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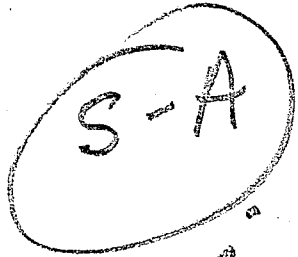
P. H. SHERRON

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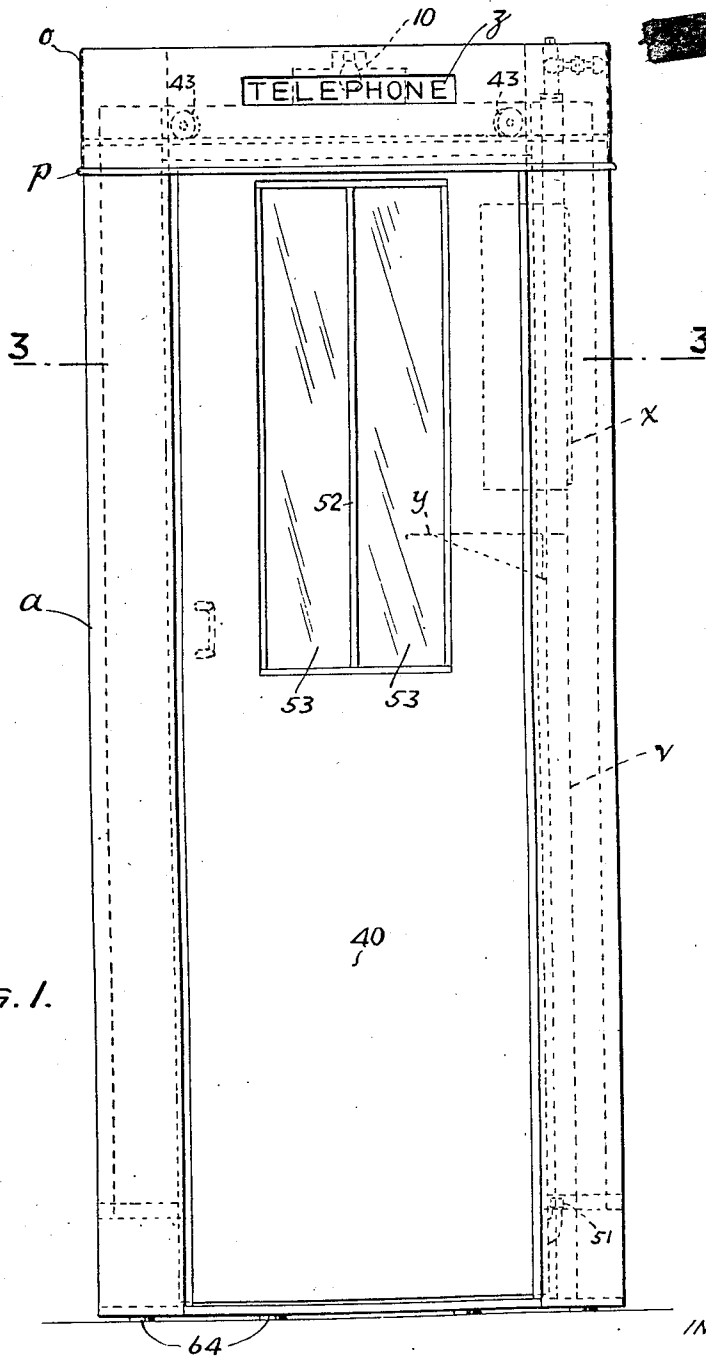
TELEPHONE BOOTH

Filed Nov. 7, 1932

5 Sheets-Sheet 1



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WITNESS:

Robt R. Kitchel.

INVENTOR

Percival H. Sherron

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Bussler and Harding
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Jan. 21, 1936.

