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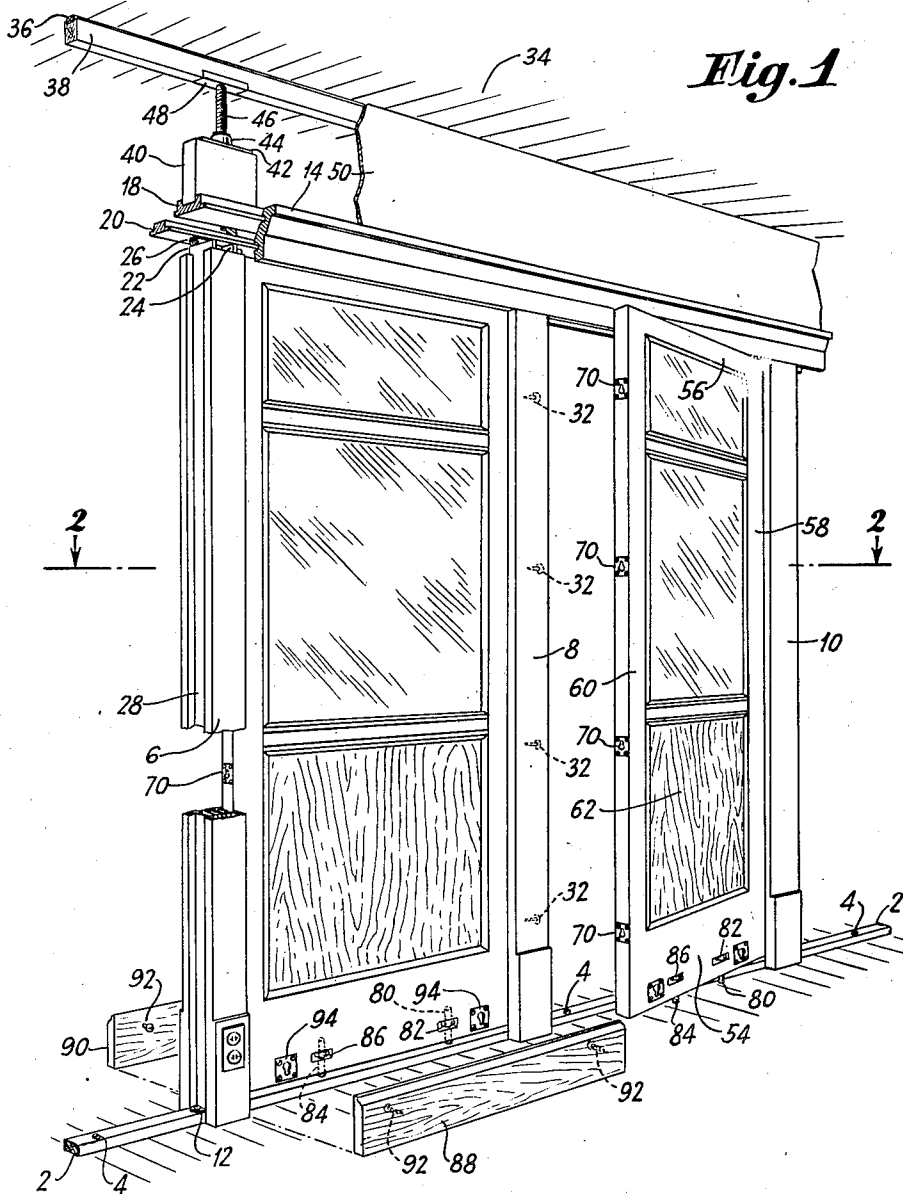
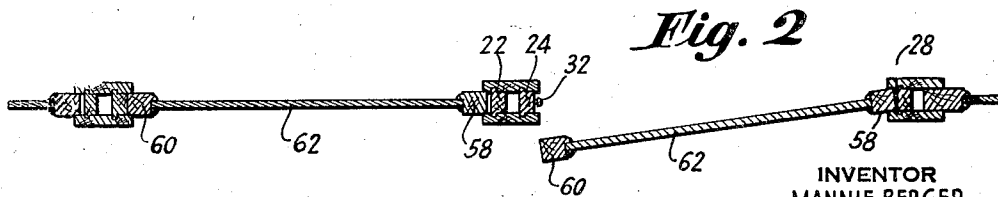
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2,107,624

