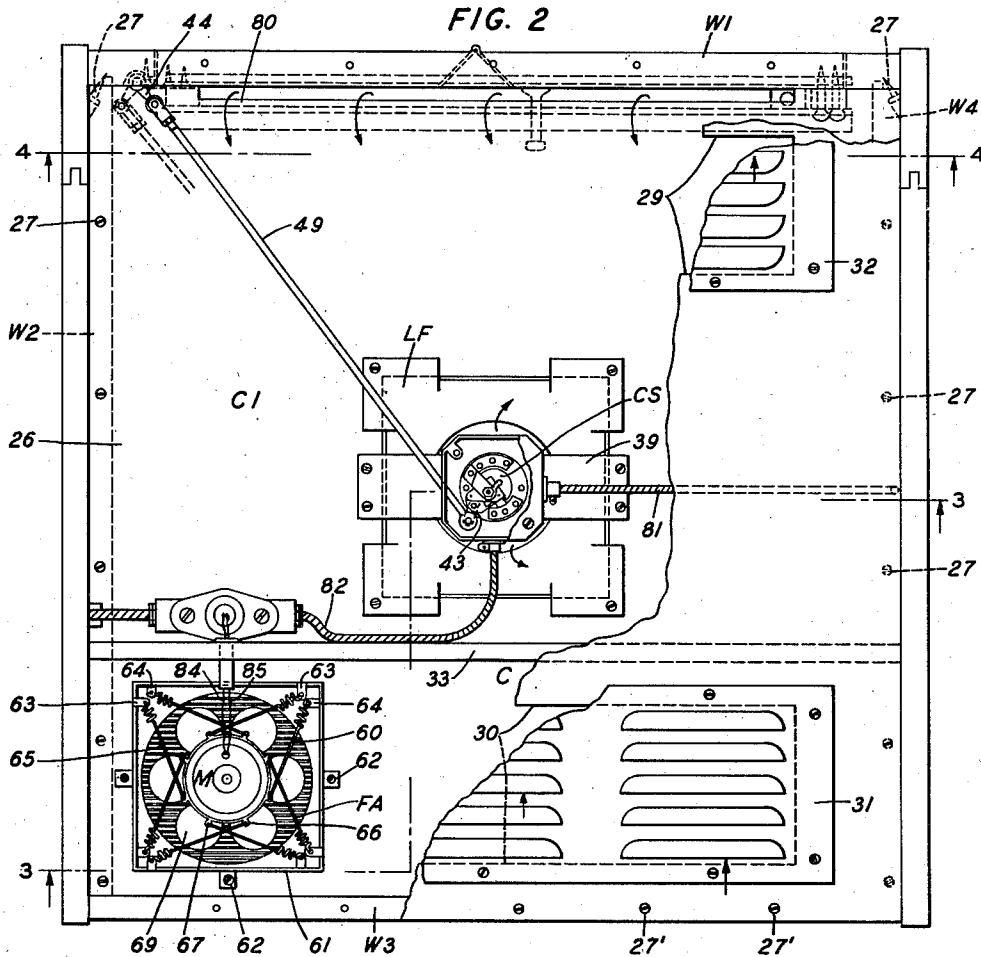
F. A. KUNTZ

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INVENTOR
F. A. KUNTZ
BY *J. Mac Donald*
ATTORNEY