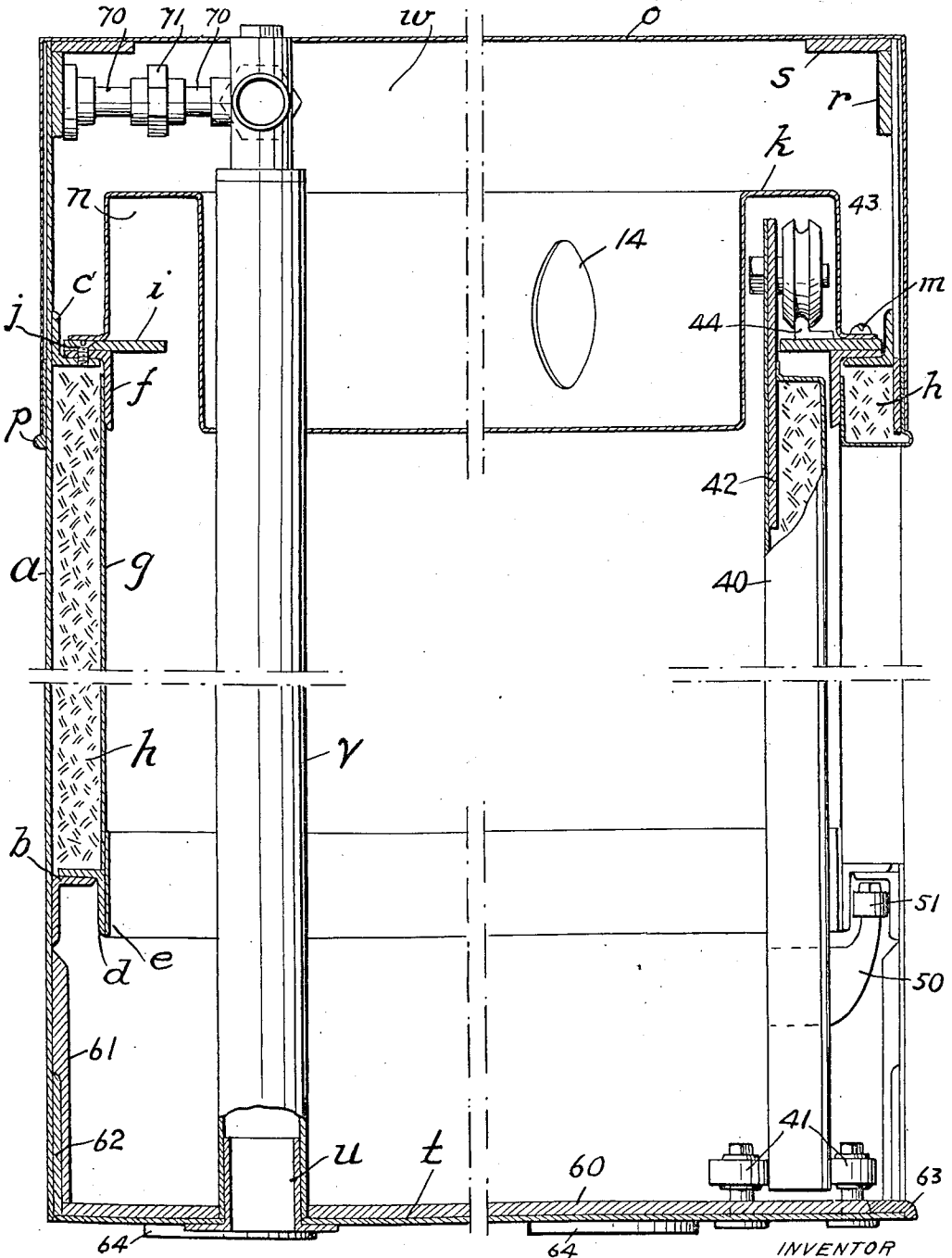
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TELEPHONE BOOTH

Filed Nov. 7, 1932

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WITNESS:

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FIG. 2.

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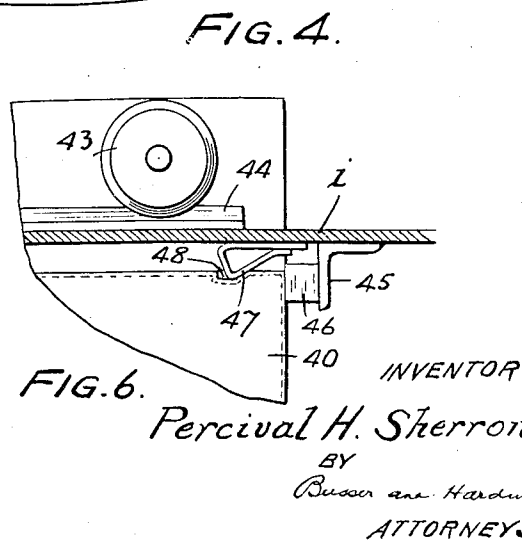
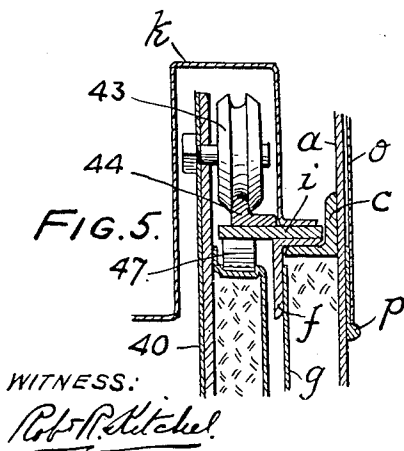
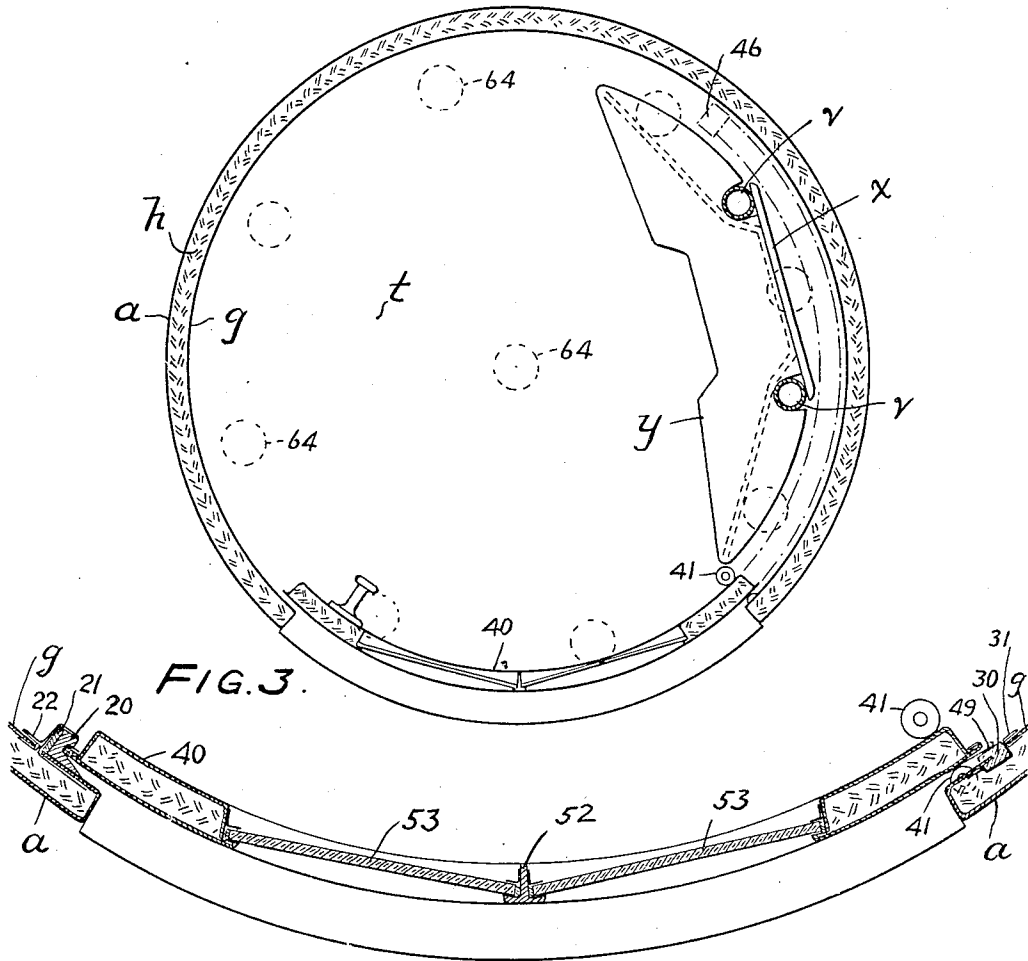
P. H. SHERRON

