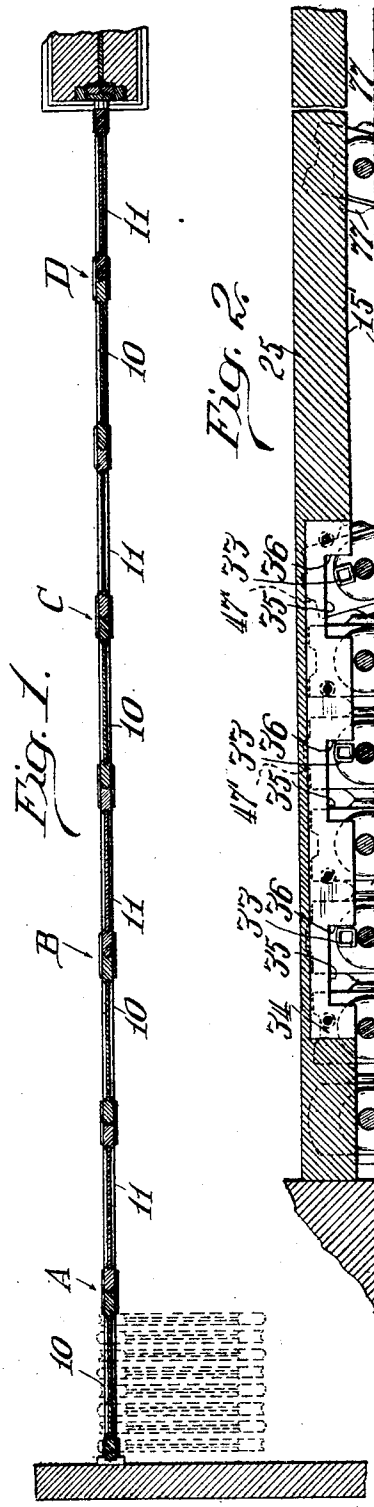
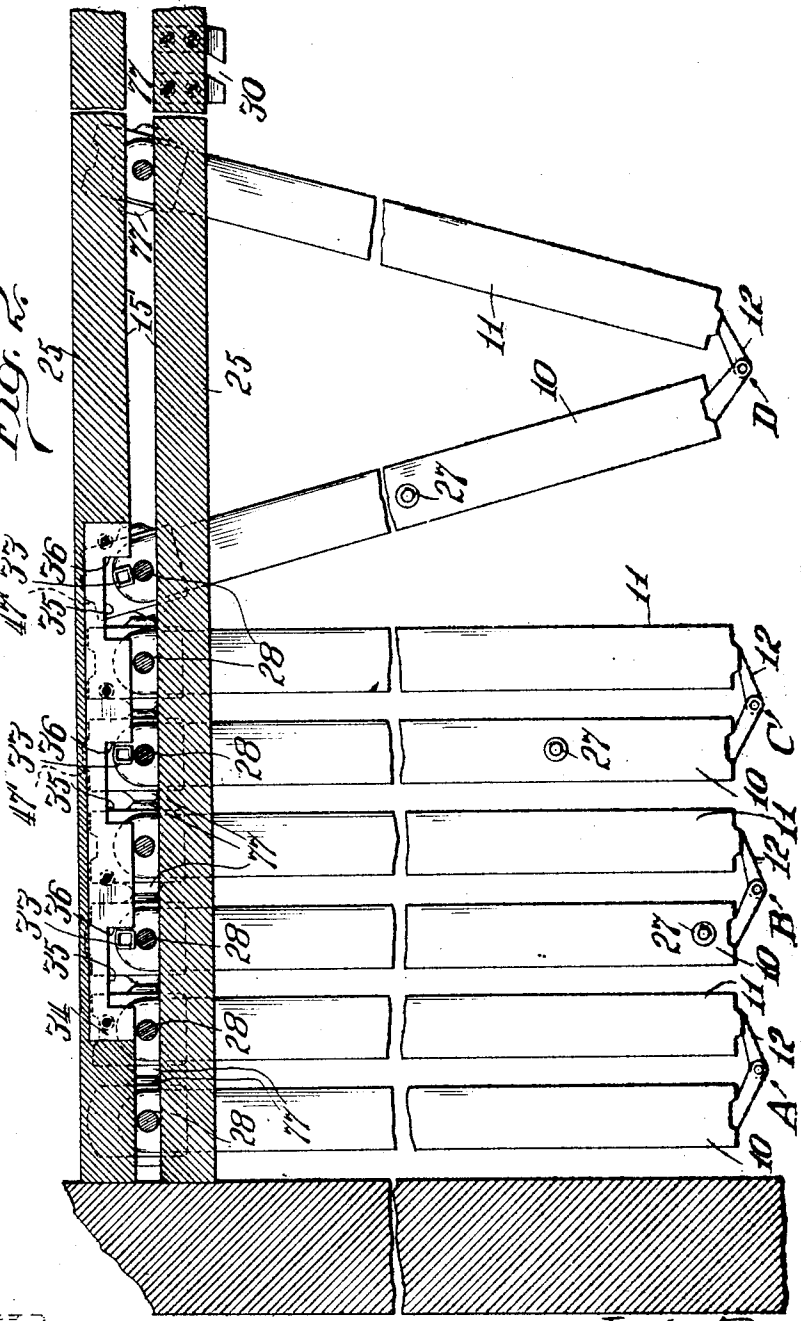
Nov. 24, 1931. E. J. G. PHILLIPS 1,833,496

