Jan. 4, 1938. F. A. KUNTZ 2,104,425

TELEPHONE BOOTH

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FIG. I

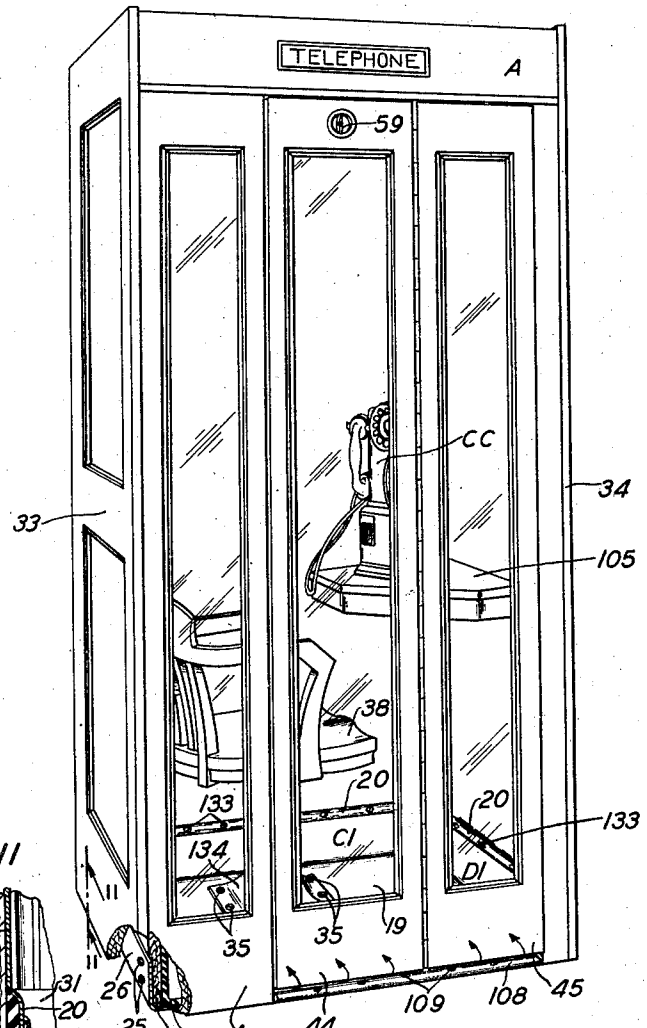
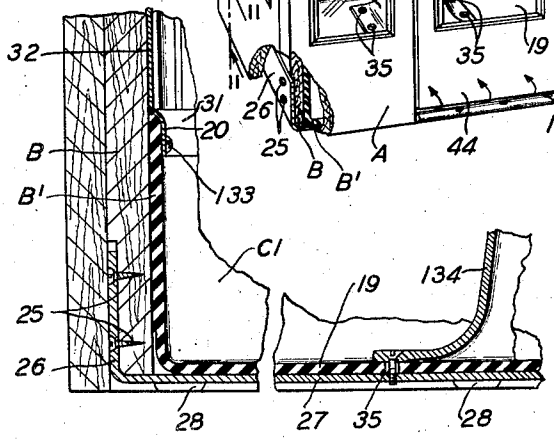