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TELEPHONE BOOTH

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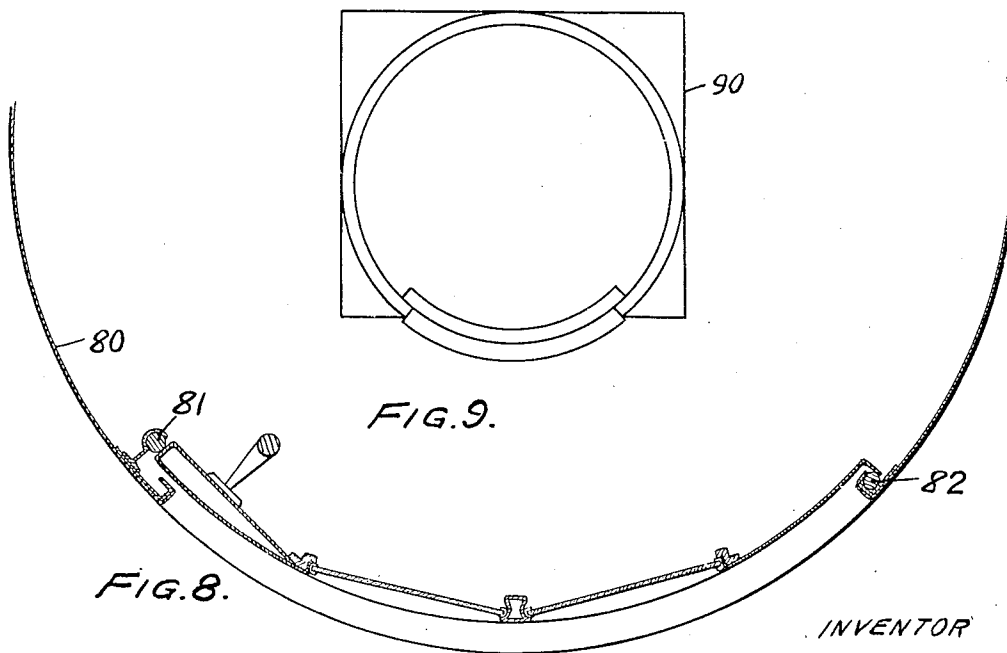
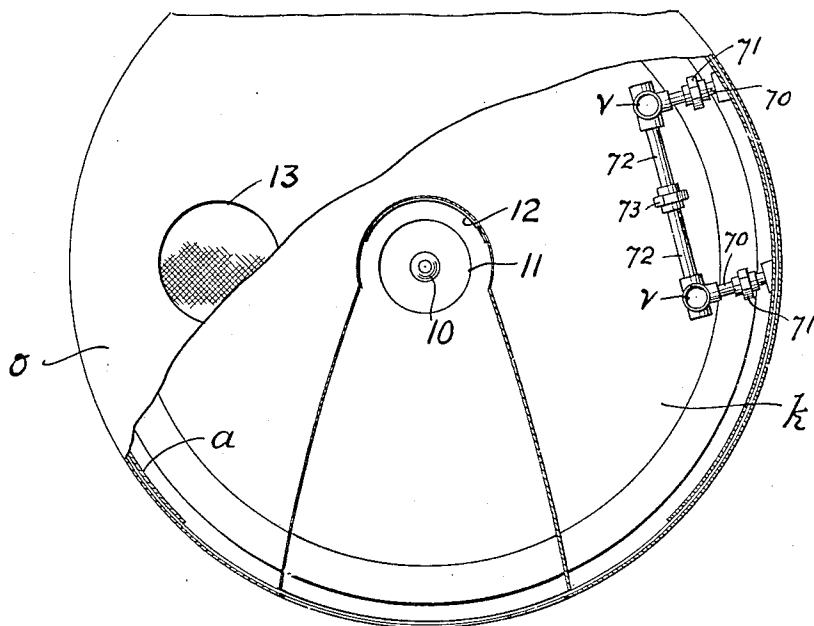
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2,028,627