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F. A. KUNTZ

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FIG. 4

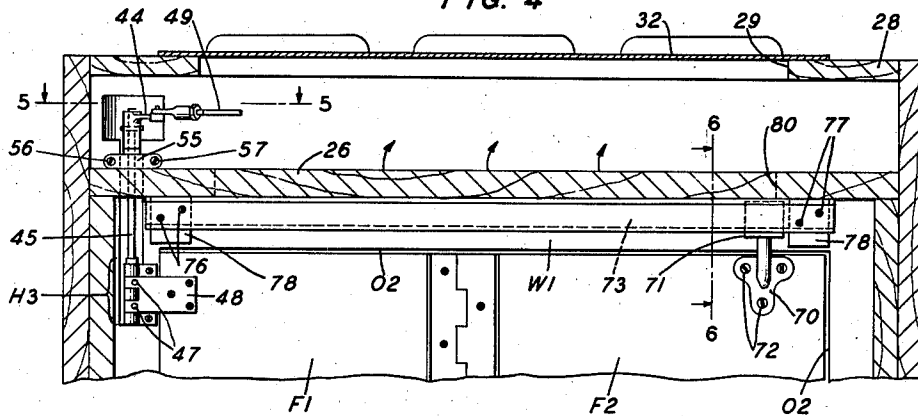


FIG. 5

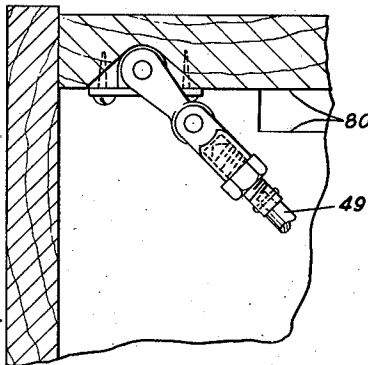


FIG. 6

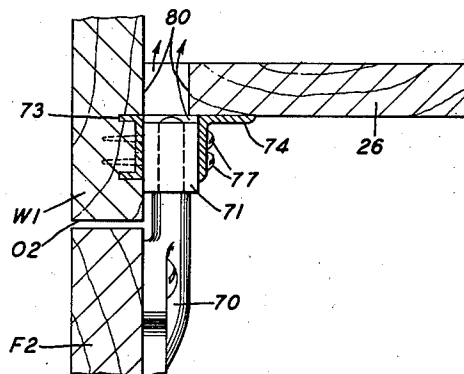
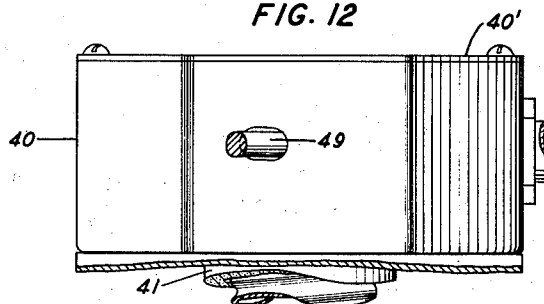


FIG. 12



INVENTOR
F. A. KUNTZ
BY *J. Mac Donald*
ATTORNEY

Sept. 21, 1937.

