Nov. 13, 1962 R. K. GRAFF 3,063,522

PARTITION WALL

Filed Oct. 16, 1959 3 Sheets-Sheet 1

Fig. 1.

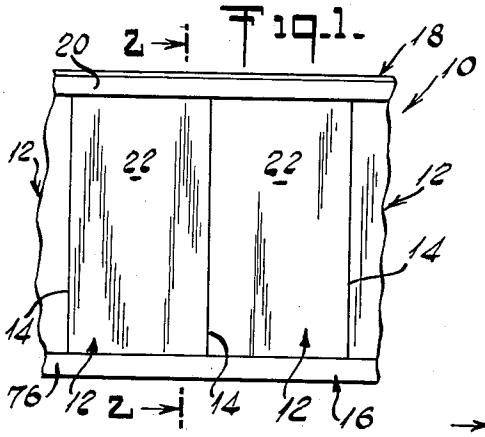


Fig. 6.

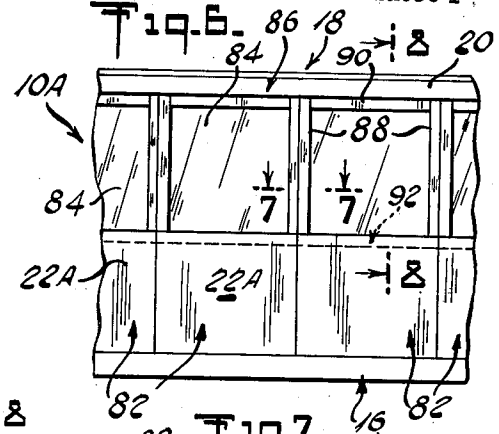


Fig. 10.

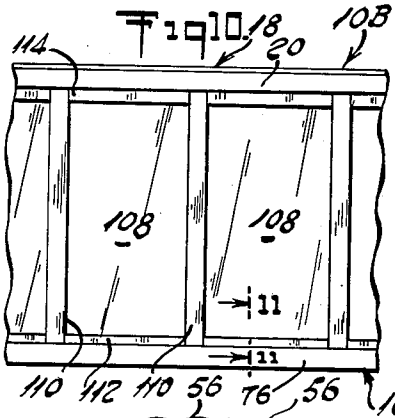


Fig. 7.

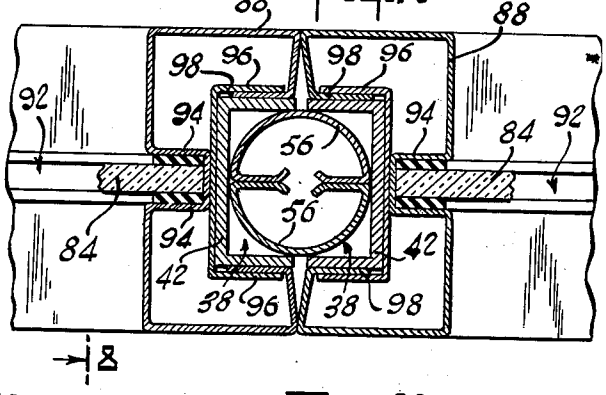


Fig. 8.

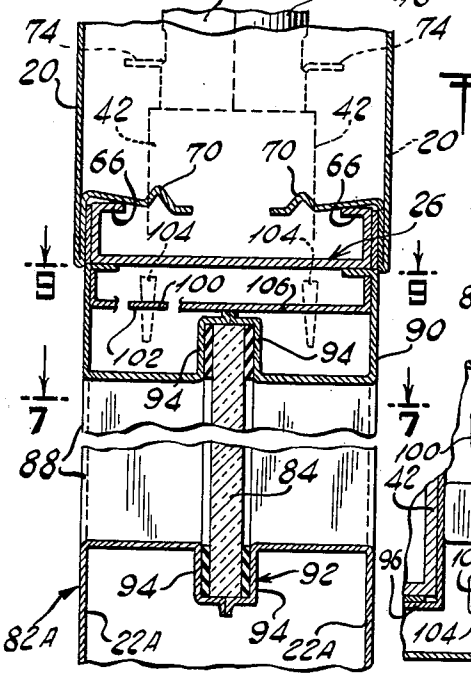


Fig. 11.

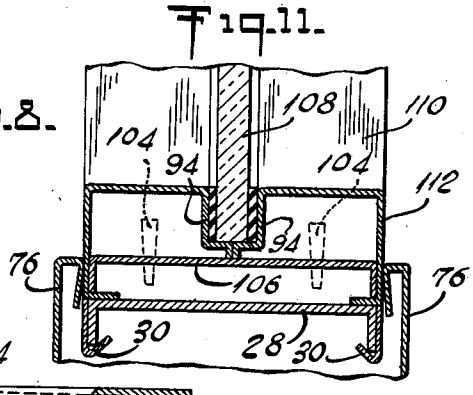
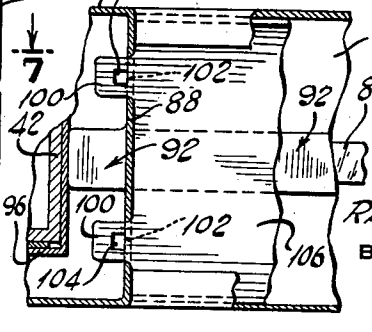


Fig. 9.



INVENTOR
RAYMOND K. GRAFF
BY Harry Cole
ATTORNEY

Nov. 13, 1962 R. K. GRAFF 3,063,522

PARTITION WALL

Filed Oct. 16, 1959 3 Sheets-Sheet 2

Fig. 2.