TELEPHONE BOOTH

Filed Nov. 7, 1932

5 Sheets-Sheet 4



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TELEPHONE BOOTH

Filed Nov. 7, 1932

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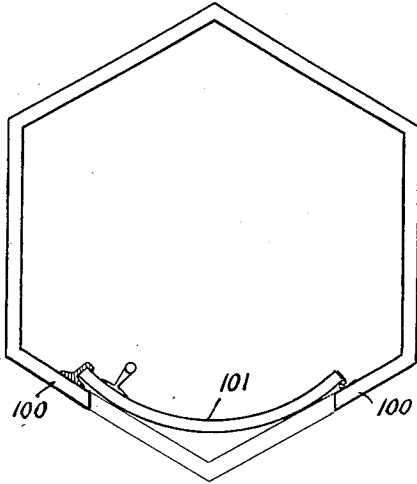


FIG. 10.

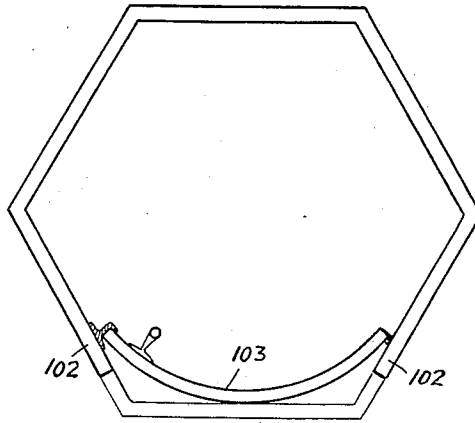


FIG. 11.

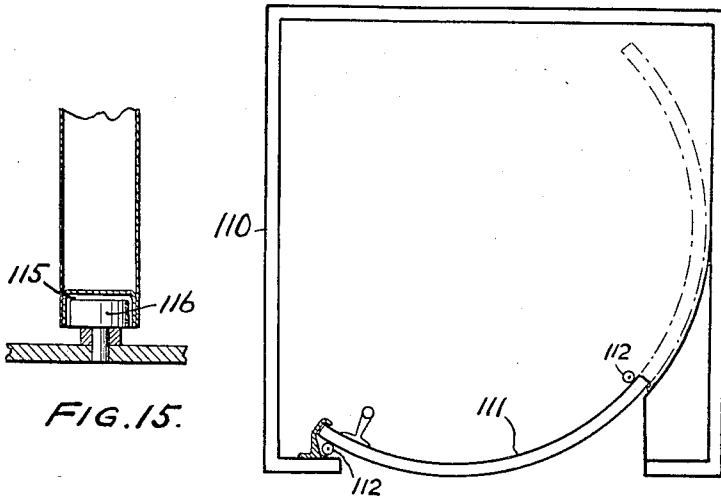


FIG. 12.

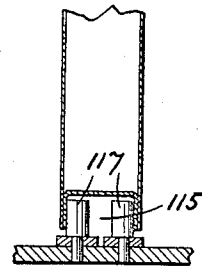


FIG. 16.

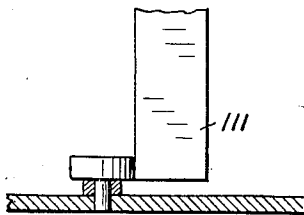


FIG. 13.

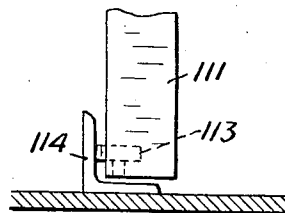


FIG. 14.

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UNITED STATES PATENT OFFICE

2,028,627

TELEPHONE BOOTH

Percival H. Sherron, Jamaica, N. Y.

Application November 7, 1932, Serial No. 641,592

33 Claims. (Cl. 189—2)

The objects of the invention are: to provide a fire-proof and substantially sound-proof telephone booth; to so construct the booth that any injury to its wall may be readily repaired: and to these ends to provide the booth with an outer shell and an inner metal shell, spaced from the outer shell, or lining, to pack sound-insulating material between the shells, and to so construct the booth that the inner shell or lining is readily removable without disturbing the ordinary fixtures of the booth. The invention also comprises other structural features which are hereinafter particularly described.

In the drawings, which show a preferred embodiment of the invention and various modifications:

Fig. 1 is a front elevation of the booth.

Fig. 2 is a vertical sectional view, partly broken away, of the booth.

Fig. 3 is a horizontal section, enlarged, on the line 3—3 of Fig. 1.

Fig. 4 is a horizontal section through the door and doorway.

Fig. 5 is a detail sectional view of the door supporting and latching means and parts adjacent thereto.

Fig. 6 is a side view of the door supporting and latching means with the track-supporting member in section.

Fig. 7 is a top view of the booth with the cover partly broken away.

Fig. 8 is a horizontal sectional view through part of a modified booth in which a single shell forms the wall of the booth.

Fig. 9 is a diagram showing the booth partly enclosed in a rectangular casing.

Figs. 10 and 11 are diagrams of modifications showing booths whose enclosing walls are of hexagonal shape.

Fig. 12 is a diagram of a modification showing a booth of rectangular shape.

Fig. 13 is a detail elevational view of the means, diagrammed in Fig. 12, for guiding the lower end of the door.

