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TOILET ENCLOSURE OR BOOTH

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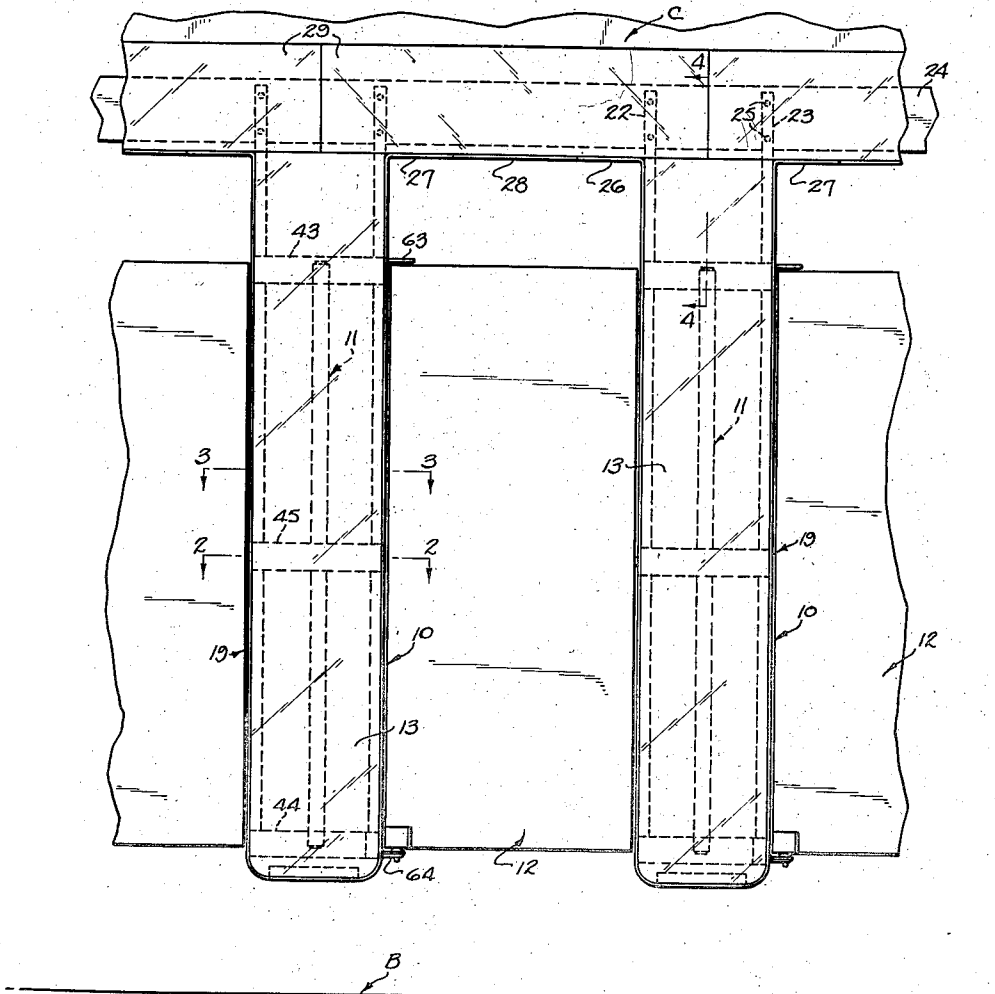


Fig. 1.

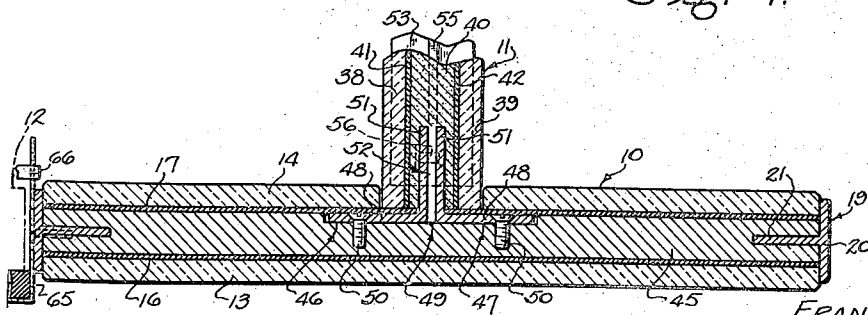


Fig. 2.

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TOILET ENCLOSURE OR BOOTH

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9 Claims. (Cl. 72-16)

The present invention relates to improvements in toilet enclosures or booths and the like.