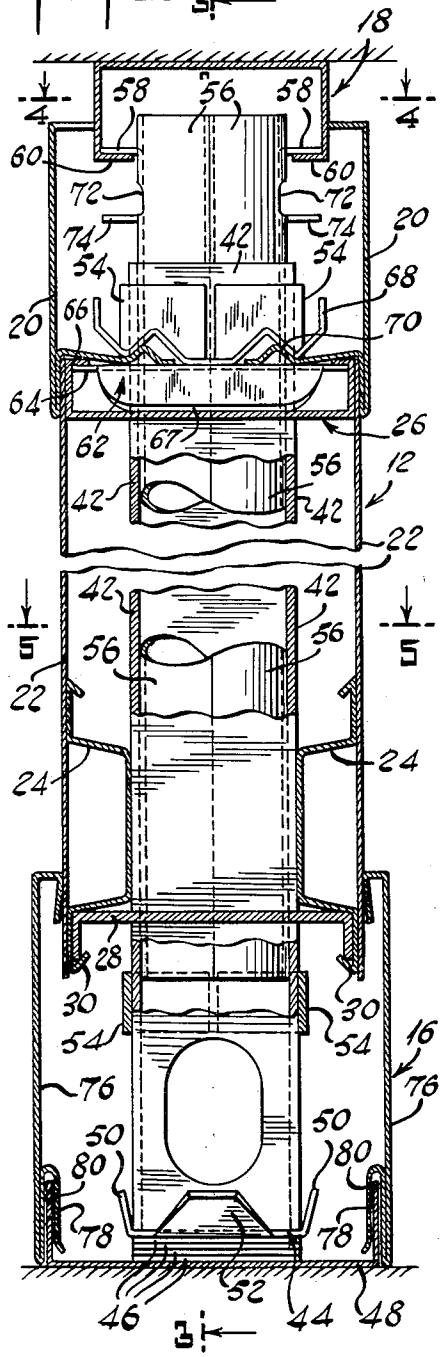


Fig. 4.

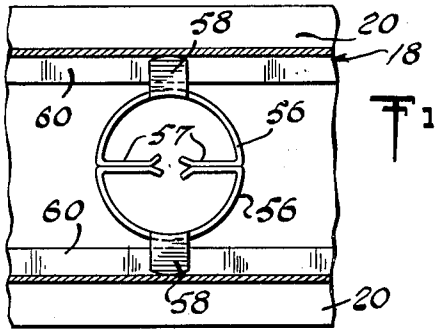


Fig. 4a.

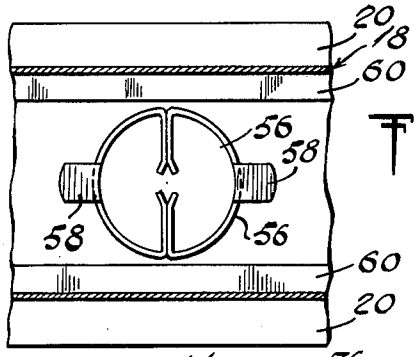


Fig. 5.

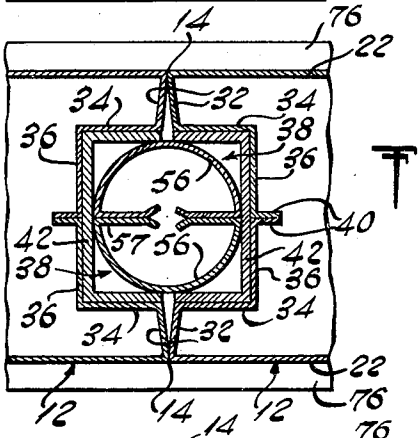
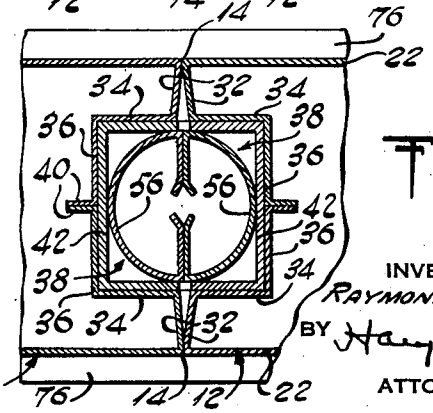


Fig. 5a.