FIG. II



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TELEPHONE BOOTH

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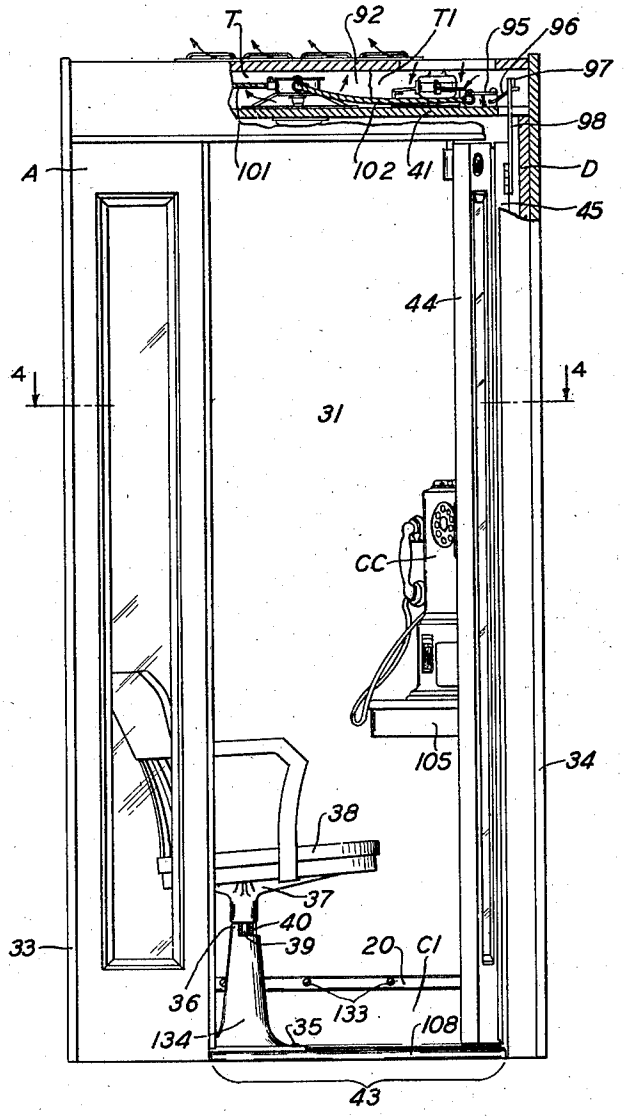
FIG. 2



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TELEPHONE BOOTH

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FIG. 3

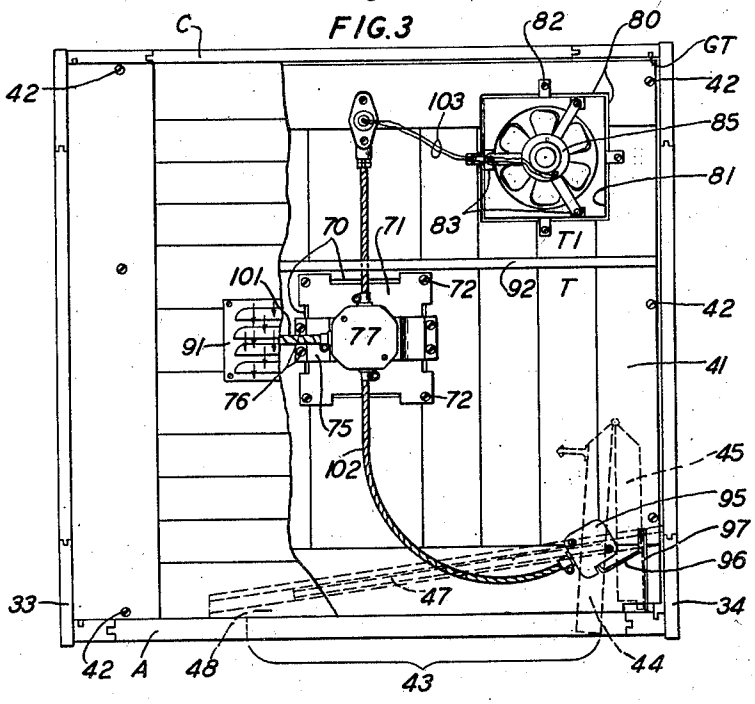
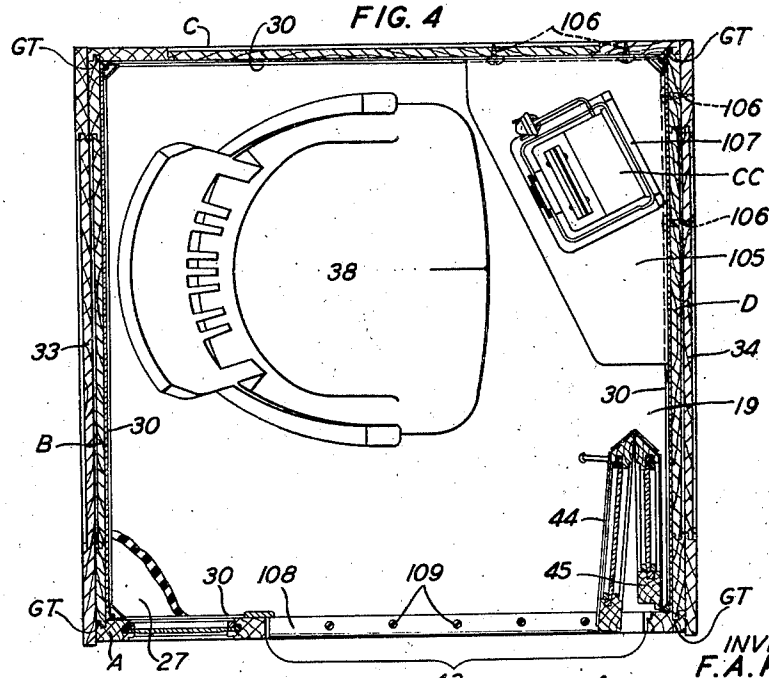