Heretofore, in the construction of enclosures or booths of this character, it has been customary for the vertical stiles at the front thereof to be supported at their lower ends directly upon the floor and, in many instances, the lower ends of the stiles have been anchored in recesses formed in the floor. This type of construction, however, is relatively expensive, in that considerable time and labor are required to properly set the stiles. Further, the supporting of the stiles directly upon the floor renders the cleaning of the floor more difficult as well as providing corners and cracks at the lower ends of the stiles in which dirt and the like may accumulate. Likewise, in mopping the floor the lower ends of the stiles are very apt to be smeared or spattered with dirty water.

It is an aim of this invention to avoid the above objectionable features by the provision of a toilet enclosure or booth of novel and improved construction wherein the vertical stiles are supported in such a manner that the lower ends thereof are spaced above the floor so that they in no way interfere with the cleaning of the floor but instead permit it to be more easily kept at all times in a clean and sanitary condition.

Another object of the invention is the provision of means for suspending the stiles from the upper ends thereof in such a way that they can be readily installed at considerably less expense and in relatively less time than heretofore required.

Another object of the invention is the provision of stiles formed of composite slabs or panels faced with Vitrolite or other structural glass whereby to provide an enclosure or booth of exceptionally pleasing and attractive appearance, as well as presenting a sanitary construction capable of withstanding hard wear.

A further object of the invention is the provision of transverse partitions between adjacent enclosures or booths also formed of composite slabs or panels faced with Vitrolite or other structural glass, together with novel means for tying the partitions and stiles together and for anchoring them to the supporting walls to provide a rigid, durable construction.

A still further object of the invention is the provision of stiles formed of composite slabs or panels of the above character so constructed that the required metallic hardware for supporting the doors of the enclosure or booth may be conveniently secured thereto.

Other objects and advantages of the invention will become more apparent during the course of the following description, when taken in connection with the accompanying drawings.

In the drawings, wherein like numerals are employed to designate like parts throughout the same:

Fig. 1 is a front view of an enclosure or booth constructed in accordance with the present invention;

Fig. 2 is a horizontal transverse section through one of the vertical stiles taken substantially on line 2-2 of Fig. 1;

Fig. 3 is a horizontal transverse section through the stile and one of the transverse partitions taken substantially on line 3-3 of Fig. 1;

Fig. 4 is a vertical section through the upper end of the stile taken substantially on line 4-4 of Fig. 1; and

Fig. 5 is a vertical detail section showing the manner in which the partition is anchored into the supporting side wall.

With reference now to the drawings, the letter A designates generally one side wall of a room in which the enclosure or booth herein provided is adapted to be mounted while B designates the floor level and C a vertical curtain wall depending from the ceiling in forwardly spaced, substantially parallel relation to the side wall A.

The improved enclosure or booth construction provided by the present invention embodies briefly a plurality of vertical stiles designated in their entirety by the numeral 10; the transverse partitions 11 associated with the stiles and arranged between adjacent booths; and the doors 12 carried by said stiles.

The stiles 10 are made up of composite slabs or panels composed of the outer and inner facings 13 and 14 arranged at opposite sides of a body portion or core 15. The facings 13 and 14 preferably consist of sheets or plates of Vitrolite or other structural glass, while the body portion or core 15 may be formed from gypsum, concrete, Haydite, or other composition material. Also, if desired, the body portion or core may comprise a suitable type plaster or fiber board.

The sheets or plates of glass forming the facings 13 and 14 are preferably secured to opposite sides of the body portion or core 15 by the non-brittle sheets of strengthening material 16 and 17, respectively, although relatively thin layers of mastic or other suitable adhesive material may be used. The sheets of strengthening material 16 and 17 preferably consist of a fibrous

base coated with a bituminous substance such as asphaltum. One type of material which has been used with satisfactory results is that made and sold under the trade-name "Ru-ber-oid." This type of material is relatively inexpensive, will stand up indefinitely, and does not deteriorate. The composite slabs or panels may be further strengthened, if desired, by embedding in the body portion or core 15 a wire mesh or metal lath reinforcing 18.

Extending along both vertical side edges and also across the bottom edge of each stile 10 is a T-shaped metal rim 19 including a transverse portion 20, which engages the peripheral edges of the glass facings 13 and 14, and an inwardly directed tongue portion 21 embedded in the body or core 15. The metal rim 19 is preferably formed of a single length of material bent in a substantially U-shape. The tongue portion 21 of the metal rim projects at its opposite ends upwardly beyond the upper end of the stile as indicated at 22 and 23, and these projecting end portions are secured to a horizontal channel beam 24 by bolts or the like 25.