INVENTOR
RAYMOND K. GRAFF
BY Harry Cole
ATTORNEY

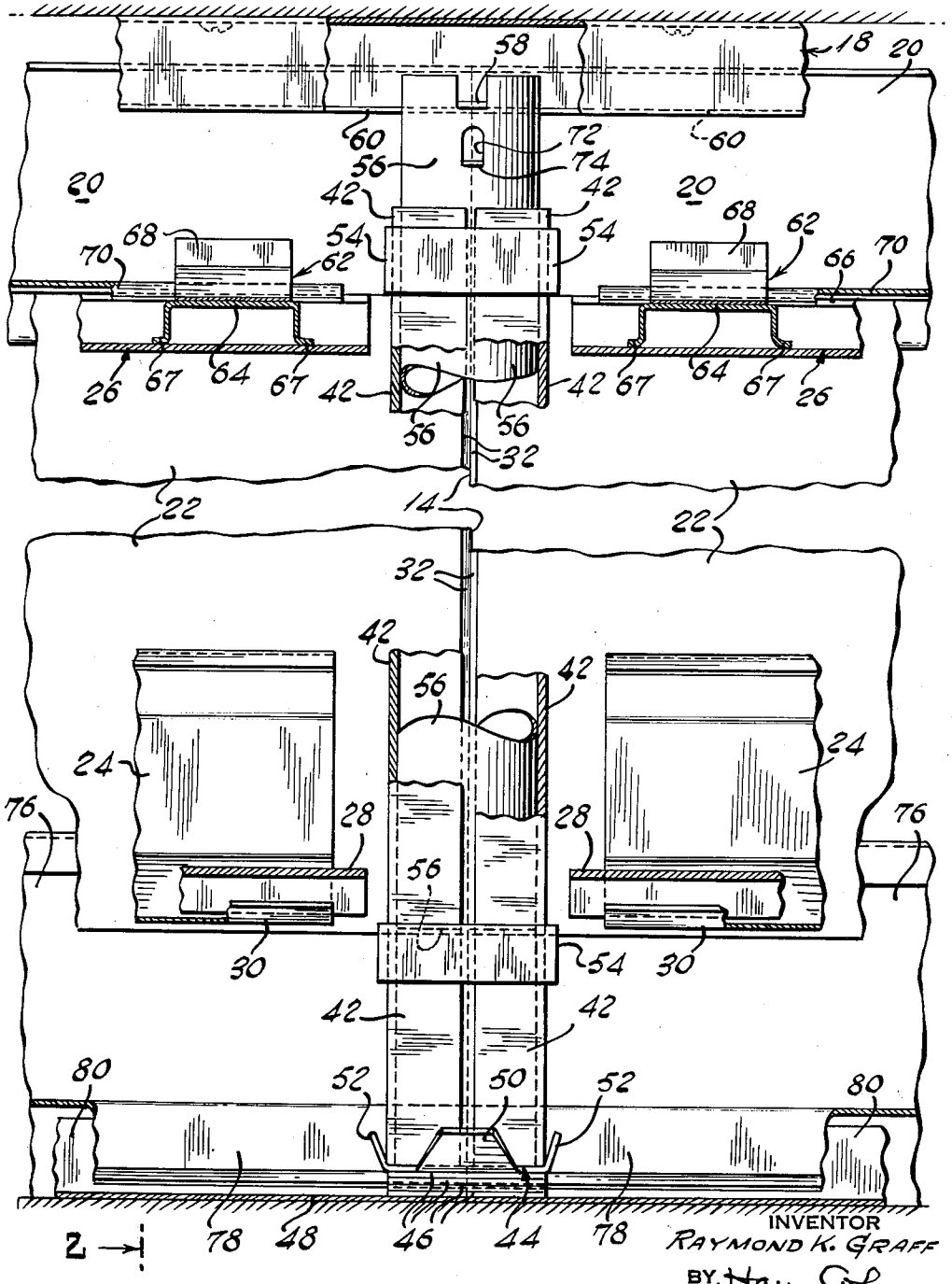
Nov. 13, 1962 R. K. GRAFF 3,063,522

PARTITION WALL

Filed Oct. 16, 1959 3 Sheets-Sheet 3

2 → | 2 → |

Fig. 3



INVENTOR
RAYMOND K. GRAFF
BY Harry Cole
ATTORNEY

United States Patent Office 3,063,522 Patented Nov. 13, 1962

3,063,522
PARTITION WALL

Raymond K. Graff, Yonkers, N.Y., assignor to Aetna Steel Products Corp., New York, N.Y., a corporation of New York

Filed Oct. 16, 1959, Ser. No. 846,987
16 Claims. (Cl. 189—34)

This invention relates to partition walls, and while useful for other purposes is especially advantageous in respect to partitions formed of all steel panel units or steel panel units which are partially glazed.

The principal object of the invention is to provide a partition wall construction which is formed of a series of panel units secured in end to end wall-defining relation in such a way that one or more panel units can be easily and quickly removed, replaced or interchanged at any point in the wall without the necessity for removing adjacent panel units. By reason of this construction of the wall, the partition, after having been erected, can be easily and quickly modified to provide a door or panel change therein at any desired location along the length of the wall.

The above and other objects, features and advantages of this invention will be fully understood from the following specification considered in connection with the accompanying illustrative drawings.

In the drawings:

FIG. 1 is a side view in elevation of part of a partition wall;

FIG. 2 is a sectional view, on a larger scale, on the line 2—2 of FIG. 1 and on the line 2—2 of FIG. 3;

FIG. 3 is a sectional view on the line 3—3 of FIG. 2;

FIG. 4 is a horizontal sectional view on the line 4—4 of FIG. 2, showing the panel unit retaining means in projected or operative position;

FIG. 4*a* is a view similar to FIG. 4 showing the panel retaining means in panel releasing position;

FIGS. 5 and 5*a* are views similar to FIGS. 4 and 4*a*, respectively, taken on the line 5—5 of FIG. 2;

FIG. 6 is a side view of part of a partition wall formed of panel units which comprise steel and glass panels in each unit;

FIG. 7 is a horizontal sectional view on the line 7—7 of FIG. 6 and on the line 7—7 of FIG 8;

FIG. 8 is a vertical sectional view on the line 8—8 of FIG. 6 and on the line 8—8 of FIG. 7;

FIG. 9 is a detailed plan view, partly in section, on the line 9—9 of FIG. 8;

FIG. 10 is a side view in elevation of part of a partition wall in which the panel units are formed of glass in steel frames; and

FIG. 11 is a vertical sectional view, on a larger scale, on the line 11—11 of FIG. 10.