FOLDING PARTITION

Filed July 5, 1928 3 Sheets-Sheet 1





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Nov. 24, 1931. E. J. G. PHILLIPS 1,833,496

FOLDING PARTITION

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Fig. 3.

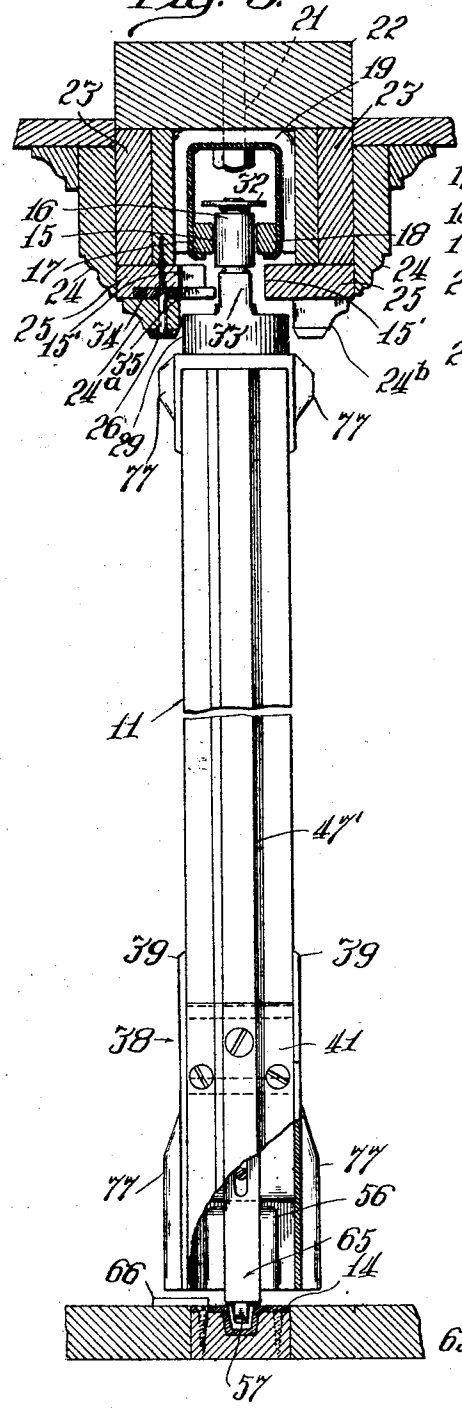
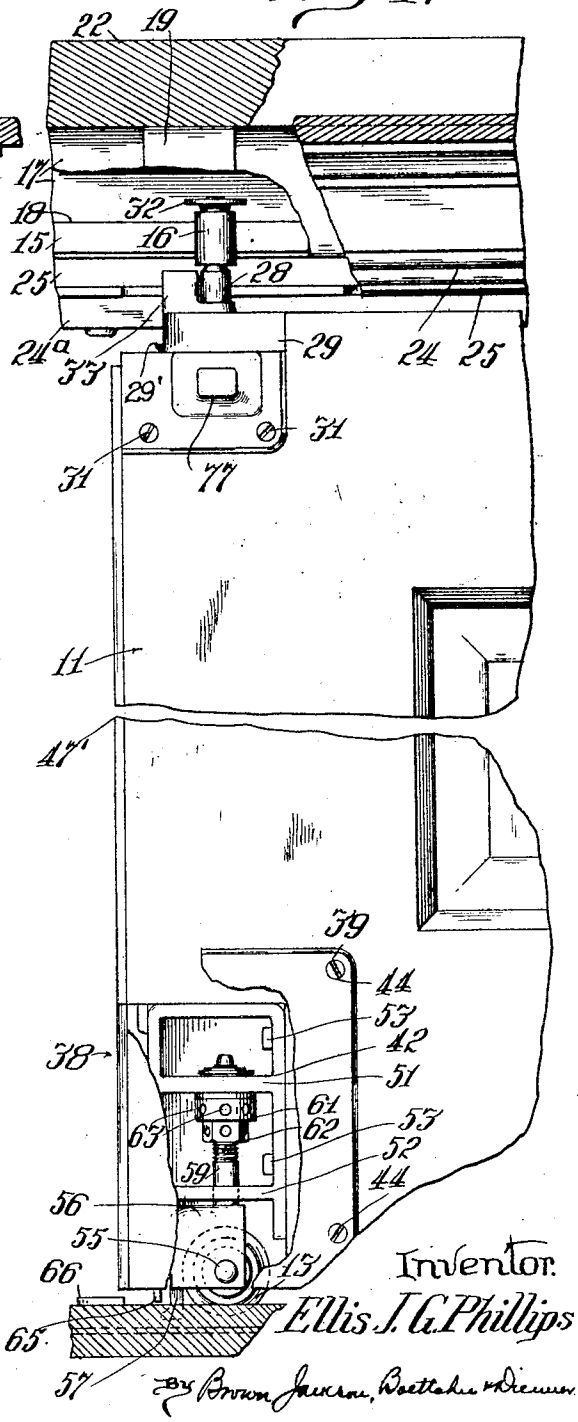