The opposite ends of the transverse portion 20 of the metal rim can be bent outwardly in opposite directions as indicated at 26 and 27 (Fig. 1) to fit beneath the channel beam 24 and the space between the horizontal portions 26 and 27 of adjacent rims can be closed by a plate 28. If desired, the vertical projecting end portions 22 and 23 of the metal rims 19 can be cut off and the stiles 10 hung from the channel beam 24 by securing the horizontal portions 26 and 27 of the metal rims thereto. Or, both the vertical projecting end portions 22 and 23 and the horizontal portions 26 and 27 of the metal rims may be attached to the channel beam 24.

The channel beam 24 is shown in Fig. 4 as being mounted beneath the vertical curtain wall C and said channel beam may be covered upon one side with sheets or plates of Vitrolite or the like 29 and at its opposite side by similar sheets or plates 30, said sheets or plates 29 and 30 being secured in place by layers of mastic or the like 31. The bottom of the channel beam is covered by horizontal sheets or plates 32 secured by mastic 33. The sheets or plates 32 are supported at their outer edges upon the upper end of the stiles 10 and at their inner edges by the horizontal portion 34 of a T-hanger 35; said hanger being provided with a vertical tongue 36 secured to the channel beam 24 by a bracket or the like 37. The facing sheets 30 may also be supported at their lower edges upon the horizontal portion 34 of the T-hanger 35 outwardly of the vertical tongue 36.

From the above, it will be readily seen that the vertical stiles 10 are hung from their upper ends and that the lower ends thereof are spaced above the floor B (Fig. 1). As stated, this greatly facilitates the cleaning of the floor so that it can be easily kept in a sanitary condition. This method of installing the stiles also makes for economy and simplicity of erection; good appearance; capability of withstanding hard wear; and a sanitary construction.

The vertical transverse partitions 11 forming the side walls of the enclosure also preferably consist of composite slabs or panels including the opposite side facings 38 and 39 of Vitrolite or other structural glass, secured to the body portion or core 40 by layers of mastic or sheets of non-brittle strengthening material 41 and 42 respectively.

Arranged between the front and rear glass fac-

ings 13 and 14 of each stile 10 adjacent the upper and lower ends and also preferably intermediate the ends thereof are the horizontal metal bars 43, 44, and 45, to which the means for supporting the partitions 11 are secured. Extending longitudinally of each stile and secured to the metal bars 43, 44, and 45 intermediate the ends thereof are the two vertical angle irons 46 and 47, the inner flanges 48 thereof being parallel with said bars 10 and fitting within recesses 49 therein. The flanges 48 of the angle irons 46 and 47 are secured to the bars 43, 44, and 45 by screws or the like 50. The outwardly projecting flanges 51 of the angle irons 46 and 47 are spaced slightly from one another as indicated at 52 and are embedded in the core 40 of the respective partition 11.

Secured to the lower ends of the angle irons 46 and 47 is one end of a horizontal T-member 53, while a similar T-member 54 is secured at its outer end to the upper ends of said channel irons. More specifically, the tongue portion 55 of each T-member 53 and 54 is embedded in the body 40 and also received within the space 52 formed between the flanges 51 of the angle irons; being 25 secured thereto by screws 56 (Fig. 2). The T-members 53 and 54 as well as the partition 11 are received at their inner ends within a recess 57 cut into the supporting side wall A. The T-members are secured in the recess 57 by vertical pins 58 which pass through openings in the transverse portions thereof and which are embedded in plaster of Paris or the like 59 filling said recess. The front surface of the wall A can be provided with a plaster coat 60 to which may be secured 35 Vitrolite or other structural glass panels or slabs 61 by mastic or other suitable adhesive material 62.

The metal bars 43, 44, and 45 carried by each stile also provide the means to which the metal hardware for the doors 12 is secured. Thus, as shown in Fig. 1, the upper and lower bars 43 and 44 have suitably secured or welded thereto the hinge members 63 and 64 for receiving complementary hinge members carried by the doors 12, 45 while as shown in Fig. 2 the intermediate bar 45 may have secured thereto a suitable door stop 65 and latch 66.

It is to be understood that the form of the invention herewith shown and described is to be taken as the preferred embodiment of the same, and that various changes in the shape, size and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

I claim:

1. In a booth of the character described, the combination of vertical stiles arranged at the front of the booth, vertical partitions extending rearwardly at substantially right angles to said stiles and forming the side walls of said booth, means supporting said stiles so that the lower ends thereof are entirely free of the floor, including a metal rim extending along opposite vertical side edges of each stile and also across the bottom edge thereof, said rim projecting at its opposite ends from said stile at the upper end thereof, and means securing the opposite ends of the said rim to an overhead supporting structure.

