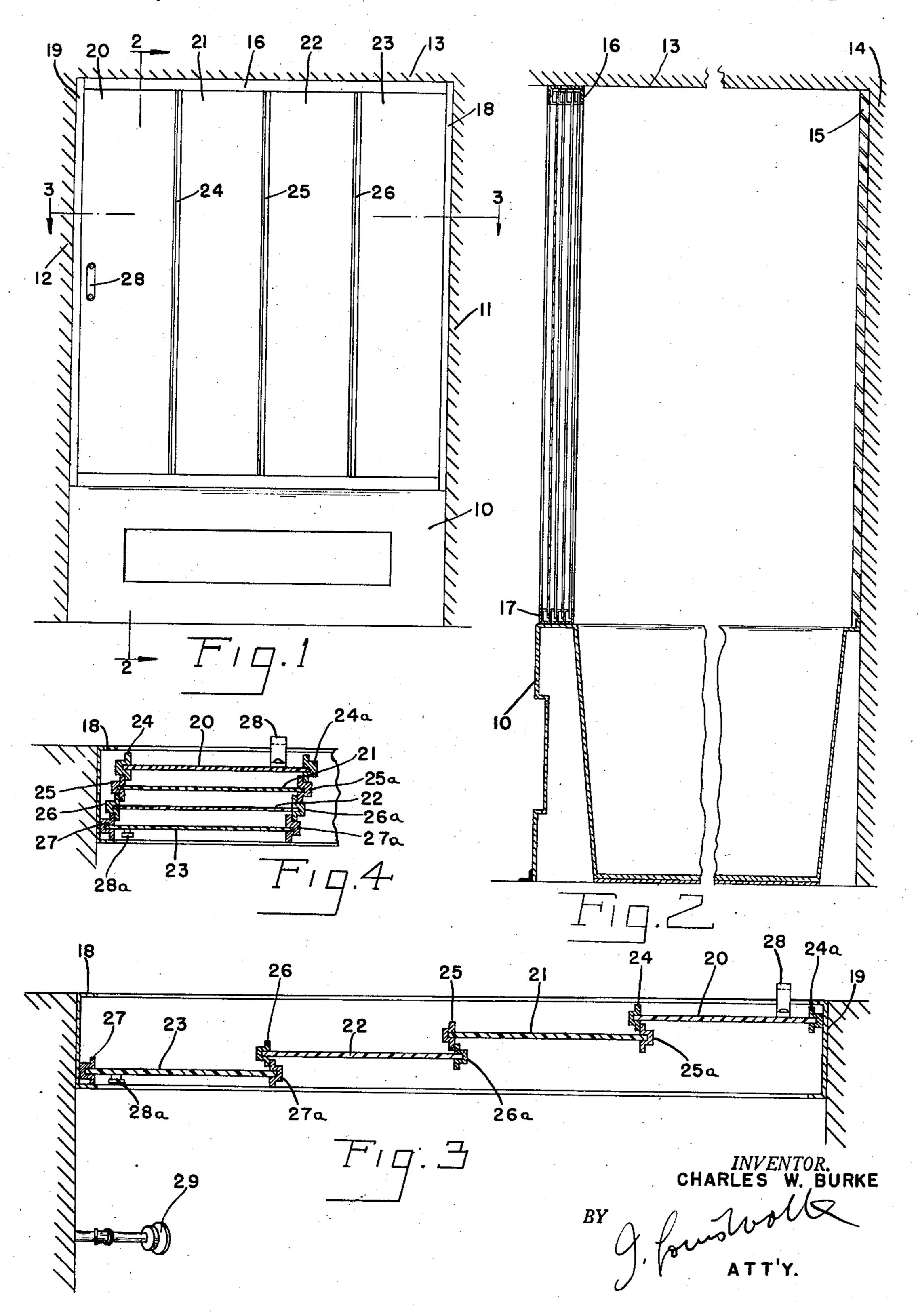
TELESCOPIC DOOR

Filed May 21, 1954

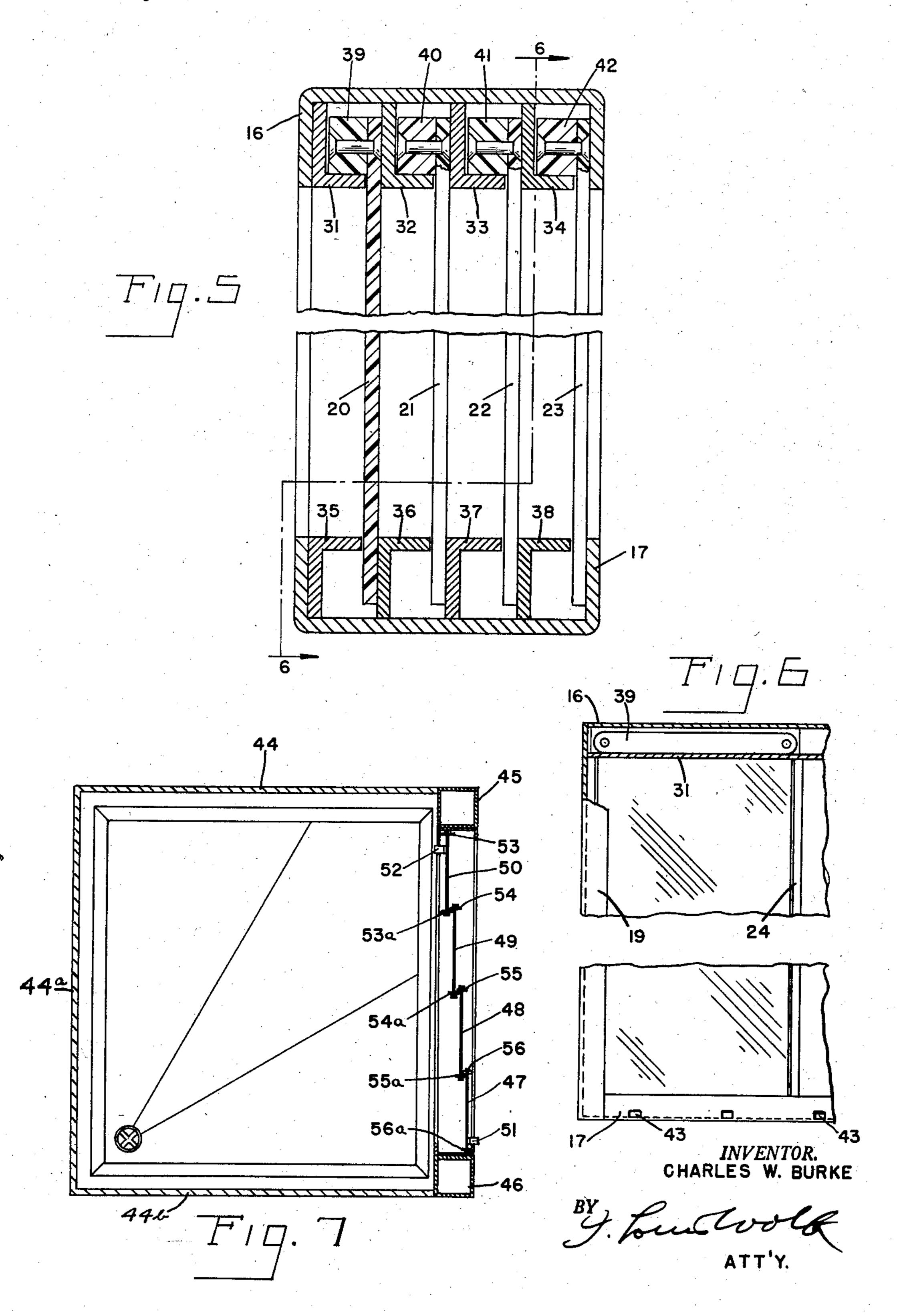
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TELESCOPIC DOOR

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TELESCOPIC DOOR

Charles W. Burke, Dayton, Ohio Application May 21, 1954, Serial No. 431,522 1 Claim. (Cl. 160—202)

The present invention relates to a new and useful improvement in shower stall installations, and more particularly to a sectional telescopic shower door assembly suitable for installation in combination with a tub or in a shower stall.