Fig. 14 is a view of a modification of said door guiding means.

Figs. 15 and 16 are detail elevational views, partly in section, of modified guiding means for the lower end of the sliding door.

a is an outer cylindrically shaped shell which extends, preferably in one piece, from the floor of the booth to its roof. The shell is not a complete cylinder, but has a vertically extending opening of somewhat less arcuate extent (say 90° or less) than that of the sliding door hereinafter

described. Secured to the inner wall of the outer shell *a*, respectively above the bottom and below the top thereof, are circumferentially extending angle irons *b* and *c*. Resting on the lateral wing of angle iron *b* is an angle iron *d*. Secured to the depending wing of angle iron *d* and extending above it is a circumferentially extending plate *e*. Hanging from the angle iron *c* is a circumferentially extending iron *f*. Resting on the lateral wing of angle iron *d* and respectively at top and bottom against the outer faces of the depending wing of angle iron *f* and the upwardly projecting part of plate *e*, is the inner cylindrically shaped shell or lining, *g*, of the booth. This inner shell has substantially the same arcuate extent as the outer shell and is, preferably, also of one piece. The space between the outer and inner shells is filled with any suitable sound-insulating material *h*.

Resting on and extending inward beyond the lateral wing of the angle iron *f* is a flat ring *i*. Screws *j* extending through ring *i* and the lateral wings of angle irons *f* and *c* removably secure these members together.

Resting on the ring *i* is the outwardly extending annular flange of the false top, or ceiling *k*, of the booth. The flange of the ceiling *k* may be secured to ring *i* by means of screws *m*. The ceiling is shaped to provide, adjacent its outer flange and above the ring *i*, a circumferentially extending channel *n* for a purpose hereinafter described.

The booth is provided with a flanged roof or top piece *o* which telescopically engages the outer shell *a*. Preferably a reinforcing ring *p*, beaded along its lower edge, is secured to the shell *a*, and the flange of the top *o* rests on the bead of the ring *p*.

The shell *a* has secured to its inner face, near its upper edge, a reinforcing ring *r*, and the roof *o* has secured to its lower face, near its depending marginal flange, a reinforcing ring *s* that rests on the upper edge of the ring *r* when the roof is in position.

The booth is provided with a floor or base plate *t*, which is provided with two holes through which, from the bottom, are inserted two annularly flanged tubular guides *u*. Resting on the base plate and telescopically engaging the guides *u* are two tubular standards *v*, which extend up through the interior of the shell, through holes in the ceiling *k*, through the compartment *w* formed between the ceiling *k* and the roof, and into holes in the roof. To the standards *v* are secured a vertically extending plate *x* for sup-

porting the telephone instrument and coin box (not shown), and a shelf *y*.

To the lower face of the floor *t* of the booth are secured spaced apart flat discs 64, which rest directly on the floor of the building in which the booth is located.

Within the compartment *w* is an electric light 10. An opening 11 in the ceiling *k* (see Fig. 7) allows the light to illuminate the interior of the booth. Properly positioned within the compartment *w* is a reflector 12, which throws an arc of light horizontally so as to light any sign composed of letters, figures, or trade-mark (2) which may be cut out of the surrounding flange of cover 15 *o* and backed up with a transparent material so as to permit the light to penetrate through such sign.

The compartment *w* may also contain a fan (not shown) for delivering air through a screened inlet 13 in the roof and through one or more holes 14 in the depending flange of the ceiling *k* to the interior of the booth.

The wires for the electric light and fan motor and the telephone wires may be brought in through the hollow standards from either the holes in the floor *t* or through holes in the roof.

The electric light, and the fan also, if desired, may be controlled by a switch which is operable by the sliding door hereinafter described. This is a known arrangement and need not, therefore, be shown or particularly described.

It is necessary to afford closures between the outer and inner shell along the vertical edges thereof forming the doorway and to provide for sliding the door across one of said edges and sealing it (when closed) along both edges. The following construction effects these purposes. The outer shell *a*, along the left hand vertical edge (see Fig. 4), is bent inward and thence backward about in alignment with the inner shell *g*. Applied to the inner face of the backward bend of the shell *a* is a block 20 of flexible material, such as felt, having a recess for the reception of the edge of the door 40. The block 20 is backed by a plate 21, and the block and plate are held in position by means of a metal strip 22, which extends inside and along the backward bend of shell *a*, along the rear face of plate 21, over the block 20, thence bent back upon itself over the block 20 and back of the plate 21, thence along the inner face of the inner shell *g* and back upon itself against said inner face, and thence around the edge of shell *g* and against its outer face.

At the other, or right hand, edge of the doorway the outer shell *a* is bent inward and thence backward and has secured to it a block 30 of felt or other suitable material, against which almost abuts the corresponding vertical edge of the inner shell *g*. A metal strip 31 extends within the backward bend of the outer shell, thence along the block 30 and behind it and between it and the end of shell *g*, thence along the inner face of the inner shell *g* and back upon itself against the said inner face, and thence around the edge of shell *g* and against its outer face.

Secured to and projecting above the floor *t* of the booth are shafts affording bearings for rollers 41 between which slides the lower end of the door 40.

The main body of the door comprises a hollow shell filled with sound insulating material. The upper part of the door extends into the channel *n* formed in the ceiling *k*. The inner wall of the door shell extends up beyond the outer wall and

has secured to its outer face a reinforcing plate 42. Turning on pins secured to the extension of the inner door shell wall and the plate 42 are trolley wheels 43 (see Figs. 2, 5 and 6) which roll on a track 44 carried on the upper face of ring *i*.