Referring now to the drawings in detail and first to the partition wall **10** illustrated by FIGS. 1 to 3, 4, 4*a*, 5 and 5*a*, said wall comprises a series of steel panel units **12** disposed in end to end wall-defining relation, the meeting edges of adjacent panel units being indicated at **14** in FIG. 1. Said partition wall also includes base **16**, a ceiling runner **18** and removable closure trim strips **20**.

Each panel unit **12** comprises a pair of laterally spaced panel plates **22** which are reinforced by the channels **24** (FIG. 2) welded to said plates, respectively, on the inner sides thereof. The panel plates **22** are connected to each other by the upper and lower channels **26** and **28**, respectively, which extend transversely between the companion panel plates of the panel unit and are secured thereto, by welding, in the case of the upper channel **26**, and by the inturned and crimped lower edges **30** of the reinforcing channels **24**, in the case of lower channel **28**. Referring to FIGS. 5 and 5*a*, it will be noted that at the

ends of each panel unit the companion panel plates **22** of that unit have integral parts **32**, **34** and **36** which define a vertically extending recess **38** inwardly of the panel unit at the edge thereof. The transversely extending parts **36** of the companion plates **22** are provided with flanges **40** which are secured to each other by spot welding or in any other suitable way. A vertical post, formed of a pair of channels **42** which are positioned in the recesses **38**, respectively, at the meeting ends **14** of adjacent panel units **12** is provided at each end of each panel unit for supporting the panel units in vertical position on the base **16**. For this purpose each post channel **42** is secured in the recess **38**, by welding or other fastening means to the companion plates **22** of the panel unit. The lower end of each post is supported on the base plate **44** mounted on shims **46** on the base runner **48** which is secured to the floor in any suitable way. The post positioning and supporting plate **44** is provided with the upwardly inclined ears **50** and **52** which hold the lower end of the post in position. It will be understood that as illustrated by FIG. 3, each post supporting and positioning plate **44** is disposed in the base **16** at the meeting ends of adjacent panel units, and as clearly illustrated by FIGS. 2 and 3, the posts project below and above the panel units. A pair of U-shaped tie members **54** engage the companion post channels **42** below the connecting channel **28** and a similar pair of U-shaped tie members engage the companion post channels **42** above the upper connecting channel **26**.

In accordance with the present invention, pursuant to the above stated principal object thereof, provision is made for preventing relative transverse movement of the adjacent panel units at the meeting ends thereof when the wall is in erected position, the construction and arrangement in this respect being such that the panel units can be readily moved transversely realtive to each other at the meeting ends of adjacent panel units when it is desired to remove a panel unit at any location along the length of the wall. The means provided for this purpose comprises the companion semi-cylindrical or tubular members **56** which are disposed in the vertical recesses **38** at the meeting ends of adjacent panel units. Said members **56** are made of steel and are strong and rigid and are provided with the internal flanges **57** which extend for the full lengths of said members. The companion semi-cylindrical members **56** are movable by rotation around the vertical axis of the tube or cylinder, from the projecting or panel unit retaining positions illustrated by FIGS. 4 and 5 to the panel unit releasing positions illustrated by FIGS. 4*a* and 5*a*. In the projected positions of retaining members **56**, illustrated by FIGS. 4 and 5, said members extend upwardly into the channel of the ceiling runner **18**, as illustrated by FIGS. 2 and 3, and are provided with lateral projections, here shown as struck-out tabs **58**, which engage the flanges **60** of the ceiling runner.

When the members **56** are moved to their panel releasing positions illustrated in FIGS. 4*a* and 5*a* said lateral projections clear the flanges **60** and enable said members to move downwardly so that the upper ends of said members are below the flanges **60** of the ceiling runner **18**. More specifically, in the operative or projected position of the retaining members **56** illustrated by FIG. 5, each of the companion retaining members extends transversely across the meeting ends of adjacent panel units and thereby prevent relative transverse movement of the adjacent ends of the adjacent panel units. In this projected position each of the retaining members **56** is positioned in both of the vertical recesses **38** of the tube adjacent panel ends, within the companion channels **42** in said recesses and in rotary engagement with said channels. As illustrated in FIGS. 4*a* and 5*a*,

the companion retaining members 56 are movable to the releasing positions in which each of said retaining members is disposed entirely within the companion recesses 38 at the meeting ends, respectively, of adjacent panel units.

In order to move the companion retaining members 56 from the panel unit retaining positions to the panel unit releasing positions, it is necessary, of course, to remove the upper closure and trim strips 20. These trim strips are removably secured to the upper ends of the panel units in snap-on fashion by the clips 62. Clip 62 comprises an inverted channel member having its web 64 in engagement with the undersides of the flanges 66 of upper channel 26, the lower edges 67 of the clip channel being in resilient engagement with the bottom of the channel 26. A resilient clip member 68 is riveted to the web 64 of the clip channel, and the inturned ends of the trim strips 20 have portions 70 which are resiliently and removably engageable with the resilient member 68 of the spring clip 62 between said member 68 and the upper surface of the web 64 of the clip channel, as illustrated in FIGS. 2 and 3.