2. In a booth of the character described, the combination of vertical stiles arranged at the front of the booth, each including a body and outer and inner glass facings secured to the opposite sides thereof, vertical partitions extending rearwardly at substantially right angles to said stiles and forming the side walls of said booth,

means supporting said stiles so that the lower ends thereof are entirely free of the floor, comprising a metal rim extending along opposite vertical side edges of each stile and also across the bottom edge thereof, said metal rim projecting at its opposite ends from said stile at the upper end thereof, and means securing the opposite ends of the said rim to an overhead supporting structure.

3. In a booth of the character described, the combination of vertical stiles arranged at the front of the booth, each including a body and outer and inner glass facings secured to the opposite sides thereof, vertical partitions extending rearwardly at substantially right angles to said stiles and forming the side walls of said booth, means supporting said stiles so that the lower ends thereof are entirely free of the floor, comprising a T-shaped metal rim extending along opposite vertical side edges of each stile and also across the bottom edge thereof, the transverse portion of said rim engaging the edges of said glass facings and the tongue portion thereof being embedded in said body, the opposite ends of the said rim projecting upwardly beyond the upper end of said stile, and means securing the projecting ends of said rim to an overhead supporting structure.

4. In a booth of the character described, the combination of vertical stiles arranged at the front of the booth, vertical partitions extending rearwardly at substantially right angles to said stiles and forming the side walls of said booth, each of said partitions including a body and glass facings secured to the opposite sides thereof, means suspending said stiles from overhead so that the lower ends thereof are spaced above the floor, and horizontal T-members secured at their forward ends to each of said stiles and at their rear ends to a supporting structure, the transverse portions of said T-members engaging the upper and lower edges of the respective partition and the tongue portions thereof being embedded in said body.

5. In a booth of the character described, the combination of vertical stiles arranged at the front of the booth, vertical partitions extending rearwardly at substantially right angles to said stiles and forming the side walls of said booth, each of said partitions including a body and glass facings secured to the opposite sides thereof, means suspending said stiles from overhead so that the lower ends thereof are spaced above the floor, vertical angle irons secured to each of said stiles and having rearwardly projecting spaced flanges, horizontal T-members secured at their forward ends to said stile and at their rear ends to a supporting structure, the transverse portions of said T-members engaging the upper and lower edges of the respective partition, while the tongue portions thereof are received between the spaced flanges of the angle irons and secured thereto.

6. In a booth of the character described, the combination of vertical stiles arranged at the front of the booth, each including a body and outer and inner glass facings secured to the opposite sides thereof, vertical partitions extending rearwardly at substantially right angles to said stiles and forming the side walls of said booth, 70

each of said partitions also including a body and glass facings secured to the opposite sides thereof, means suspending said stiles from their upper ends so that the lower ends thereof are spaced above the floor comprising a T-shaped metal rim extending along opposite vertical side edges of each stile and also across the bottom edge thereof, the transverse portion of said rim engaging the edges of said glass facings and the tongue portions thereof being embedded in said body, the opposite ends of said rim projecting upwardly beyond the upper end of the stile and secured to an overhead supporting structure, and horizontal T-members secured at their forward ends to each of said stiles and at their rear ends to a supporting structure, the transverse portions of said T-members engaging the upper and lower edges of the respective partition and the tongue portions thereof being embedded in the body of said partition.

7. In a booth of the character described, the combination of vertical stiles arranged at the front of the booth, vertical partitions extending rearwardly at substantially right angles to said stiles and forming the side walls of said booth, means supporting said stiles so that the lower ends thereof are spaced above the floor including a metal rim extending along and secured to the opposite vertical side edges of each stile and also to the bottom edge thereof and having portions at the upper end of said stile for attachment to an overhead supporting structure, and means securing said portions of the metal rim at the upper end of the said stile to an overhead supporting structure.

8. In a booth of the character described, the combination of vertical stiles arranged at the front of the booth, each including a body and outer and inner glass facings secured to the opposite sides thereof, vertical partitions extending rearwardly at substantially right angles to said stiles and forming the side walls of said booth, and means supporting said stiles so that the lower ends thereof are spaced above the floor including a T-shaped metal rim extending along opposite vertical side edges of each stile and also across the bottom edge thereof and having portions at the upper end of said stile for attachment to an overhead supporting structure, the transverse portion of said rim engaging the edges of the glass facings and the tongue portion thereof being received between said glass facings.

9. In a booth of the character described, the combination of vertical stiles arranged at the front of the booth, vertical partitions extending rearwardly at substantially right angles to said stiles and forming the side walls of said booth, each of said partitions including a body and glass facings secured to the opposite sides thereof, means supporting said stiles so that the lower ends thereof are spaced above the floor, and horizontal T-members secured at their forward ends to each of said stiles and at their rear ends to a supporting structure, the transverse portions of said T-members engaging the upper and lower edges of the glass facings of the respective partition and the tongue portions thereof being received between said glass facings.

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