It is an object of the present invention to provide a sliding sectional shower door and mounting means therefor which shall be easily installed and of relatively low cost, while yet highly effective for the purpose.

It is a further object of the present invention to provide a combination tub and shower arrangement incorporating a sectional sliding door assembly.

Further objects of the invention and novel features of the invention will be apparent from the following specification and claims and in the accompanying drawings.

In the drawings:

Figure 1 is a view in elevation taken in front of or facing a tub and shower door assembly of the invention.

Figure 2 is a somewhat enlarged vertical transverse cross-sectional view taken along lines 2—2 of Figure 1.

Figure 3 is a somewhat enlarged horizontal cross-section.

Figure 3 is a somewhat enlarged horizontal cross-sectional view taken along lines 3—3 of Figure 1.

Figure 4 is a horizontal view corresponding to Figure 3 but with the door panels in open position.

Figure 5 is an enlarged vertical transverse cross section taken along lines 2—2 of Figure 1 illustrating the manner in which the panel sections are slidably positioned and the track structure.

Figure 6 is a vertical longitudinal view partly in cross section illustrating the position of one of the panels of the sectional sliding door member.

Figure 7 is a horizontal view partly in cross section illustrating a modified form of the invention incorporated in a stall shower.

Referring to the drawings in detail wherein like reference characters denote like parts, Figures 1 and 2 show a tub 10 enclosed in a recess defined by side wall portions 11 and 12, rear wall portion 14 and ceiling 13. The tiled portion of wall 14 is shown at 15. Across the top of the recess positioned directly above the outer edge of the tub is positioned a track supporting member 16 in the form of an inverted U-channel. This channel member is fastened to the ceiling between the side walls of the recess by any suitable means, as by screws or the like. Within channel 16 are positioned a plurality of track members which support sliding sectional panels 20, 21, 60 22 and 23 which panels are slid to open or closed position by means of handle 28. The bottom edges of these panels are guided by guide tracks formed in another U-channel member 17 positioned on the top outer edge portion of the tub below and opposite the upper channel 16. Vertical channel members 18 and 19 are provided at the walls of the recess and serve to receive the outer edges of the outermost panels at each side of the door. These vertical channels extend between members 16 and 17. The panels engage each other through edge members 24, 25 and 26 which are described in greater detail 70 in Figure 3.

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Figure 3 illustrates a horizontal cross section in which the relationship of the vertical channels and the sections is illustrated in closed position. As shown, vertical channels 18 and 19 are positioned at each side of the recess between the upper and lower channels in which the section panels are guided. Each panel is formed with its vertical edges having outwardly projecting longitudinal flanged portions. These may be in the form of integrally shaped or molded portions, or preferably in the form of preformed strips as shown at 24 and 24a on panel 20, 25 and 25a on panel 21, 26 and 26a on panel 22, and 27 and 27a on panel 23. These edge members permit interlocking engagement of the respective panels so that by pulling horizontally on handle 28 and sliding the first panel in one direction the leading edge in that direction will engage a corresponding edge projection on the adjacent panel and so on. In closing, the same thing will occur. For example, the edge member on panel 20 will engage edge member 25 on panel 21, with continuation of the horizontal sliding movement of panels 20 and 21 edge member 25 will engage member 26 on panel 22, and when the door is fully open all of the panels will be lined up adjacent and parallel to end panel 23 as shown in Figure 4.

In closing, the door handle 28 and panel 20 are slid horizontally to the closed position. In doing so edge member 24 engages member 25a on panel 21, member 25 in turn engages member 26a on panel 21. The fully closed position is illustrated in Figure 3. Another advantage of the arrangement shown in Figure 3 is that the spray head of the shower 29 is positioned so that the shower spray will flow in a direction away from the junction of the respective edge members to minimize leakage. In opening the door from the inside handle 28a may be utilized.