It will be understood that when it is desired to remove a panel unit from the partition wall the trim strips 20, which extend along a plurality of the panel units, are removed. The retaining members 56 at each end of said unit are moved from the positions illustrated in FIGS. 4 and 5 to the positions illustrated in FIGS. 4*a* and 5*a*. The turning movement of members 56 required for releasing the adjacent ends of adjacent panel units for relative transverse movement is facilitated by the provision of openings 72 in members 56 through which a suitable tool, such as a rigid bar, may be inserted for turning said members. Members 56 are provided with struck-out tabs 74 which engage the upper edges of channels 42 to limit the downward movement of said members 56 in recesses 38 when said members are moved to the panel unit releasing positions illustrated in FIGS. 4*a* and 5*a*. The longitudinally extending base plates 76 are removed to provide access to the lower tie clips 54 for the removal thereof, access to the upper tie clips 54 being had upon removal of the trim strips 20. It will be noted that the base plates 76 are removably engageable with the floor plate 48 by the resilient engagement of the inverted U-shaped flanges 78 with the upstanding flanges 80 of the floor plate 48 of the base 16.

As previously indicated, the present invention is also applicable to partition walls which include glass panels. As illustrated in FIG. 6, the partition wall 10A includes a series of panel units 82 disposed in end to end wall-defining relation, the base 16, ceiling runner 18, and finishing strips 20. Said base, ceiling runner and finishing strips may be the same as in the wall 10. Each panel unit 82 comprises a pair of laterally spaced steel panel members 22A and a glass panel 84 mounted in a metal frame 86 which is connected to the companion steel panel members 22A, as hereinafter more particularly described. In this form of the invention the metal frame 86 for the glass panel 84 comprises the side rails 88, a top rail 90 and a bottom rail 92 (FIGS. 6 to 8) formed by downwardly bent upper portions 94 of the companion metal panel members 22A of the panel unit 82. The side rails 88 are provided with internal recesses 38 which are continuous with the corresponding vertical recesses in the metal panel members 22A which are formed in the same way as described above with reference to the panel members 22 in the partition wall 10. The post channels 42 are welded or otherwise secured in recesses 38 of the side rails 88 by means of the vertically extending channel strips 96 which are welded or otherwise secured to the inner parts 98 of the companion side rail (FIG. 7). The upper rail 90 is secured at its opposite ends to the side rails 88 by the engagement of the lugs 100 in slots 102 in said side rails, with tapered securing pins 104 driven through the apertures in the lugs 100. The lugs 100 are formed on a channel 106 which is welded to the upper side of rail 90 (FIG. 9). The trim strips 20 are releasably secured to the upper rail 90 by the clips 62 in the same way as described above in the construction illustrated by FIGS. 2 and 3. It will be understood that the posts formed by channels 42 are supported at their lower ends in the same way as in wall 10 and extend upwardly beyond the upper rails 90 as illustrated in FIG. 8. Also, it will be understood that the releasable retaining members 56 coact with the panel units 82 and with the ceiling runner as described above with reference to the partition wall 10.

In the form of the invention illustrated in FIGS. 10 and 11 the glass panels in the panel units of the wall 10B extend for substantially the full height of the partition wall between the base 16 and the ceiling runner 18. In this construction the glass panels are indicated at 108 and are each mounted in a frame which includes the side rails 110, a bottom rail 112 and a top rail 114. The side rails 110 and the top rail 114 of each panel unit which includes the glass panel 108 are of the same constructions as the side rails 88 and the top rail 90 in the partition wall 10A. In this form of the invention, however, the bottom rail 112 is formed substantially in the same way as the metal panel parts 22A of the panel units illustrated in FIGS. 6 to 8. As illustrated in FIG. 11, the bottom rail 112 is secured at its opposite ends to the side rails 110 substantially in the same manner as the securement of the upper rail 90 to the side rails 88 in the partition wall 10A. It will be understood that the side rails 110 are provided with the post channels 42 and with the releasable panel retaining members 56 in the same way as in the walls 10 and 10A.

While I have shown and described the preferred embodiment of my invention, it will be understood that the invention may be embodied otherwise than as herein specifically illustrated or described, and that certain changes in the form and arrangement of parts and in the specific manner of practicing the invention may be made without departing from the underlying idea or principles of this invention within the scope of the appended claims.

What I claim is:

1. In a partition wall having a plurality of wall-defining panel units disposed in edge to edge meeting relation, each of said panel units having at its opposite ends vertical edges each provided with an internal vertically extending recess open at said edge of the panel and in registry with a similar recess in the adjacent edge of an adjacent panel unit, a ceiling runner, and means releasably engaging said ceiling runner and extending downwardly therefrom into the adjacent recesses of adjacent panel units in positions transversely of their meeting edges for releasably preventing relative transverse movement of adjacent panel units, said means being movable in said adjacent recesses to positions in which the adjacent panel units are released therefrom for relative transverse movement and being downwardly movable out of engagement with said ceiling runner to enable separation of one panel unit from adjacent panel units of the partition wall.

2. In a partition wall having a plurality of wall-defining panel units disposed in edge to edge meeting relation, each of said panel units having at its opposite ends vertical edges each provided with an internal vertically extending recess open at said edge of the panel and in registry with a similar recess in the adjacent edge of an adjacent panel unit, a ceiling runner, and means releasably engaging said ceiling runner and extending downwardly therefrom into the adjacent recesses of adjacent panel units in positions transversely of their meeting edges for releasably preventing relative transverse movement of adjacent panel units, said means being movable in

said adjacent recesses to positions in which the adjacent panel units are released therefrom for relative transverse movement and being downwardly movable out of engagement with said ceiling runner to enable separation of one panel unit from adjacent panel units of the partition wall, said downwardly extending means comprising a pair of semi-cylindrical vertical members which are movable in said adjacent recesses from projected positions in which said semi-cylindrical members extend across the meeting edges of adjacent panel units to retracted positions in which one of said semi-cylindrical members is removed from one of said adjacent recesses and is positioned in the other of said adjacent recesses and the companion cylindrical member is removed from said other of said adjacent recesses and is positioned in said one of said recesses.