FIG. 4



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TELEPHONE BOOTH

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FIG. 5

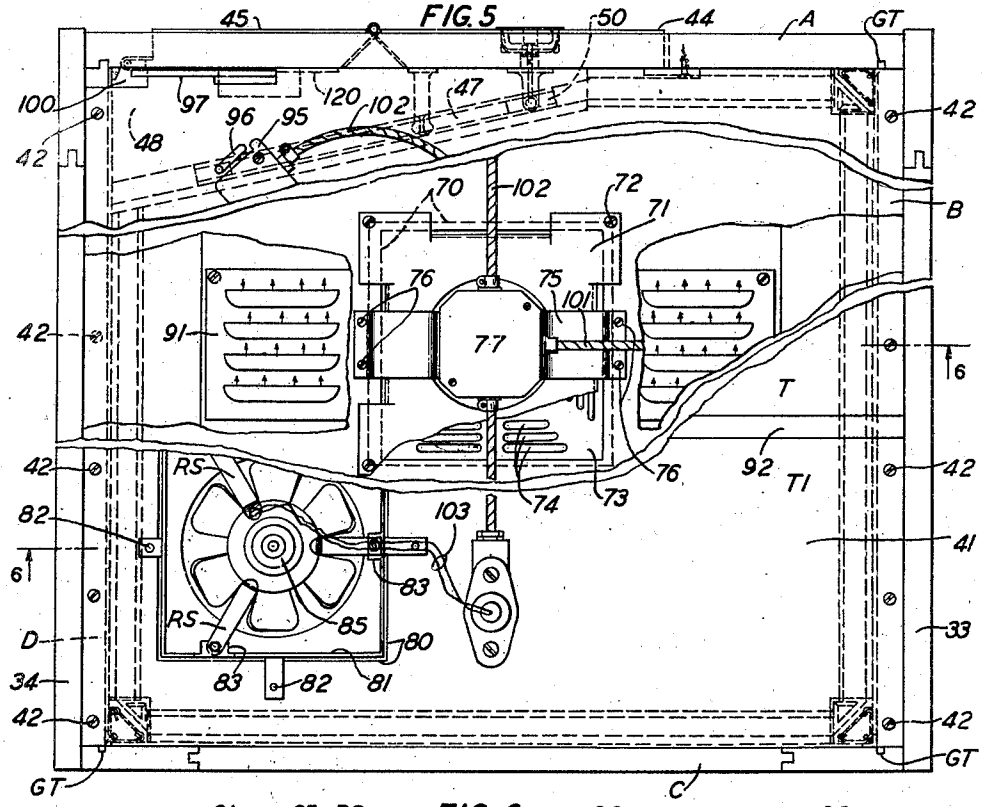

FIG. 6

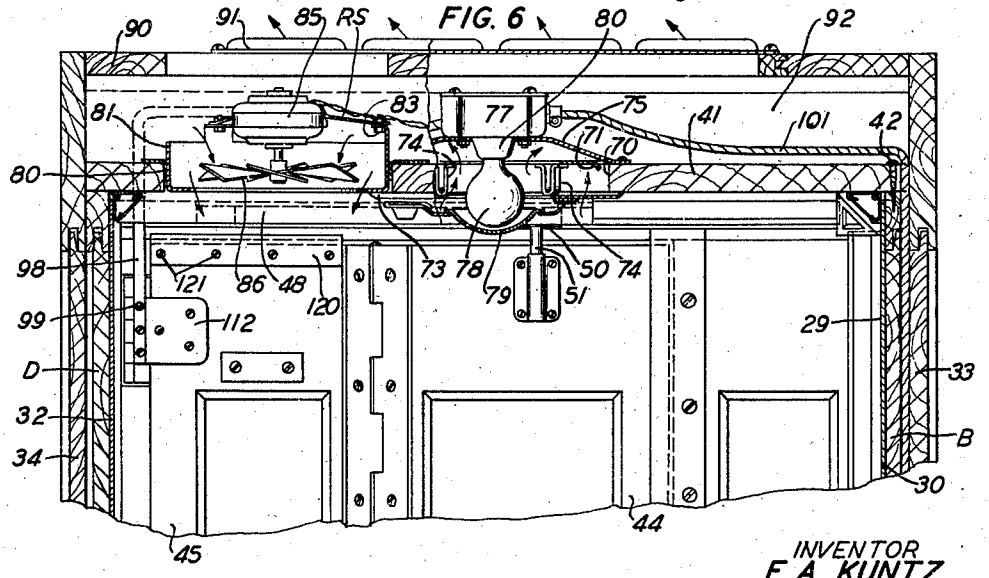

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FIG. 7

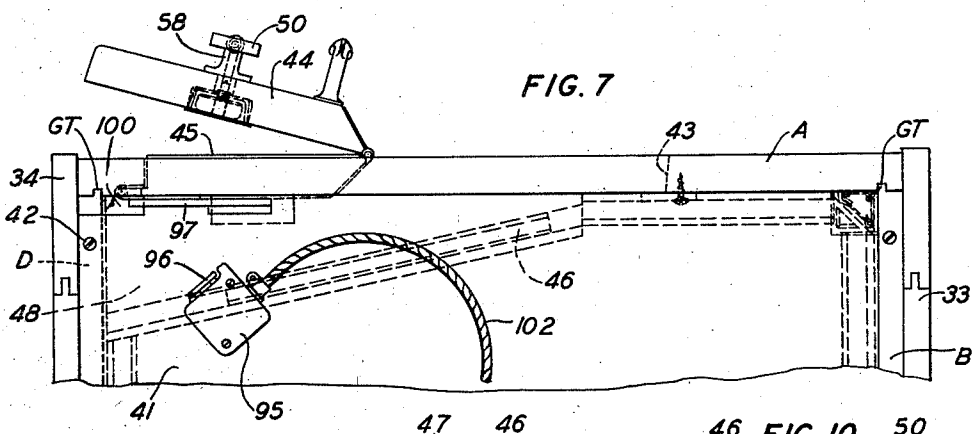


FIG. 8

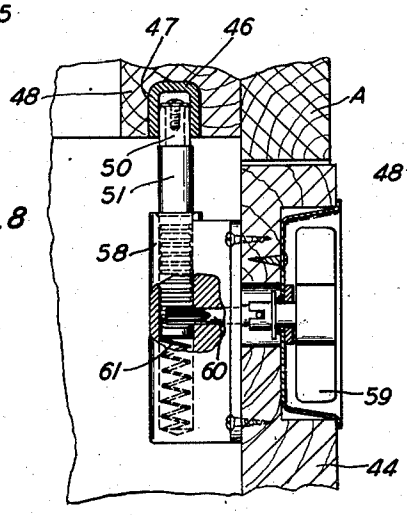


FIG. 10

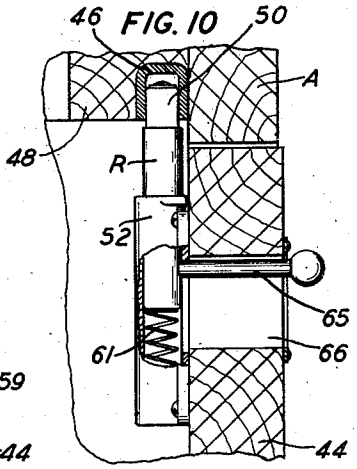
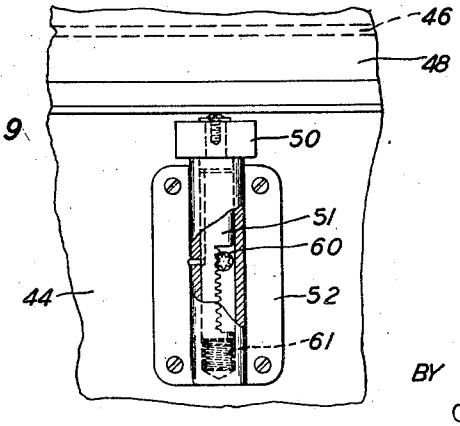


FIG. 9



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Patented Jan. 4, 1938

2,104,425

UNITED STATES PATENT OFFICE

2,104,425

TELEPHONE BOOTH

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Application August 16, 1934, Serial No. 740,038

3 Claims. (Cl. 20—3.5)

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

According to the present invention a telephone booth is provided in which the walls thereof are held in assembled angular relation at their lower ends by a base on the center portion of which is secured an upright support provided for mounting a revolving chair. These walls are held in angular relation at their upper ends by an apertured ceiling and a roof with a partition extending in parallel relation to the front and rear walls of the booth to form compartments for mounting a lighting fixture and a fan, the openings in the ceiling in cooperation with the openings in the roof forming an air inlet and an air outlet for the stream of air generated by the fan and an