The structure of the upper and lower horizontal channel members and the respective track and guiding members is illustrated in Figures 5 and 6. The tracks are formed of depending right angular members 31, 32, 33 and 34 welded or otherwise fastened to the bottom of channel 16 with the horizontal legs thereby forming tracks. Slidable members 39, 40, 41 and 42 are attached to the respective door panels adjacent the top edges of each. Preferably, these slidable members are in the form of strips bolted or riveted to the panels, but may be formed integrally therewith. The bottom surfaces of these strips bear against and are in sliding engagement with the upper surfaces of the horizontal tracks, as shown. The door panels 20, 21, 22 and 23 are attached to these strips and depend therefrom being thereby slidably supported by the tracks. The bottom channel member 17, which is attached to the outer top edge of the tub, as shown in Figure 2, or at the base of a shower stall if desired, is provided with guiding channels or grooves within which the bottom edges of the panels are positioned and guided as shown at the bottom of Figure 5. One preferred manner of providing these channels is by the use of spacers 35, 36, 37 and 38 in the form of elongated right angled members as shown, although any other desirable type of spacing members may be provided. These spacers serve to hold the panels in a vertical line while they are being moved horizontally to open and close the door. The vertical channel 19 at one end is also shown in Figure 6, as well as bottom horizontal channel member 17. Since the bottom channel will tend to collect water, openings 43 are provided along its base opening toward the tub to permit drainage.

In Figure 7 is illustrated a modified form of the invention in combination with a stall shower. In this arrangement the walls of the stall are shown at 44, 44a and 44b. The opening to the stall is defined by posts 45 and 46. The panels of the sliding door are 47, 48,

49 and 50. Handles 51 and 52 are provided for sliding the panels in either direction from either side. Edge members 53, 53a, 54, 54a, 55, 55a, 56 and 56a are provided to provide the interlocking arrangement similar to that shown in Figures 3 and 4. Although not shown, the 5 panels slide in tracks supported in a channel, and are guided by a bottom channel similar to the members illustrated in Figure 5.

Any suitable materials of construction may be utilized for fabricating the products of this invention. The door panels may be of glass, metal or plastic. Preferably, the panels are constructed of translucent plastic material such as polyester resin reinforced with glass fibers. The channel and track members may be of metal or plastic, but are preferably of aluminum Monel metal or stainless or plated steel. The edge engaging members are also preferably of similar metals. The sliding members which engage the tracks and support the panels may be of plastic, metal, or other suitable material. In place of the slidable strip, wheels may be used.

This invention is susceptible to various changes in form, proportions or construction, all of which fall within the scope of the invention as defined by the appended claim.

I claim:

A sectional shower bath door comprising a plurality of parallel, spaced, horizontally supported overhead track members, a plurality of vertically depending separate shower door panels including an outermost panel, at least one intermediate panel, and an innermost panel, each slidably supported upon one of said overhead track members, a plurality of horizontally positioned spaced

grooved members positioned across the bottom of the shower opening and directly beneath the overhead track members, the bottom edge portions of each door panel being slidably positioned within and engaging one of said spaced grooved members, said outermost door panel having an inwardly turned edge portion coextensive with and extending along each vertical edge thereof, each said intermediate door panel having an edge portion which is both inwardly and outwardly turned coextensive with and extending along each vertical edge thereof, said innermost panel having outwardly turned edge portions coextensive with and extending along each vertical edge thereof, the panels being arranged with the respective edge portions of each being positioned for interlocking engagement with a corresponding edge portion of an adjacent panel whereby said panels may be moved horizontally to open or close said door by sliding the outermost panel to one side or the other and causing horizontal movement of said panels upon their respective tracks by effecting successive engagement of the inner engaging portions of the respective panels.

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