PARTITION SYSTEM

Filed Sept. 15, 1936

2 Sheets-Sheet 1



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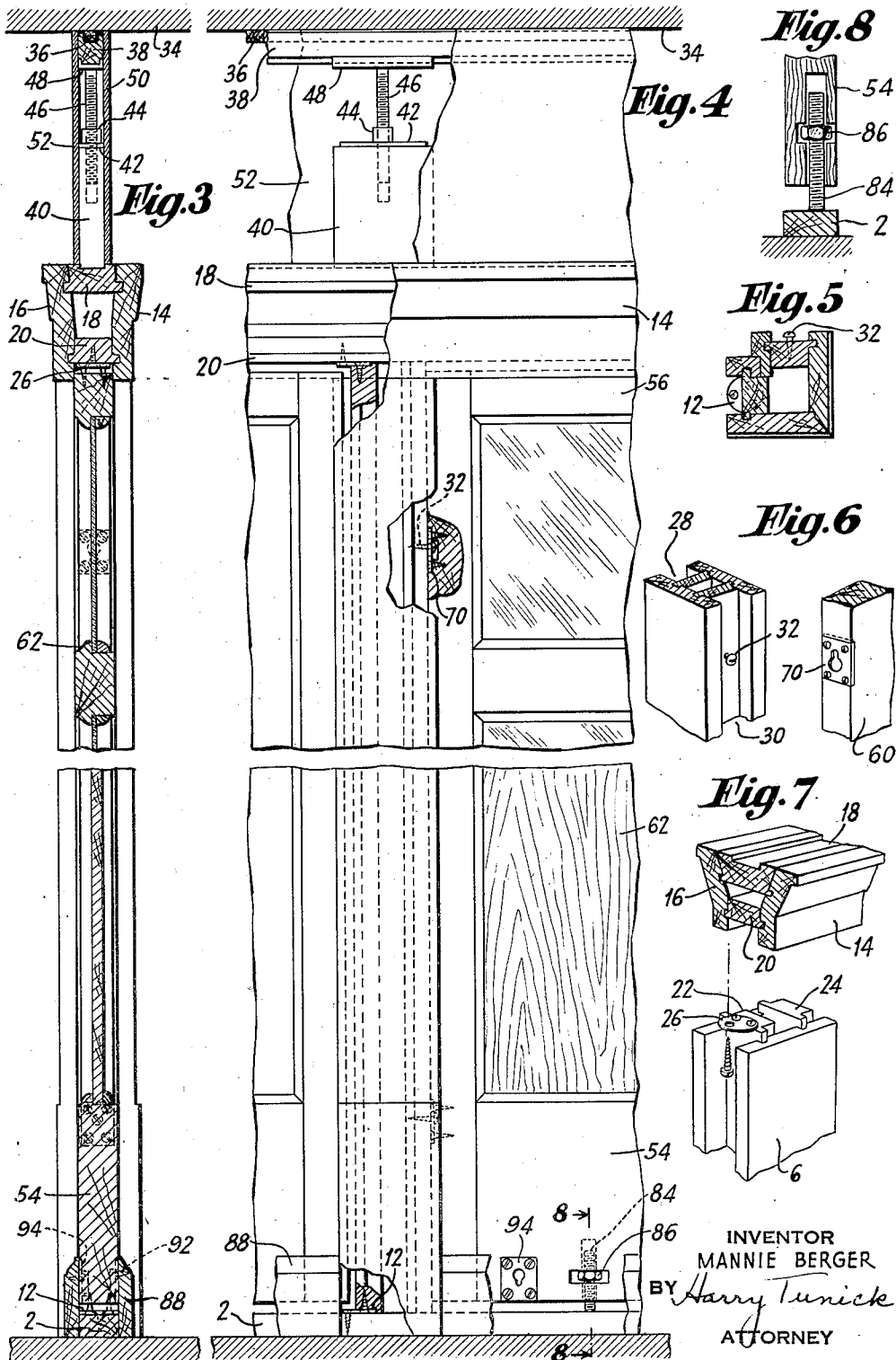
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UNITED STATES PATENT OFFICE

2,107,624

PARTITION SYSTEM

Mannie Berger, Plainfield, N. J.

Application September 15, 1936, Serial No. 100,826

6 Claims. (Cl. 20-4)

My present invention deals with partitions and has for one of its objects the general improvement in partition construction used particularly for offices, hospitals, factories, etc.

Another object of my present invention is to provide a partition system of the sectional type which is portable and which may be constructed or disassembled quickly and easily.

Further, in connection with all ceiling high partitions of which I am aware, some form of fastening to the ceiling has been required, either in the form of nails or screws. This mode of fixing the partitions against the ceiling is objectionable in that removal of the partition causes marring of the ceiling and costly repairs. A further object of this invention is to provide a ceiling high partition arrangement which, though fixed to the ceiling, will not mar the same. Briefly, this is accomplished by frictionally clamping the partition to the ceiling. A more detailed description of this feature will be given hereinafter.

A further feature of my present invention resides in its ready susceptibility to wiring, special hollow posts and hollow cornice caps being provided so as to minimize the labor and difficulty usually encountered when installing electric wires or cables.