Depending from ring *i* is an angle iron 45, to the depending arm of which is secured a buffer block 46, against which the upper end of the right hand edge of the door is adapted to abut when the door is fully opened.

Secured against the lower face of the ring *i* is a detent 47 of spring material, the under bend of which is adapted to be engaged by the upper corner of the door as it approaches its closed position and to yield upwardly and longitudinally to allow the door to be fully closed, whereupon the detent snaps into a notch 48 in the upper edge of the door and yieldingly holds it closed while again yielding to permit the door to be opened upon application of a reasonable pulling force.

When the door is closed, a flange along one vertical edge of the door extends into a recess in the felt block 20 (see Fig. 4). A spring plate 49 along the other vertical edge of the door engages the inner face of the felt block 30. Thus both vertical edges of the door are sealed.

The door 40 may also be provided with an arm 50 (see Fig. 2) carrying a roller 51 which extends between the depending wings of angle bars *b* and *d*.

The door 40 may conform to the radius of the booth, as shown, or it may have a flat contour. The door shell is preferably cut away to form a glass-covered opening. It is preferred to divide this opening by an upright center bar 52 and to provide this bar and also the edges of the door shell with grooves adapted to receive glass panes 53, 53.

The floor or base plate *t* may be provided with a floor covering of linoleum or other material 60 (see Fig. 2). Across the door-way, and in front of and flush with the linoleum covering, is a metal strip 63 having a nose which is bent down in front of the front edge of the base plate *t*. A linoleum covering, or other material, 61, may be applied to the inner wall of the outer shell *a* between the covered floor and the angle bar *b*. The inner wall of the outer shell may have applied thereto, adjacent the base plate *t*, a reinforcing plate 62, and the material 61 may be applied to this plate and to the inner wall of the outer shell.

The upper ends of the tubular standards *v* are preferably connected with and supported from the reinforcing ring *r* by means of laterally extending nipples 70, 70 connected by unions 71 (see Figs. 2 and 7). The two standards *v* may be connected together by means of nipples 72, 72 connected by a union 73.

When it is desired to disassemble the booth, the unions 71 are removed, the screws *m* are removed and the top *o* lifted off. The screws *j* are then removed, which permits the inner shell or lining *f* to be lifted out. This gives access to each of the shells from both sides, thereby enabling any dents therein to be smoothed out. Since the telephone instrument, coin box and shelf are carried by the standards *v*, the inner shell or lining can be removed without disturbing any of these fixtures.

Except for the described buffers and floor covering, the entire booth may be constructed of metal, and since the sound deadening material is

also a fire-resisting material, the structure is fire-proof. When the door is closed, not only does the wall prevent the transmission of sound through it, but the vertical edges of the door are sealed against the doorway and the booth is virtually sound-proof. My experiments show, also, that a booth of cylindrical shape eliminates low notes, while the other structural features, particularly the double wall enclosing insulating material, keep the high notes within the booth and prevent ordinary sounds from the outside penetrating thereinto.

In Fig. 8 is shown a modification wherein the shell of the booth is composed of a single wall, 80, instead of two walls spaced apart. The outer shell is bent inward and backward upon itself at both ends to form the door frame. Secured to the shell 80, adjacent opposite ends, are holders carrying buffers 81, 82. When the door is closed, one buffer 81 is adapted to be engaged by one vertical edge of the door, while the other buffer 82 is adapted to be engaged by a flange on the opposite vertical edge of the door.

Fig. 9 is a diagram of the booth of Figs. 1-7, enclosed, except for the doorway, in a rectangularly shaped box 90, so that the booth presents, exteriorly, a cubical shape.

Instead of making the booth of double walled cylindrical form, it may be made of double walled polygonal form, as shown in Figs. 10 and 11. In Fig. 10 parts of two adjacent flat sections 100, 100 are cut away to form a doorway; the door 101, when closed, spanning the space between these two thus narrowed flat sections. In Fig. 11, one entire flat section and also (preferably) short widths of two adjacent flat sections 102, 102, are cut away to form the doorway; the door 103, when closed, spanning the completely eliminated short section.

In Fig. 12, the booth 110 is made of double walled rectangular form. The door 111 may be guided by rollers 112, supported from the floor as shown in Figs. 13, one inside and the other outside the path of travel of the door. Instead of the door engaging stationarily positioned rollers, the door may carry one or more rollers 113, which engage a track 114 secured to the floor of the booth, as shown in Fig. 14.

In place of the door guides shown in Figs. 2, 13 and 14, the door may be provided, along its lower edge, with a recess 115, as shown in Fig. 15, and within this recess may extend a roller 116 supported from the floor, the roller being adapted to engage either side wall, or both side walls, of the recess. If adapted to engage both side walls, there may be some danger of binding, for which reason it is preferred to support pairs of rollers 117 from the floor, as shown in Fig. 16, one roller engaging one side wall of the recess 115 and the other roller engaging the other side wall of this recess.

What I claim and desire to protect by Letters Patent is:

1. A telephone booth comprising a floor, a cylindrically shaped wall extending from the floor throughout the height of the booth and provided with an opening forming a doorway, a door adapted to close said doorway, and a removable top comprising a roof and an annular flange thereon adapted to engage the upper end of the cylindrical wall.