opening formed between the base and the bottom edge of the door assists in exhausting the air from the booth. Means for mounting the fan on the ceiling is provided whereby the noise generated by the movement of the fan is attenuated to a point wherein this noise is ineffective to affect the telephone conversations and means is provided whereby one section of the normal inwardly folding door of the booth may be moved in an outwardly folding position as to permit access to the interior of the booth whenever the normal folding movement of this door is accidentally prevented, with means operated upon a predetermined movement of the door for controlling the operation of the lighting fixture and the fan.

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 perspective assembly view of the booth showing two of the walls with portions cut away and the door in its unfolded position;

Fig. 2 is a front view showing the top of the booth with portions cut away and the door in its normal folded position;

Fig. 3 is a top view showing the roof with portions cut away and the door in its folded position;

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

Fig. 5 is an enlarged partial top view;

Fig. 6 is a partial view shown in section taken approximately on line 6—6 of Fig. 5;

Fig. 7 is a partial top view showing the free section of the folding door in its open position outwardly;

Fig. 8 is a partial view of the booth showing the door releasing mechanism in its normal position;

Fig. 9 is a partial rear view of the booth showing the door releasing mechanism in its operated position;

Fig. 10 is a modification of the door releasing mechanism shown in Fig. 8; and

Fig. 11 is a partial view of the booth taken on line 11—11 of Fig. 1 showing the base, the flooring and the chair upright support in section.

In the telephone booth of this invention the walls A, B, C and D shown through the several figures cooperate to form a booth of substantially square cross-section. These walls are provided at their edges with interfitting grooves and tongues GT provided for readily assembling them in proper relation and a number of screws 25 shown in Figs. 1 and 11 are provided for securing them at their lower ends to the upright extending flanged portions 26 of a base 27, this base being provided with a number of bearing portions such as 28 on which the booth rests in an upright direction.

Walls A, B, C and D are interiorly lined with ornamental plates 29, 30, 31 and 32 and to the outer surface of walls B and D are secured the panel boards 33 and 34 shown in Figs. 1, 2, 3, 4, 5, 6 and 7.

On the base 27 there is mounted a pad or flooring 19 of suitable rubber or insulating fibre material. This flooring is provided with flanged portions A_1, B_1, C_1 and D_1 the top edges of which are held against the booth walls A, B, C and D by metallic strips such as 20 as shown in Figs. 1, 2 and 11, these strips being secured to the walls by a number of screws 133.