A further object of my present invention is to provide a partition system in which the sectional units or panel units are easily removable and interchangeable with door units without requiring dismantling of the partition. Easy removal of a sectional unit is advantageous frequently for the delivery or removal of large objects and interchangeability with door units permits of ready change in office layout at minimum cost.

A further object of my present invention is to provide a partition in which sectional units or panel sections thereof are removable from only one side of the unit. In this way, unlawful entry is discouraged and prevented.

Other objects, advantages and features of my present invention will become self-apparent as the more detailed description thereof proceeds. This more detailed description will be given in greater detail in connection with the accompanying drawings wherein:

Figure 1 is a perspective view partially cut away of my improved partition system;

Figure 2 is a cross-sectional view of Figure 1 looking down on plane 2-2 of Figure 1;

Figure 3 is a vertical cross-sectional view of Figure 1;

Figure 4 is a sectional, vertical, elevational view partially broken away of a portion of Figure 1;

Figure 5 is a cross-section of a post which may be used where the partition is to extend in two right-angled directions;

Figure 6 is an exploded view of a portion of a post and sectional unit; and, similarly,

Figure 7 is an exploded view partially in section of a post and cornice cap used in connection with my improved partition system.

Figure 8 is a view in cross section of a threaded leveling support used in conjunction with my invention.

Referring to the drawings and especially to Figure 1 for the moment, a floor strip 2 is fastened to the floor by means of wood screws 4. In the event that the floor is of cement or concrete or of similar material, holes are drilled therein at suitable intervals and blocks are inserted into the holes. The floor strip is then screwed to the blocks.

Posts 6, 8, 10, etc. are set up at proper succeeding intervals according to section size and door layout. The posts are fastened to the floor strip 2 by means of fastening plates 12, in turn fastened by means of wood screws, as shown in Figures 3 and 4 in greater detail, to the posts.

The cornice cap, (box cornice construction) consisting of side rails 14, 16 and top and bottom rails 18, 20, respectively, (see Figures 1, 3, 4 and 7) is then dropped over the tongue extensions 22, 24 of the posts so that the latter slip into the lower groove or lips of the cornice cap. The tongue extensions 22, 24 for post 6 are shown in greater detail in Figure 7, as are also the lips formed by the extensions of the side rails 14, 16 below the bottom strip 20.

After the posts are adjusted to be vertical they are fastened at their upper ends to the lower cornice strip or rail 20 by means of the metal fastening plates, such as plate 26 for post 6, and by cooperating wood screws as shown in greater detail in Figure 7.

When setting the posts or vertical rails, care should be exercised to have all plain or deeper grooves facing one way and all engaging strip or shallower grooves or panels facing the other way. For example, the deep plain groove 28 and post 6 (see Figures 1 and 6) may be made to face left and the shallower grooves 30 containing the supporting screws 32 may be arranged to face to the right. All of the other posts should be correspondingly arranged so that their similar grooves face the same way.

The cornice is frictionally fixed to the ceiling as shown in greater detail in Figures 1, 3 and 4. In contact with the ceiling 34 is the com-

pressible felt strip 36 mounted within the relatively incompressible wood strip 38. At suitable intervals pressing against the wood strip 38 and the upper cornice strip 18 are extending clamps, 5 each consisting of a wooden block 40, metal pressure plate 42, internally screw threaded nut 44, screw 46 and metal engaging plate 48, the latter being shaped so as to generally conform with the external surface of strip 38. Nut 44 is turned 10 until the post system is firmly, frictionally fixed between ceiling and floor. In this way, marring of the ceiling, heretofore necessitated by the use of screws and nails in paneling and partitioning systems, is avoided.

15 As many clamping blocks and screws are provided as are found necessary. Variable filler pieces or board coverings 50, 52, are suitably fastened to the ceiling strip 38 and cornice piece 14, 16, 18, 20. Concealed horizontal or vertical 20 reenforcing strips for the surface or filler pieces 50, 52 may be used if desired.

One form of sectional unit for insertion between the posts is illustrated in Figure 1. The unit consists of horizontal rails 54, 56, vertical 25 uprights or stiles 58, 60 and a panel 62.