F. A. KUNTZ

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FIG. 8

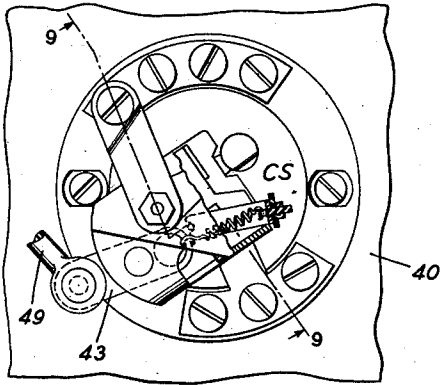


FIG. 9

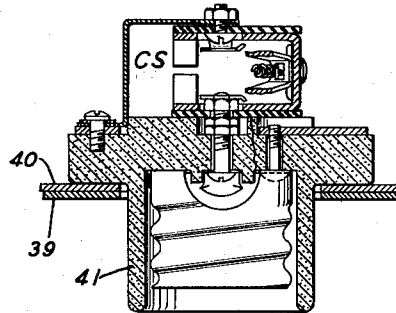


FIG. 10

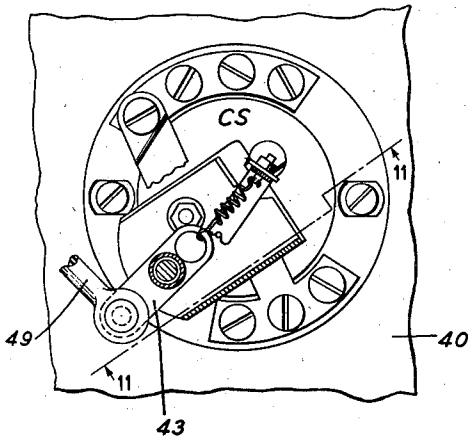


FIG. 11

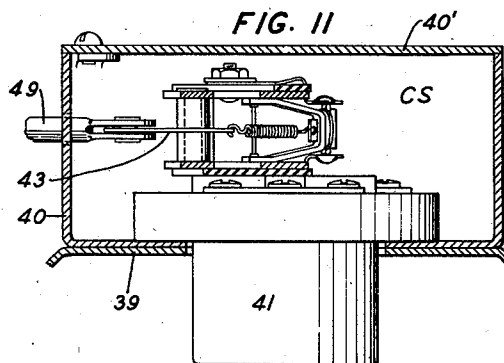
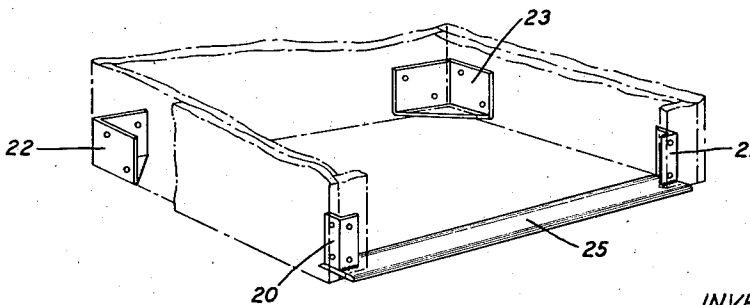


FIG. 7



INVENTOR
F. A. KUNTZ
BY *J. Mac Donald*
ATTORNEY

UNITED STATES PATENT OFFICE

2,093,679

TELEPHONE BOOTH

Frank A. Kuntz, Woodhaven, N. Y., assignor to
Bell Telephone Laboratories, Incorporated,
New York, N. Y., a corporation of New York

Application November 10, 1934, Serial No. 752,439

4 Claims. (Cl. 20—3.5)

This invention relates to telephone booths and its object is to simplify and improve the construction of such booths.

A feature of the invention is the provision of a plurality of independent securing means whereby the walls of the booth are held in assembled relation at their lower ends without the use of a base.

Another feature is the provision of a novel guiding mechanism for the booth door which simplifies the construction of the booth while permitting a freer movement of the door.

Another feature is the provision of a lighting fixture and means whereby the use of separate housings for the switching device and the lamp socket is avoided.

Another feature is the provision of means whereby the operation of the lamp and the fan is effected simultaneously and in timed relation with respect to the movement of the booth door.

Another feature is the provision of a ventilating system whereby the ventilation of the booth is effected in an efficient manner and wherein the noise generated by the operation of the fan is reduced to a minimum level.

Other novel features of the invention and advantages will appear from the following description and by the claims appended thereto, reference being had to the accompanying drawings in which:

Fig. 1 is a front elevation view of the booth shown in perspective and with portions of one of the side walls cut away;

Fig. 2 is a top view showing the roof and louver plates with portions cut away;

Fig. 3 is a cross-sectional view of the top portion of the booth taken on line 3—3 of Fig. 2;

Fig. 4 is a cross-sectional view taken on line 4—4 of Fig. 2;

Fig. 5 is a sectional view of the booth taken on line 5—5 of Fig. 4;

Fig. 6 is a sectional view taken on line 6—6 of Fig. 4;

Fig. 7 is a perspective view of the corner members showing their relation with respect to the walls of the booth;

Fig. 8 is a top view of the combined switch and lamp unit showing the casing and a number of operating parts of the switch cut away, the switch being shown in its unoperated position;

Fig. 9 is a cross-sectional view of the lamp socket and the switch taken on line 9—9 of Fig. 8;

Fig. 10 is a top view of the combined lamp socket and switch unit showing the casing with portions cut away and the switch in its operated position;

Fig. 11 is a cross-sectional view of the switch and lamp unit taken on line 11—11 of Fig. 10;

Fig. 12 is a side view of the switch and lamp

unit showing the connecting rod and lamp socket with portions cut away; and

Fig. 13 is an enlarged view of a spring used for mounting the fan on its supporting frame.