Fig. 4.



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FOLDING PARTITION

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Fig. 5.

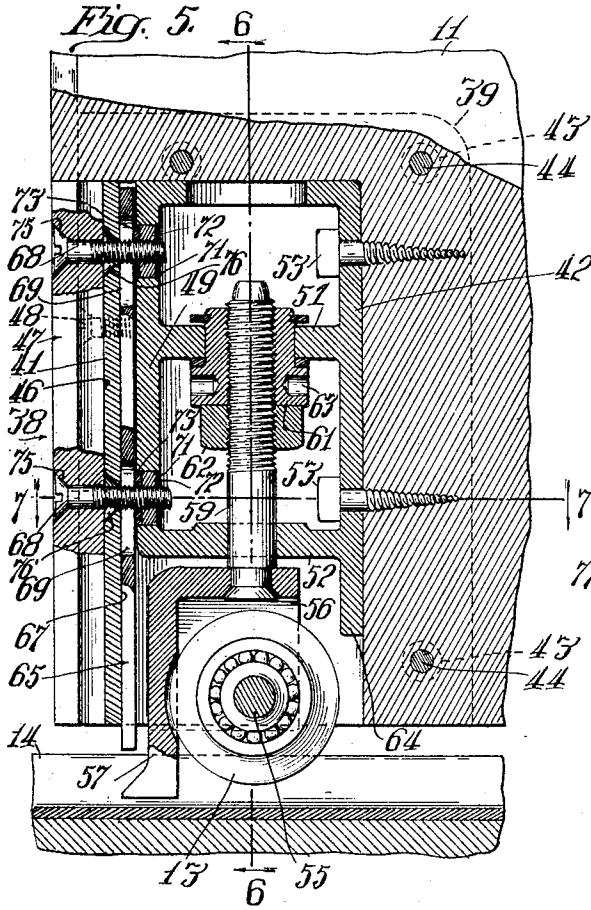


Fig. 6.

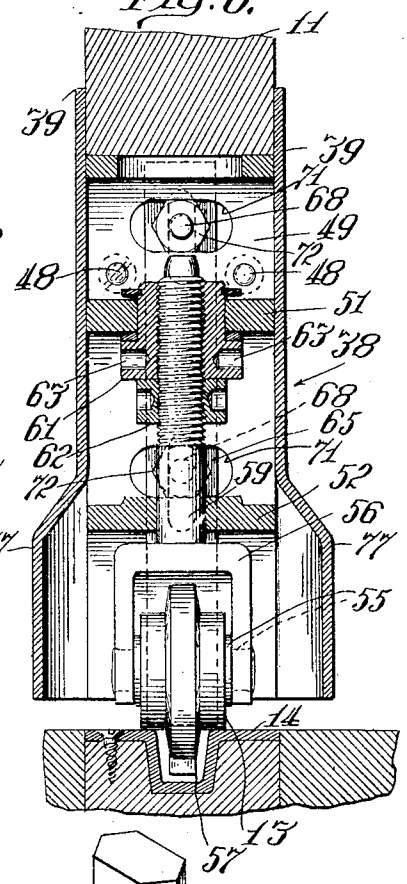


Fig. 7.