An upright support 134 having an outwardly flared base portion is secured to the booth base by a number of screws such as 35 shown in Figs. 1, 2 and 11 and serve for securing the center portion of the flooring 19 to the booth base 27. The upright support 134 is provided at its upper end with a bearing portion 36 engaged by a bearing 40 of a spider-shaped support 37 to which the chair 38 is secured, these bearings having abutting portions provided for limiting the angular movement of the chair 38 on its pivot as formed by the spindle 39 engaging a hole in the upright support 134.

A ceiling 41 is secured by a number of screws 42 on the top portions of walls A, B, C and D as shown in Figs. 3 and 5 and holds these walls in assembled relation at this end.

To one side of front wall A is provided a door

opening 43 and to the narrow portion of this wall is hinged a door made of folding sections 44 and 45 of unequal width with the narrow section 45 equaling in width the glass panel portion of wall A as shown in Figs. 1, 4, 5 and 6, this symmetry of construction giving an esthetic appearance to the telephone booth while permitting a maximum of natural light to enter the booth.

The door section 45 is provided at its upper end portion with a stop plate 120 shown in Fig. 6 secured thereto by a number of screws 121. This stop plate engages the top portion of front wall A for preventing the movement of this door section past its maximum unfolded position, that is, with respect to the plane of front wall A.

A wooden block 48 shown in Figs. 3, 5, 6, 7, 8, 9 and 10 of triangular formation is secured to the front wall A and is provided with a groove 47 along its diagonal side for securely mounting a metallic guiding member 46 shown in Figs. 8 and 10. This guiding member is normally engaged by a slider 50 pivotally mounted at the top end of a gear toothed plunger 51 mounted for axial movement in a bracket 52 which is secured to the top portion of door section 44. Bracket 52 is fitted with a gear toothed spindle 60 engaging the gear rack portion of plunger 51 and extends to the front side of this door section for mounting a knob 59 provided for manually moving this plunger against the resistance of a spring 61 from the position shown in Fig. 8 to the position indicated in Fig. 9 for disengaging the slider 50 from the guiding bar 46 and thereby permitting the movement of this door section outwardly as shown in Fig. 7 as to give access to the interior of the booth when the normal inward folding movement of this door is accidentally prevented.

Fig. 10 shows a modification of the door release mechanism wherein the gear toothed plunger 51 and pinion 60 shown in Fig. 8 are replaced by a plain rod R having an operating handle 65 extending laterally therefrom in an elongated slot 66 to the front side of the door section 44, the downward movement of handle 65 and thereby the movement of plunger R against the resistance of spring 61 being effective to disengage the slider 50 from the guiding member 46 as above described in connection with the door releasing mechanism shown in Figs. 8 and 9.

As shown in Figs. 3, 5 and 6 the booth ceiling 41 is provided with a centrally disposed opening 70 fitted with a lighting fixture consisting of apertured plates 71 and 73 connected to each other by a plurality of brackets 74, the plate 71 being, in turn, secured to the top side of ceiling 41 by a plurality of screws 72.

A bracket 75 secured to the top surface of ceiling 41 by a number of screws 76 supports a casing 77 for housing the connecting block of a lamp socket 80 shown in Fig. 6 to which the lamp 78 is fitted, the lighting fixture plate 73 having a centrally disposed aperture for receiving a translucent inverted dome-shaped light shade 79.

Ceiling 41 is provided adjacent the intersecting point of the walls C and D with a preferably square-shaped opening 80 fitted with a frame 81 held in place on the ceiling by a number of screws 82. This frame is provided with a plurality of inwardly bent lug portions such as 83 shown in Figs. 3, 5 and 6 for securing similar ends of resilient strips RS to the other ends of which the motor 85 is secured in a horizontal position and to the armature shaft of motor 85 is mounted a fan wheel 86 provided for generating a current of air in the direction indicated by the arrows for ventilating the booth, the air exhausting through the openings in the lighting fixture plates 73 and 71 and through an opening formed between the lower edge of the folding door and a metallic strip 106 which serves to secure the front edge of the floor covering 19 to the booth base 27 and also as a non-slip threshold, this metallic strip being secured to the base 27 as by a number of rivets 109, shown in Figs. 1 and 4.