In order to install a sectional unit including, for example, uprights 58, 60 and horizontal members 54, 56, the unit is placed in front of the framed opening formed by two posts. The plain 30 edge of a sectional unit is then inserted, as shown in Figures 1 and 2, into the deeper groove of a post, the sectional unit being maintained at floor strip level. The unit is then swung into alignment with the shallow groove 32 and then raised 35 upwardly so that the upper cross member 36 of the unit enters the groove box cornice formed by the lips of the side rails 14, 16 extending below the horizontal rail 20. Then, without dropping the section it is slid towards the engaging groove 40 side of the post or, as shown in Figures 1 and 2, to the left so that the wood screws 32 engage the circular portion of the pear shaped openings in the metal supporting plates 70. The section is then dropped slightly so that the screws 32 45 reach their final position in the metal fasteners 70 which, of course, is a position lying within the narrower portion of the pear shaped openings within the metal plates 70. In this lower position, the dimensions of the various members 50 should be so chosen and the fastening hooks or screws 32 and their cooperating fastening plates 70 should be so positioned that the upper horizontal rail 56 remains in engagement with the lips of the cornice cap and so that the vertical 55 stiles 58, 60 are in substantial engagement with the lips of the vertical posts such as 8, 10. The locked position for the fastening plates 70 and the cooperating wood screws 32 is shown more clearly in Figure 4, and the details of these fastening members are shown in still greater detail in Figure 6.

In order to support the section at the base of the vertical rail 58 or on the side away from the fastened side, the screw threaded toothed washer 65 or nut 82 is rotated, for example, by means of a screw driver. This, in turn, forces the screw threaded member 80 against the floor strip, thereby supporting the righthand side of the sectional unit. An additional screw threaded supporting means 84, 86 may be provided for the 70 lefthand side of the unit, although these members may be omitted, if desired. The washer 82 and screw thread 80 should be so mounted within the base of the sectional unit that they are 75 accessible from one side only of the sectional

unit. This side is the side facing the interior of a given office space. By utilizing these threaded leveling supports underneath the bottom rail of each section for shimming purposes, which supports are accessible from only one side 5 of each sectional unit, the possibility of gaining access to the office or other space by removing a sectional unit from the outside is avoided, since the screw threaded rod 80 prevents dropping of the section below the cornice lips, which is 10 essential to the removal of the section.

The base boards 88, 90 are applied to both sides of the sectional units after installation by the use of screws and fastening plates 92, 94. 15 It is to be noted that the base boards are not continuous, but run between posts, thereby providing for easy scribing to difficult floor conditions.

It is to be noted that the sectional units are interchangeable with doors and that the panels 20 of each sectional unit may be of glass or wood or a combination of both.

The posts, as illustrated, are provided with electric receptacle openings concealed by plinth blocks, cutout blocks being provided to replace 25 the regular plinth blocks when it is desired to install an electric receptacle.

Transoms may be added, as will be obvious to those skilled in the art, over the sectional units or included as part of the sectional units. For 30 interchangeability to a door with a sectional unit, the door jambs are tongued into the post grooves and screwed thereto. A hollow back door saddle should be provided in this instance by fitting to the floor. The transoms, strikes therefor and the 35 jambs should be made so as to be removable with the doors as a unit, if desired, whereby interchange of a panel sectional unit with a door sectional unit is facilitated.

Wiring can be carried continuously through the 40 hollow cornice cap and through the hollow posts which, as before explained, are provided with openings for receptacles. An opening should be provided in the cap above each post to allow for continuous wiring from posts to cap. In this 45 way, it is possible to run an electric wire continuously through the length of the partition within the cap and vertically from the cornice cap to the floor through the posts.

Figure 5 illustrates a cross-section of a post in 50 which the partition is to be carried on in two right-angled directions.

Having thus described my invention, what I claim is:

1. In combination, a pair of spaced vertical 55 posts, both of said posts being grooved, but one post being grooved more deeply than the other, a channeled member above and positioned across the upper ends of said posts, a sectional panel 60 unit so dimensioned as to be adapted to be inserted in the deeper channel of one of said posts, then moved to alignment with the shallower groove of the other post, then raised into the 65 channeled cross-member and then adapted to be moved into the shallow channel of the other post; and means for removably maintaining said unit in a position so as to engage the lips of the channeled cross-member.

2. Apparatus as claimed in claim 1, characterized by the addition of means within the shallow 70 groove for removably locking said unit in position so as to engage the lips of the grooved post and the lips of the cross-member.

3. Apparatus as claimed in claim 1, characterized by the provision of wood screws and perfo- 75

rated metallic plates in the shallow grooved post and on said section for maintaining said section in engagement with the lips of said posts and cross-member.

5 4. Apparatus as claimed in claim 1, characterized by the provision of means within the shallow groove of the shallow grooved post for preventing return sidewise movement of said section and by the provision of means at the base of
10 said unit for maintaining said unit in engagement with the lips of said cross-member.

5. Apparatus as claimed in claim 1, characterized by the provision of means at the base of said unit for maintaining said unit in engagement with the lips of the cross-member.

6. Apparatus as claimed in claim 1, characterized by the provision of means at the base of said unit accessible only from one side of said unit for maintaining said unit in engagement with the lips of said cross-member. 5

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