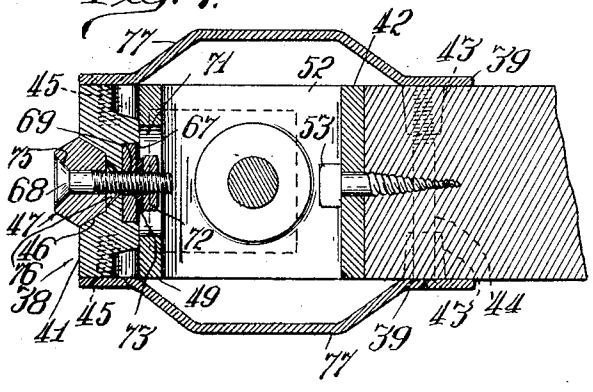
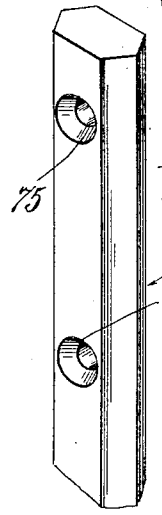


Fig. 8.



Witness
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Patented Nov. 24, 1931

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UNITED STATES PATENT OFFICE

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FOLDING PARTITION

Application filed July 5, 1928. Serial No. 290,435.

The present invention relates to improvements in folding partitions or doors of the type frequently employed as a temporary dividing wall in large rooms, or as a closure or door for large entrances. These devices are usually made up of doors or units hinged together in pairs, each pair forming a section of the partition. The several sections are usually mounted to slide or roll along upper and lower guideways, with the doors of each section free to pivot or swing transversely of said guideways, so as to be capable of being moved to one side of the room or doorway and there folded together at right angles to their former position for leaving the major portion of the doorway clear.

It is the general object of my invention to provide new and improved means for holding the sections normally at the side of the doorway when folded back, such means being adapted to permit a free movement of the sections again into operative closing position in the doorway when the door units of the section are given an unfolding movement to bring them again into alignment in the doorway.

More specifically, it is one of the objects of the invention to provide improved holding means for this purpose associated with the upper edges of the sections and with the upper guideway, which holding means is entirely concealed in the guideway, and is in the form of a single plate which provides a predetermined accurate spacing of the stop shoulders for the several sections, so that in the installation of the folding partition, it is not necessary for the carpenter to measure the exact location of these shoulders.

Another object of the invention is to provide improved holding or locking means for this same purpose, associated with the lower edges of the sections. This latter locking means has an improved adjustable mounting on the castor wheel supporting means so that it can be given any desired vertical adjustment to correspond with the height of the lower track or guideway and the height of the lower stop shoulder.

Another object of the invention is to provide a removable form of joining bar on each castor wheel support, which joining bar is adapted to form a part of the rabbet joint between the edges of adjacent sections.

The ability to remove or replace the joining bar serves to adapt a single type of castor wheel support to all door panels, irrespective of which half of the rabbet joint is formed on the edge of the panel, i. e., by removing the joining bar, the castor wheel support is made adaptable to a door panel, in which the groove portion of the joint is formed, and by replacing the joining bar, the castor wheel support is made adaptable to a door panel, on which the tongue portion of the joint is provided.

Other objects and advantages of the invention will appear from the following description of a preferred embodiment thereof. In the drawings accompanying such description:

Figure 1 is a horizontal sectional view through the partition, showing the sections in extended or closed position in full lines, and showing the folded or open position of the sections in dotted lines;

Figure 2 is a horizontal sectional view through the upper guideway, showing the locking means associated therewith and with the door sections.

Figure 3 is an edge view of one of the door units, illustrating the upper and lower guideways in cross section;

Figure 4 is a fragmentary side view of one of the door panels, portions of the upper guideway and of the castor wheel support being broken away;

Figure 5 is a vertical sectional view through one of the castor wheel supports;

Figure 6 is a transverse sectional view, taken at right angles to Figure 5, on the plane of the line 6—6 thereof;

Figure 7 is a horizontal sectional view, taken on the plane of the line 7—7 of Figure 5; and

Figure 8 is a perspective view of the joining bar which is associated with each castor wheel support.