3. In a partition wall having a plurality of wall-defining panel units disposed in edge to edge meeting relation, each of said panel units having at its opposite ends vertical edges each provided with an internal vertically extending recess open at said edge of the panel and in registry with a similar recess in the adjacent edge of an adjacent panel unit, a ceiling runner, and means releasably engaging said ceiling runner and extending downwardly therefrom into the adjacent recesses of adjacent panel units in positions transversely of their meeting edges for releasably preventing relative transverse movement of adjacent panel units, said means being movable in said adjacent recesses to positions in which the adjacent panel units are released therefrom for relative transverse movement and being downwardly movable out of engagement with said ceiling runner to enable separation of one panel unit from adjacent panel units of the partition wall, said downwardly extending means comprising a pair of semi-cylindrical vertical members which are movable in said adjacent recesses from projected positions in which said semi-cylindrical members extend across the meeting edges of adjacent panel units to retracted positions in which one of said semi-cylindrical members is removed from one of said adjacent recesses and is positioned in the other of said adjacent recesses and the companion cylindrical member is removed from said other of said adjacent recesses and is positioned in said one of said recesses, said semi-cylindrical retaining members having parts at their upper ends which are engaged with the ceiling runner for supporting said retaining members in said projected positions thereof and which are automatically disengaged from said ceiling runner by the movement of said retaining members to said retracted positions thereof.

4. In a partition wall having a plurality of wall-defining panel units disposed in edge to edge meeting relation, each of said panel units having at its opposite ends vertical edges each provided with an internal vertically extending recess open at said edge of the panel and in registry with a similar recess in the adjacent edge of an adjacent panel unit, vertical channel members secured in said recesses, respectively, of each panel unit for supporting the companion panel unit in vertical position, said channel members being open at the adjacent edges, respectively, of the companion panel unit, a ceiling runner, and means releasably engaging said ceiling runner and extending downwardly therefrom into the channel members at the meeting edges of adjacent panel units for releasably preventing relative transverse movement of adjacent panel units, said means comprising a pair of semi-cylindrical vertical members rotatable in said channel members about a vertical axis from projected positions in which they extend transversely of the meeting edges of adjacent panel units to retracted positions in said channel members, respectively, clear of said meeting edge of the panel units, said semi-cylindrical members having parts at their upper ends which are engaged with the ceiling runner for supporting said retaining members in said projected positions thereof and which are automatically disengaged from said ceiling runner by the movement of said retaining members to said retracted positions thereof.

5. In a partition wall having a plurality of wall-defining panel units disposed in edge to edge meeting relation, each of said panel units having at its opposite ends vertical edges each provided with an internal vertically extending recess open at said edge of the panel and in registry with a similar recess in the adjacent edge of an adjacent panel unit, vertical channel members secured in said recesses, respectively, of each panel unit for supporting the companion panel unit in vertical position, said channel members being open at the adjacent edges, respectively, of the companion panel unit, a ceiling runner, said channel members and said panel units having their upper ends below said ceiling runner, and means releasably engaging said ceiling runner and extending downwardly therefrom into the channel members at the meeting edges of adjacent panel units for releasably preventing relative transverse movement of adjacent panel units, said means being movable in the channel members of the adjacent edges of adjacent panel units to positions in which the adjacent panel units are released therefrom for relative transverse movement and being downwardly movable out of engagement with said ceiling runner to enable separation of one panel unit from adjacent panel units of the partition wall.

6. In a partition wall having a plurality of wall-defining panel units disposed in edge to edge meeting relation, each of said panel units having at its opposite ends vertical edges each provided with an internal vertically extending recess open at said edge of the panel and in registry with a similar recess in the adjacent edge of an adjacent panel unit, vertical channel members secured in said recesses, respectively, of each panel unit for supporting the companion panel unit in vertical position, said channel members being open at the adjacent edges, respectively, of the companion panel unit, a ceiling runner, said channel members and said panel units having their upper ends below said ceiling runner, and means releasably engaging said ceiling runner and extending downwardly therefrom into the channel members at the meeting edges of adjacent panel units for releasably preventing relative transverse movement of adjacent panel units, said means comprising a pair of semi-cylindrical vertical members rotatable in said channel members about a vertical axis from projected positions in which they extend transversely of the meeting edges of adjacent panel units to retracted positions in said channel members, respectively, clear of said meeting edge of the panel units, said semi-cylindrical members having parts at their upper ends which are engaged with the ceiling runner for supporting said retaining members in said projected positions thereof and which are automatically disengaged from said ceiling runner by the movement of said retaining members to said retracted positions thereof.