To the top edges of walls A and C there is secured a roof 90. This roof is provided with a louver plate 91 for the exhaust of the air and a partition 92 divides the space formed by the ceiling 41 and the roof 90 into two compartments T and T_1, as shown in Figs. 2, 3, 5 and 6 serving as a barrier for preventing the vitiated air exhausting from the booth through the several openings in the light fixture plates to reenter the booth at this point, thus forcing the air to exhaust through the louver plate 91 in a direction opposite to that of the air inlet as indicated by the arrows in Fig. 5.

On the top disposed surface of ceiling 41 there is mounted a casing 95 for housing a switching mechanism, not shown, this mechanism having a camming arm 96 disposed in engageable relation with an operating lever arm 97 formed integrally with a vertical spindle 98 extending through an opening in ceiling 41 and secured to one flap of the door hinge H_2 by a number of screws, such as 99.

The contact elements of the switch in casing 95 are connected to the power line 101 by a cable 102 connected to the terminals of lamp 78 to which the fan motor 85 is also connected through wires 103.

The operation of camming arm 96 and of the switch actuated thereby within a predetermined angular movement of the door section 45 is effective to operate the switching device for closing the lamp and the motor circuit for operating them.

In the corner of the booth formed by the intersection of the walls C and D as shown in Figs. 1, 2 and 4 and disposed at a predetermined distance with respect to the fan wheel 86 is mounted a metallic writing shelf 105 of unit structure which is held securely to the walls C, D by a plurality of screws 106 and on this writing shelf is securely mounted a bracket 107 to which the telephone apparatus in the form of a coin collector C—C is secured by a plurality of screws, not shown, such apparatus being so related as to height and distance from the chair 38 as to place the user of the booth in the air stream generated by the movement of the fan, this disposition of elements permitting the use of a fan of minimum air displacement together with considerable saving in the initial cost of the apparatus, current used and the avoidance of noises as generated by a fan or greater air displacement characteristic, while the spring mounting of the fan effectively prevents any vibration from reaching the walls of the telephone booth.

It is understood that minor changes may be made to this telephone booth without departing from the spirit of the invention and the scope of the appended claims.

What is claimed is:

1. A telephone booth having a rear wall, side walls, a ceiling for holding the walls in angular relation to each other at their upper ends, a base for holding the walls in angular relation to each

other at their lower ends, a front wall having a door opening, a door made of two folding sections for the opening, normally folding inwardly of the booth, means for controlling the folding movement of said door comprising an inverted U-shaped guide member secured to the under side of the ceiling, a slider element normally engaging said guiding member, a plunger on the top of which said slider element is pivoted, a bracket for said plunger carried by the inner face of the free door section, and a handle accessible from the exterior of said free door section, said handle operatively engaging said plunger for disengaging said slider from said guiding member at any point therealong for folding said free door section outwardly of the booth.

2. A telephone booth having a rear wall, side walls, a ceiling, a front wall having a door opening, a door consisting of a plurality of sections for said opening hinged to each other and one of said sections to one side of the front wall, means for controlling the folding movement of the door comprising an inverted U-shaped guiding member secured to the under side of the ceiling, a bracket carried by the inner face of the free door section, a plunger mounted in said bracket, a slider element arranged for pivotal movement on said plunger and engaging said guiding member for controlling the normal inwardly folding movement of said door, spring means acting on said plunger for holding said slider in engaged relation with said guiding member, means mounted on the outer side of said door and connected to said plunger for manually operating said plunger against the tension of said spring means to disengage said slider element from said guiding member at any point therealong for moving said free door section outwardly of the booth.

3. A telephone booth having a rear wall, side walls, a ceiling, and a base, in combination with a front wall having a door opening disposed on one side thereof, a door consisting of two hinged sections of unequal width for the opening, the narrower section being substantially equal in width to the larger portion of said front wall and hinged to the narrower side thereof, an inverted U-shaped guide member secured to the under side of the ceiling, a bracket carried by the wider section of said door and mounted on the inner side thereof, a plunger mounted in said bracket having a slider element normally engaging said guide member for controlling the normal inward folding movement of said door sections, and manually operable means disposed outwardly of said wider door section for disengaging said slider from said guide member for moving said wider door section outwardly of the booth.

FRANK A. KUNTZ.