As shown in the drawings the telephone booth of this invention consists of walls W1, W2, W3 and W4 which are held in angular relation at their lower front end by two angle-shaped metallic members 20 and 21 and at their lower rear end by triangularly shaped metallic members 22 and 23 secured to the booth walls by a plurality of ordinary wood screws 24, shown in Fig. 1, members 20 and 21 being in turn welded perpendicularly or formed integrally with a cross-brace 25 which serves to maintain the portions P1 and P2 of front wall W1 in space relation at this point.

The walls W1, W2, W3 and W4 are held in angular relation at their upper ends by a ceiling 26 resting on the top ends of walls W2 and W4 as shown in Figs. 2 and 3 and is secured thereto by a number of wood screws 27. On the top ends of walls W2 and W4 above the ceiling 26 is mounted a roof 28 provided with two oppositely disposed openings 29 and 30 which are fitted with louver plates 31 and 32, the roof being held securely by a number of wood screws 27.

A vertically disposed partition 33 extends from ceiling 26 to roof 28 to form two compartments C and C1 for housing a fan assembly unit FA consisting of an ordinary motor M and a fan wheel FW and a lighting fixture LF including a controlling switch CS, shown in Figs. 2 and 3.

The front wall W1 is provided with an opening OP fitted with a door formed of two folding sections F1 and F2. The folding section F1 is pivoted to one side of wall W1 by a number of hinges, such as H3, shown in Figs. 3 and 4. The pin of the top hinge H3, however, is secured to the movable hinge flap 48 by screws 47 and rotates therewith upon the folding movement of the door. This hinge pin is formed integrally with a rod portion 45 extending above the ceiling 26 in a bearing in the form of bracket 55 for mounting a lever member 44, this bracket being secured to the front wall of the booth by screws 56 and 57.

The lighting fixture LF consists of plates 34 and 35 held to the ceiling 26 by a number of clamps, such as 36 and 37 shown in Fig. 3, and the lower disposed plate 34 is provided with a plurality of angularly disposed air openings 41 shown in Fig. 1 and its central portion is fitted with a translucent dome-shaped glass shade 38. On the top surface of ceiling 26 is securely mounted a bracket 39 fitted with a casing 40 having a cover 40' provided for housing the terminals of the lamp socket 41 and a controlling switch CS which may be of any well-known construction having an operating arm such as 43 for connection with the arm 44 at the end of rod 45, such connection being effected by a length-

wise adjustable bar 49 extending through an opening in the wall of casing 40 as shown in Figs. 2, 3, 11 and 12.

The ceiling 26 is provided at its rear right corner with a square opening fitted with a similarly shaped frame 61 held securely thereon by a number of screws 62. This frame is provided at its corner portions with inwardly extending lugs such as 63 and 64 provided for hooking similar ends of a plurality of spring members, such as 65, the other ends of these members being disposed tangentially and hooked to corresponding lugs 66 and 67 carried by the motor housing 68, on the armature shaft of which is mounted the fan wheel FW for rotation in the opening 60 of ceiling 26.

The door section F2 is provided at its upper portion with a bracket 70 held securely thereon by a number of screws 72 and on the pivot of this bracket is mounted a slider member 71 which cooperates with a guide formed by two parallelly disposed rails 73 and 74 for controlling the movement of the door from its folded position as shown in Fig. 1 to its unfolded position as shown in Figs. 2, 3, 4 and 6. The rails 74 and 73 are secured to the front wall of the booth by the sets of screws 76 and 77 engaging spacer members 78 and 79 at each end of the rails, the ceiling being provided along the rails with an open slot 80 shown in Figs. 2, 3, 4, 5 and 6 connecting the interior of the booth to the compartment C1 at the top of the booth in order to assist in the exhaust of the air from the booth as will be hereinafter described in detail.