Referring to Figures 1 and 2, the partition is composed of a plurality of independent sections A, B, C, D, etc., four of such

sections being shown, although it will be evident that a greater or less number may be provided, depending upon the width of the room or doorway. Each of these sections consists of two panels or door units 10 and 11, having their adjoining edges hinged together by hinge brackets 12 which are suitably secured to the panels. Such hinge connection permits each section to be folded with the two panels substantially in parallelism with each other, as shown in Figure 2, or permits each section to be extended with all of the panels disposed in alignment across the door way, as illustrated in Figure 1. The weight of each section, A, B, etc., is carried on castor wheels 13, which are mounted at the lower corners of the opposite or free edges of the panels 10—11. The castor wheels roll along a lower track or rail 14 disposed in the floor, and each panel has pivotal mounting on its associated castor wheel, so as to permit the panel to swing angularly relative thereto, when the sections are being folded, as will be presently described. The upper corners of these same free edges of the panels 10—11 have guided restraint in an upper guideway 15. Rollers 16 extend upwardly from each of these corners and engage in said guideway for holding the sections upright. The axis of the upper roller 16 is vertically aligned with the swivelling axis of the lower castor wheel 13, thereby providing vertical pivot axes adjacent to each free edge of the section, around which the panels of the section can swing in the folding movement of the section. The panel 10 of the first section A is usually mounted on a fixed pivotal axis 20 adjacent to the jamb.

The construction thus far described is old and well known, it being understood that when it is desired to open the doorway, the several sections of the partition are folded together in parallel relation adjacent to one side of the doorway as illustrated in dotted lines in Figures 1.

Referring, now, to the improvements of the present invention, it will be seen, from Figure 3, that the upper guideway 15 comprises a channel rail 17, having bars 18 secured to the inner sides of the side flanges thereof. The roller 16 at the outer corner of each section is guided in the slot-like area defined between the bars 18. The channel rail 17 is supported, at spaced points along its length, by inverted U-shaped clips 19, which embrace the rail. Bolts 21 pass upwardly through the top of the channel rail 17 and anchor the latter to an overhead beam or like supporting member 22. The channel 17 is enclosed in a suitable box-like frame comprising wood side plates 23, which are externally finished by any suitable arrangement of molding strips 24. Secured to the lower edges of these plates and extending inwardly therefrom are plates or bars 25, the opposing edges of which constitute a lower portion 15′ of the horizontal guideway 15. Molding strips 24^a and 24^b are secured to the lower sides of the plates 25 by the screws 26, which secure the horizontal plates 25 to the vertical plates 23, such molding strips embracing the upper edges of the panels on both sides when the door is closed and concealing the lower portion 15′ of the guideway. As shown in Figure 2, the several sections, A, B, C and D fold together to project laterally in one direction from the doorway. The molding or stop strip 24^b is cut away or omitted at this edge of the doorway in the folding zone of the door (see Figures 3 and 4), so that the upper edges of the panels can swing out of the plane of the doorway in moving to folded position.

The other stop strip 24^a, along the opposite edge of the doorway is preferably extended to the very end of the doorway. Additional guide or registration means for each section is, preferably, provided in the form of a pin 27 which is mounted on the panel 10 of each section, such pins being spaced at varying distances from the hinge edges of the panels (see Figure 2). These pins are adapted to have guided movement in the lower narrow portion 15′ of the upper guideway 15. As the sections are brought to the folding side of the doorway, the pins 27 are permitted to swing out of the narrow guideway 15′ through an intercepting passageway 30 (Figure 2), which opens outwardly thereform through the upper guide frame structure. As soon as each pin 27 is freed from the guiding restraint of the guideway 15′, the panels of such section are free to be folded, the section at this time being disposed in the folding zone where the stop strip 24^b is omitted.

The roller 16 is pivotally mounted on a vertical spindle or bearing pin 28, which extends upwardly from a bracket 29 mounted on the door panel. As shown in Figure 3, such bracket has depending side plates which embrace the upper edge of the door and are secured thereto by screws 31. A washer or disc 32 is usually mounted on the upper end of the spindle 28, above the guide bars 18, to prevent the accidental withdrawal of the roller 16 from the guideway 15. A locking lug 33 extends upwardly from the bracket 29, so as to be disposed in the lower portion 15′ of the guideway, such lug lying in the same plane of the door panel as the spindle 28, but being disposed in closer proximity to the edge of the panel. It will be understood that this lug is only provided on the panels 10 of each partition section, these being the panels which lie in proximity to the adjacent side wall of the room, when the partition is folded. The companion panels or doors 11 are provided with brackets 29 having rollers 16 pivotally supported thereon for engaging in the upper guideway 15, but in the case of these

latter panels 11, the lug 33 is omitted from the bracket 29.