7. In a partition wall having a plurality of wall-defining panel units disposed in edge to edge meeting relation, each of said panel units having at its opposite ends vertical edges each provided with an internal vertically extending recess open at said edge of the panel and in registry with a similar recess in the adjacent edge of an adjacent panel unit, vertical channel members secured in said recesses, respectively, of each panel unit for supporting the companion panel unit in vertical position, said channel members being open at the adjacent edges, respectively, of the companion panel unit, a ceiling runner, said channel members and said panel units having their upper ends below said ceiling runner, and means releasably engaging said ceiling runner and extending downwardly therefrom into the channel members at the meeting edges of adjacent panel units for releasably preventing relative transverse movement of adjacent panel units, said means comprising a pair of semi-cylindrical vertical members rotatable in said channel members about a vertical axis

from projected positions in which they extend transversely of the meeting edges of adjacent panel units to retracted positions in said channel members, respectively, clear of said meeting edge of the panel units, said semi-cylindrical members having parts at their upper ends which are engaged with the ceiling runner for supporting said retaining members in said projected positions thereof and which are automatically disengaged from said ceiling runner by the movement of said retaining members to said retracted positions thereof, said ceiling runner comprising a longitudinally extending member having laterally spaced confronting horizontal flanges defining an opening through which the upper ends of said semi-cylindrical members extend with said parts which engage said runner resting on said flanges, respectively, said parts of said semi-cylindrical members being disengaged from said flanges by a rotary movement of ninety degrees of said semi-cylindrical members about said vertical axis, whereby said semi-cylindrical members are automatically disengaged from the ceiling runner concomitantly with their movement to said retracted positions thereof.

8. In a partition wall having a plurality of wall-defining panel units disposed in edge to edge meeting relation, each of said panel units having at its opposite ends vertical edges each provided with an internal vertically extending recess open at said edge of the panel and in registry with a similar recess in the adjacent edge of an adjacent panel unit, means for releasably preventing relative transverse movement of adjacent panel units, comprising releasable retaining members positioned in said adjacent recesses of adjacent panel units and movable therein from projected positions in which said members extend across said adjacent edges of adjacent panel units, thereby preventing said relative transverse movement, to retracted positions in the adjacent recesses, respectively, clear of the meeting edges of adjacent panel units to enable separation of one panel unit from adjacent panel units of the partition wall, said releasable retaining members comprising a pair of semi-cylindrical vertical members rotatable about a vertical axis in said adjacent recesses from said projected positions to said retracted positions, a ceiling runner comprising a longitudinally extending member having laterally spaced confronting horizontal flanges defining a longitudinal opening above the panel units, said semi-cylindrical members extending upwardly beyond said panel units through said longitudinal opening and having parts which rest on said flanges for supporting said semi-cylindrical members when they are in said projected positions in said recesses, said parts of said semi-cylindrical members being disengaged from said flanges by a rotary movement of ninety degrees of said semi-cylindrical members about said vertical axis, whereby said semi-cylindrical members are automatically disengaged from the ceiling runner concomitantly with their movement to said retracted positions thereof, said semi-cylindrical members being downwardly movable by gravity in said recesses upon the disengagement of said parts of said semi-cylindrical members from said flanges.

9. In a partition wall having a plurality of wall-defining panel units disposed in edge to edge meeting relation, each of said panel units having at its opposite ends vertical edges each provided with an internal vertically extending recess open at said edge of the panel and in registry with a similar recess in the adjacent edge of an adjacent panel unit, vertical channel members secured in said recesses, respectively, of each panel unit for supporting the companion panel unit in vertical position, said channel members being open at the adjacent edges, respectively, of the companion panel unit, means releasably engaging the adjacent channel members for releasably securing adjacent panel units to each other in said end to end relation, a ceiling runner, said channel members and said panel units terminating below said ceiling runner in spaced relation thereto, and means vertically movable in the adjacent channels of adjacent panel units and extending upwardly beyond said channel members and said panel units into releasable engagement with said ceiling runner for releasably connecting said panel units to said runner, said means being downwardly movable by gravity clear of said runner upon disengagement therefrom.

10. In a partition wall having a plurality of wall-defining panel units disposed in edge to edge meeting relation, each of said panel units having at its opposite ends vertical edges each provided with an internal vertically extending recess open at said edge of the panel and in registry with a similar recess in the adjacent edge of an adjacent panel unit, vertical channel members secured in said recesses, respectively, of each panel unit for supporting the companion panel unit in vertical position, said channel members being open at the adjacent edges, respectively, of the companion panel unit, means releasably engaging the adjacent channel members for releasably securing adjacent panel units to each other in said end to end relation, a ceiling runner, said channel members and said panel units terminating below said ceiling runner in spaced relation thereto, and means vertically movable in the adjacent channels of adjacent panel units and extending upwardly beyond said channel members and said panel units into releasable engagement with said ceiling runner for releasably connecting said panel units to said runner, said means being downwardly movable by gravity clear of said runner upon disengagement therefrom, and longitudinally extending closure members extending between said runner and said panel units at both sides of the partition wall and mounted in releasable engagement with said units and said runner.

11. In a partition wall having a base and a plurality of wall-defining panel units disposed in end to end wall defining relation, vertical channel members at the opposite ends of each panel unit in fixed relation thereto for supporting said units in vertical position in said relation on said base, the channel members at adjacent ends of adjacent panel units having their open ends in confronting relation, a ceiling runner above said units and said channel members in spaced relation thereto, and means vertically movable in the adjacent channels of adjacent panel units and extending upwardly beyond said channel members and said panel units into releasable engagement with said ceiling runner for releasably connecting said panel units to said runner, said means being downwardly movable by gravity clear of said runner upon disengagement therefrom, said vertically movable means comprising a pair of semi-cylindrical vertical members rotatable about a vertical axis in said adjacent channel members from projected positions in which they extend across the adjacent edges of the adjacent channel members to retracted positions, at right angles to said projected positions, clear of the adjacent edges of adjacent channel members to enable one panel unit to be removed transversely of the wall from between two adjacent panel units.