2. A telephone booth comprising a floor, a cylindrically shaped wall extending from the floor throughout the height of the booth and provided with an opening forming a doorway, a

door adapted to close said doorway, a removable top comprising a roof and an annular flange thereon adapted to engage the upper end of the cylindrical wall, and a false roof or ceiling supported by the wall and extending across the booth below and spaced from the roof to form a compartment, the ceiling having a hole through which a light in the compartment may illuminate the interior of the booth below the ceiling.

3. A telephone booth comprising a floor, a cylindrically shaped wall extending from the floor throughout the height of the booth and provided with an opening forming a doorway, a door adapted to close said doorway, a removable top comprising a roof and an annular flange thereon adapted to engage the upper end of the cylindrical wall and the upper end of said opening, a false roof or ceiling supported by the wall and extending across the booth below and spaced from the ceiling to form a compartment, the ceiling having a hole through which a light in the compartment may illuminate the interior of the booth below the ceiling, the roof flange closing the upper part of said opening and being cut away opposite the compartment, and a reflector in the compartment adapted to deflect the light rays toward the cut away portion of the roof flange.

4. A telephone booth comprising an outer shell, an inner shell spaced therefrom, sound-insulating material in the space between the shells, a removable roof closing the top of the outer shell, a false roof or ceiling beneath and spaced from the top and removably connected with the outer shell, and means removably securing together the two shells and permitting the disassembling of the booth and the removal of the inner shell.

5. A telephone booth comprising an outer shell, a removable roof closing the upper end of the outer shell, an inner shell concentric with the outer shell and terminating at its upper end below the roof, a ceiling removably secured above the upper end of the inner shell and forming between the ceiling and roof a compartment, and means removably securing the inner shell to the outer shell and permitting the disassembling of the booth and the removal of the inner shell.

6. A telephone booth comprising a floor, a roof, an outer shell extending from floor to roof, an inner shell whose lower end is spaced from the floor and whose upper end is spaced from the roof, sound-insulating material in the space between the two shells, the roof being removably secured to the outer shell, a ceiling removably secured above the inner shell and spaced from the roof, and means removably securing the inner shell to the outer shell.

7. A telephone booth comprising a floor, an outer enclosing shell, a roof, an inner shell, sound-insulating material between the shells, a wire-receiving tubular standard within the inner shell and supported independently thereof, and means removably securing together the inner shell and the outer shell and permitting disassembling of the booth and the removal of the inner shell from within the outer shell without disturbing said standard.

8. A telephone booth comprising a floor, an outer enclosing shell, a roof, an inner shell, sound-insulating material between the shells, a wire-receiving standard within the inner shell, means removably connecting said standard to the outer shell, and means removably connecting the inner shell and the outer shell, said means, when operated to disconnect said members, allowing the removal of the inner shell from within

the outer shell without disturbing said standard.

9. A telephone booth comprising a floor, an enclosing wall, a roof, and a hollow wire-receiving tubular standard extending within the booth from floor to roof and opening through both to permit wires to be inserted either through the floor or through the roof.

10. A telephone booth comprising an enclosing wall, a roof, a floor provided with a hole, a support secured to the floor and projecting through said hole, and a tubular wire-receiving standard sleeved on said support.

11. A telephone booth comprising an outer shell, an inner shell, said shells enclosing the booth except at the front where an opening is left forming a doorway, the outer shell, along one side of the doorway, being bent inwardly and backwardly toward the inner shell, a door slidable across said opening, and a buffer positioned inside said back-turned end of the outer shell and adapted to engage the door when the latter is closed.

12. A telephone booth comprising an outer shell, an inner shell, said shells enclosing the booth except at the front where an opening is left forming a doorway, the outer shell, along one side of the doorway, being bent inwardly and backwardly toward the inner shell, a door slidable across said opening, a block of flexible material between said back-turned end of the outer shell and the end of the inner shell, and a spring plate on the door engaging said block when the door is in closed position.

13. A telephone booth comprising a floor, an enclosing wall having an opening forming a doorway, a door slidable across said opening, an arcuately extending track adjacent the top of the door, wheels carried by the door and runnable on said track, the door having a notch in its upper edge, a detent adapted to snap into said notch when the door is moved to its fully opened position, and a buffer against which the upper end of the vertical edge of the door is adapted to abut when the door is fully opened.

14. A telephone booth comprising a floor; a wall composed of an enclosing outer shell, an inner shell spaced from the outer shell and whose lower end is above the floor level and sound-insulating material between the shells; said shells being shaped to provide an opening for a door; a door slidable across said opening; a wheel at the upper end of the door; an arcuately extending track on which said wheel is adapted to travel; means guiding the door at its lower end; means forming an arcuately extending channel below the double shell wall; an arm on the door; and a side-bearing roller within said channel and carried by said arm.

15. A telephone booth comprising a floor, a cylindrically shaped wall extending from the floor throughout the height of the booth and provided with an opening forming a doorway, a door adapted to close said doorway, a removable top comprising a roof supported by the wall, and a false roof or ceiling supported by the wall and extending across the booth substantially below the top of the cylindrical wall and spaced from the roof to form a compartment.

16. A telephone booth comprising a floor, a cylindrically shaped wall extending from the floor throughout the height of the booth and provided with an opening forming a doorway, a door adapted to close said doorway, a removable top comprising a roof and an annular flange thereon adapted to engage the upper end of the cylindri-

cal wall, and a false roof or ceiling supported by the wall and extending across the booth substantially below the top of the cylindrical wall and spaced from the roof to form a compartment.