The motor M of the fan is connected to the current supply line 81 through the controlling switch CS, the cable 82 and the wires 84 and 85, and a manually operable switch 86 shown in Fig. 1 is provided adjacent the telephone apparatus TA in the booth for independently and manually controlling the operation of the fan, the telephone apparatus being preferably positioned directly in the current of air generated by the fan.

In the use of the booth of this invention upon a predetermined movement of the booth door from its folded open position shown in Fig. 1 to its unfolded closed position shown in Figs. 2, 3 and 4 as controlled by the movement of slider 71 between the guiding rails 73 and 74 is effective to impart movement to the switch arm 43 through its connection with the bar 49 for causing the operation of the lamp 42 and simultaneously the operation of the motor fan M.

The operation of fan wheel FW is effective to generate a current of air passing through an air inlet path including the louver plate 31, the openings in the frame FA and the fan wheel opening 60 in the ceiling 26, the air current being directed in the interior of the booth toward the general location of the telephone apparatus.

The air is exhausted from the interior of the booth partly through the openings in the lighting fixture plates 34 and 35 and partly through the slot 80 in the ceiling 26 from which it is finally exhausted through the louver plate 32 separated to the greatest distance to that of louver plate 31 as to prevent any amount of exhausted air to reenter the booth through this latter path, while the incoming air is prevented from mixing with the exhaust air in the space between the ceiling 26 and the roof 28 by the partition 33.

In this booth the disposition of the air inlet

and exhaust paths at the top of the booth provides an efficient ventilating system and the use of springs 65 tangentially connected to the motor M effectively neutralizes the vibrations generated by the operation of the motor and thereby reduces the noise in the booth to a minimum level, while the lamp and switch unit together with the use of angle shaped members for securing the walls of the booth at their lower ends improves the construction of the booth and effects considerable saving in cost.

Obviously, minor changes may be made in this invention without departing from the scope of the appended claims.

What is claimed is:

1. A telephone booth having a rear wall, side walls, a front wall provided with a door of folding sections, characterized in this that one of the sections is provided with a slider member engaging guiding members disposed in parallel relation to each other and in line with a ventilating air-path formed in the ceiling and the front wall of the booth, the ceiling supporting a combined switch and lamp support unit controlled by the operation of the folding door as effected by the slider and the guiding members, the operating connection between the door and the switch and lamp unit being effected by a connecting rod.

2. A telephone booth having a rear wall, side walls, a front wall provided with a door and a ceiling secured to the walls, characterized in this that the ceiling is provided with a plurality of openings, one of them serving for mounting a combined lamp and switch unit and the other for mounting a fan, the operation of the lamp and the fan being effected by the operation of the switch which is itself actuated by a rod having one of its ends connected to the booth door and its other end to the operating arm of the switch.

3. A telephone booth having a rear wall, side walls, a front wall, a roof and a ceiling, characterized in this that a partition extends vertically from the ceiling to the roof to form two compartments, the roof having openings, one for each compartment, a louver plate for each opening in the roof, openings in the ceiling connecting the compartments to the interior of the booth, a fan mounted for movement in one of the ceiling openings, a lighting fixture in the other opening of the ceiling having a pair of apertured plates forming an air-exhaust path from the interior of the booth.

4. A telephone booth having a rear wall, side walls, a front wall, a ceiling and a roof supported by the wall, characterized in this that a partition extends from the ceiling to the roof to form separate compartments, the ceiling and the roof each having an opening, a frame mounted on the ceiling in concentric relation with the opening in the ceiling in one of the compartments, a motor having a fan-wheel disposed for movement in a plane common to the plane of the ceiling, the motor being supported by tangentially disposed spring members attached to the motor and the frame, other openings in the ceiling and the roof in the other compartment serving as an air-exhaust path for the ventilation of the booth under the action of the fan.

FRANK A. KUNTZ.