12. In a partition wall having a base and a plurality of wall-defining panel units disposed in end to end wall defining relation, vertical channel members at the opposite ends of each panel unit in fixed relation thereto for supporting said units in vertical position in said relation on said base, the channel members at adjacent ends of adjacent panel units having their open ends in confronting relation, ceiling means, said channel members and said panel units terminating below said ceiling means, and means vertically movable in the adjacent channels of adjacent panel units and extending upwardly beyond said channel members and said panel units into releasable engagement with said ceiling means for releasably connecting said panel units to said ceiling means, said vertically movable means comprising a pair of semi-cylindrical vertical members rotatable about a vertical axis in said adjacent channel members from projected positions in which they extend across the adjacent edges of the adjacent channel members to retracted positions, at right angles to said projected positions, clear of the adjacent edges of adja-

cent channel members to enable one panel unit to be removed transversely of the wall from between two adjacent panel units, and interengaging means on said semi-cylindrical members and on said ceiling means for releasably connecting said vertically movable means to said ceiling means.

13. In a partition wall having a base and a plurality of wall-defining panel units disposed in end to end wall defining relation, vertical channel members at the opposite ends of each panel unit in fixed relation thereto for supporting said units in vertical position in said relation on said base, the channel members at adjacent ends of adjacent panel units having their open ends in confronting relation, means releasably securing the adjacent channel members to each other for releasably securing adjacent panel units to each other in said end to end relation, ceiling means, said channel members and said panel units terminating below said ceiling means, and means vertically movable in the adjacent channels of adjacent panel units and extending upwardly beyond said channel members and said panel units into releasable engagement with said ceiling means for releasably connecting said panel units to said ceiling means, said vertically movable means comprising a pair of semi-cylindrical vertical members rotatable about a vertical axis in said adjacent channel members from projected positions in which they extend across the adjacent edges of the adjacent channel members to retracted positions, at right angles to said projected positions, clear of the adjacent edges of adjacent channel members to enable one panel unit to be removed transversely of the wall from between two adjacent panel units, and interengaging means on said semi-cylindrical members and on said ceiling means for releasably connecting said vertically movable means to said ceiling means.

14. In a partition wall having a base and a plurality of wall-defining panel units disposed in end to end wall defining relation, vertical channel members at the opposite ends of each panel unit in fixed relation thereto for supporting said units in vertical position in said relation on said base, the channel members at adjacent ends of adjacent panel units having their open ends in confronting relation, means releasably securing the adjacent channel members to each other for releasably securing adjacent panel units to each other in said end to end relation, ceiling means, said channel members and said panel units terminating below said ceiling means, and means vertically movable in the adjacent channels of adjacent panel units and extending upwardly beyond said channel members and said panel units into releasable engagement with said ceiling means for releasably connecting said panel units to said ceiling means, said vertically movable means comprising a pair of semi-cylindrical vertical members rotatable about a vertical axis in said adjacent channel members from projected positions in which they extend across the adjacent edges of the adjacent channel members to retracted positions, at right angles to said projected positions, clear of the adjacent edges of adjacent channel members to enable one panel unit to be removed transversely of the wall from between two adjacent panel units,

and interengaging means on said semi-cylindrical members and on said ceiling means for releasably connecting said vertically movable means to said ceiling means, said interengaging means being automatically disengaged from each other by the rotary movement of said semi-cylindrical members to said retracted positions thereof.

15. In a partition wall having a plurality of wall-defining panel units disposed in edge to edge meeting relation, each of said panel units having at its opposite ends vertical edges each provided with an internal vertically extending recess open at said edge of the panel and in registry with a similar recess in the adjacent edge of an adjacent panel unit, means for releasably preventing relative transverse movement of adjacent panel units, comprising releasable retaining members positioned in said adjacent recesses of adjacent panel units and movable therein from projected positions in which said members extend across said adjacent edges of adjacent panel units, thereby preventing said relative transverse movement, to retracted positions in the adjacent recesses, respectively, clear of the meeting edges of adjacent panel units to enable separation of one panel unit from adjacent panel units of the partition wall, said releasable retaining members extending upwardly beyond said panel units in said projected positions of said retaining members and movable from upper positions to lower positions concomitantly with their movement to said retracted positions, and means for releasably holding said retaining members in said upper positions when they are in said projected positions.

16. In a partition wall having a plurality of panel units disposed vertically in end to end wall-defining relation, releasable retaining means positioned between the adjacent ends of adjacent panel units and movable from laterally projected positions, in overlapping relation to marginal end portions of said adjacent ends of said units for releasably preventing relative transverse movement of said adjacent panel units, to laterally retracted positions out of said overlapping relation, said releasable retaining means being movable vertically in relation to said panel units to and from upwardly projected positions, means operable conjointly with said releasable retaining means in said upwardly and laterally projected positions thereof for releasably securing the panel units in vertical position in the partition wall, and means operable for releasably holding said retaining means in said upwardly projected positions thereof when said retaining means is in said laterally projected positions thereof.

References Cited in the file of this patent

UNITED STATES PATENTS

673,568	Reinhold	May 7, 1901
2,099,961	McLaughlin	Nov. 23, 1937
2,218,426	Hurlbert	Oct. 15, 1940
2,397,576	Townhill	Apr. 2, 1946
2,629,139	Thelander	Feb. 24, 1953

FOREIGN PATENTS

133,052	Sweden	Sept. 25, 1951