17. A telephone booth comprising a cylindrical inner metal shell provided with a doorway and otherwise imperforate, a cylindrical outer metal shell spaced from the inner shell and provided with an opening aligning with said doorway and otherwise imperforate, and sound-insulating material in the space between the shells.

18. A telephone booth comprising a cylindrical inner shell, an outer shell spaced from the inner shell, sound-insulating material in the space between the shells, and means removably securing the inner shell to the outer shell and permitting the disassembling of the booth and the removal of the inner shell.

19. A telephone booth comprising an inner shell, an outer shell spaced from the inner shell, sound-insulating material between the shells, a removable roof, a standard to which telephone instrumentalities are adapted to be secured, means supporting the standard independently of the inner shell, and means detachably securing the shells together; permitting the removal of the roof, the separation of the shells and the withdrawal of the inner shell without disturbance of the standard.

20. A telephone booth comprising an inner shell, an outer shell spaced from and extending above the inner shell, sound-insulating material between the shells, a detachable roof and means detachably securing together the shells; permitting the removal of the roof, the separation of the shells and the withdrawal of the inner shell to allow access to the interior of the outer shell.

21. A telephone booth comprising an inner shell, an outer shell spaced from and extending above the inner shell, sound-insulating material filling the annular space between the shells, a removable roof, and a false roof or ceiling above the inner shell and extending across the space enclosed by the outer shell and above the annular space enclosed by the two shells, and means detachably securing together the outer shell, inner shell and ceiling and permitting the removal of the roof, the separation of the shells and the withdrawal of the inner shell to allow access to the interior of the outer shell.

22. A telephone booth comprising an inner shell, an outer shell spaced from and extending above the inner shell, sound-insulating material filling the space between the shells, a removable roof engaging the outer shell, a false roof or ceiling above the inner shell and extending across the space enclosed by the outer shell and above the annular space enclosed by the two shells, a standard to which telephone instrumentalities are adapted to be secured, means supporting the standard independently of the inner shell, and means detachably securing together the outer shell, inner shell and ceiling; permitting the separation of the outer shell, inner shell and ceiling, the removal of the roof and ceiling and the withdrawal of the inner shell without disturbing said standard.

23. A telephone booth comprising an inner shell, an outer shell spaced from the inner shell, means removably connecting the inner shell and the outer shell, means within the booth adapted to enclose telephone wires and support telephone instrumentalities independently of the inner shell, whereby the booth may be disassembled and the inner shell removed from the

outer shell without disturbing the telephone instrumentalities and wiring.

24. A telephone booth comprising a floor, an inner shell, an outer shell spaced from the inner shell and terminating above the floor, sound-insulating material in the space between the shells, a slidable door, and guiding means for the door extending into the space adjacent the outer shell and below the space between the shells and above the floor.

25. A telephone booth comprising a floor, an inner shell, an outer shell spaced from the inner shell and terminating above the floor, a door slidable within the inner shell, and a protective covering material of substantial thickness applied to the inner wall of the outer shell below the inner shell, whereby the lower part of the inner wall of the booth may be protected and at the same time allow the door to slide close to the inner wall of the booth throughout the major part of its height.

26. A telephone booth comprising an enclosing wall, a roof and a ceiling below and spaced from the roof and forming a compartment above the main enclosure, said ceiling having a depending part provided with a side opening for sidewise passage of air between said compartment and the main enclosure.

27. A telephone booth comprising an enclosing wall, a floor, a roof, an upright standard, positioned within the enclosure and supported solely by at least one of the two last named elements, and means secured to said standard for supporting telephone instrumentalities, whereby said telephone instrumentalities are supported independently of the enclosing wall.

28. A telephone booth comprising an enclosing wall, a floor, an upright standard positioned within the enclosure and supported solely by the floor, and means secured to said standard for supporting telephone instrumentalities, whereby said telephone instrumentalities are supported independently of the enclosing wall.

29. A telephone booth comprising an enclosing

wall, a floor, a hollow upright tubular standard positioned within the enclosure and supported solely by and opening through the floor, means secured to said standard for supporting telephone instrumentalities, and connecting wiring for said instrumentalities positioned within said standard.

30. A telephone booth comprising an outer shell, an inner shell, a floor, a roof, an upright standard positioned within the enclosure formed by said inner shell and supported solely by at least one of the two last named elements, and means secured to said standard for supporting telephone instrumentalities, whereby said telephone instrumentalities are supported independently of said inner shell.

31. A telephone booth comprising an outer shell, an inner shell, a floor, a hollow upright tubular standard positioned within the enclosure formed by said inner shell and supported solely by and opening through the floor, means secured to said standard for supporting telephone instrumentalities, and connecting wiring for said instrumentalities positioned within said standard.

32. A telephone booth comprising an enclosing wall provided with a doorway, a roof, a ceiling member positioned below the roof to form a compartment beneath the roof and having an upwardly extending side wall spaced from said enclosing wall, thereby providing an annular space lying above the plane of the ceiling and communicating with the main enclosure, a slidable door, an arcuate track located in said annular space, and a wheel rollable on said track and from which the door is suspended.

33. A telephone booth comprising an enclosing wall, a roof, a ceiling below and spaced from the roof and forming a compartment above the main enclosure, said ceiling having a depending part provided with a side opening for passage of air between said compartment and the main enclosure, and air circulating means positioned in said compartment.

PERCIVAL H. SHERRON.