Such lugs cooperate with a locking plate or bar 34 which is mounted in the upper guideway at the side of the doorway where the sections are folded. Attention is directed to the fact that the mounting of the bracket 29 on the door requires a predetermined notching of the corner of the door. Since each door panel 11 swings about the axis of the roller 16, which is set inward from the edge of the panel, it follows that the corner of the panel must be notched out so that this corner will clear the molding or stop strip 24ª, when the panels are swung to folded position. Carpenters do not always understand that this notching is necessary, or they frequently make the notch of the wrong size or shape. To avoid this difficulty, I have constructed the bracket casting 29 with a notch-like depression 29′ formed integrally in the corner thereof, which depression or angle is properly proportioned to clear the stop strip 24ª, when the door is swung to folded position. It will, therefore, be seen that in order to place the bracket 29 with its lateral and upper edges flush with the corresponding edges of the door panel it is essential that the carpenter cut the required notch in the panel. With reference to the locking lug 33, it is advantageous to construct and arrange the lug symmetrically with respect to the bracket and to the roller 16, as shown, because the bracket 29 is thereby made reversible for right or left hand doors, viz., it is applicable to panels folding to the right hand side of the doorway or to panels folding to the left hand side of the doorway.

Referring again to the stop plate 34 with which these locking lugs 33 cooperate, it will be observed from Figure 3 that the stop plate is recessed into the under side of one of the horizontal plates 25, being held therein by the screws 26. The inner edge of the plate 34 is formed with spaced notches 35, one end of each notch defining a locking shoulder 36 for cooperation with a companion lug 33. The inner edge of the plate 25 is cut back to the depth of these notches throughout the length of the stop plate 34, so as to permit the lugs 33 to enter the notches 35 when the panels are folded together, as illustrated in Figure 2.

The two panels of each section occupy a definite width or space at the side of the doorway, when folded together, and the several shoulders 36 are spaced a predetermined distance apart, so that when the panels of adjacent sections are substantially in contacting relation, the lug 33 of each section will be engaging its associated shoulder 36. Thus, when the several sections are folded together, the upper corner of each panel 10 will be locked in stationary relation in the guideway so that the sections cannot tilt or become bound in the guideway. It will be noted that the two panels of each section cannot be folded together until the section has been moved endwise along the guideways to a point where the lug 33 is in position to enter one of the notches 35. That is to say, the width of the lower portion 15′ of the guideway is such as to preclude lateral swinging movement of the panel 10, except when the lug 33 is in the transverse plane of one of the notches 35. Another reason why the two panels of each section cannot be folded together until the stop lug 33 is in registry with its proper notch 35 lies in the interlocking relation between the pin 27 and the guideway 15. This is to say the panel 10 is not free to be swung to a folded position until the pin 27 lies in registry with the intercepting passageway 30, free to pass out through said passageway, at which time the lug 33 is in registry with its appropriate notch 35. Referring to Fig. 2, it will be seen that the pins 27 on the several sections have a staggered relation with respect to their distances from the hinge edges of their respective panels, so that the registry of each pin 27 with the intercepting passageway 30 will accurately position each stop lug 33 with reference to its individual notch 35. If desired, two or more intercepting passageways 30 may be provided for permitting the pins 27 to pass out of the guideway 15, particularly when the door comprises a large number of sections.

It will be noted that the sides of the brackets 29 are formed with laterally projecting bosses or protuberances 77, which contact with each other between sections and serve to maintain adequate spacing between the panels when the latter are folded together, so that there is no possibility of the edges of the panels striking and jamming with each other in the folding or unfolding movements of the sections. When one pair of panels has been folded and the next pair of panels has been brought up so that the edge of the near panel strikes the adjacent projection 77, the latter pair of panels is in position for folding, with its locking lug 33 properly aligned with the appropriate notch 35. The notches 35 can be made comparatively long, because it is only the shoulder 36 at the inner end of each notch which holds the folded sections against relative separating movement, in a direction toward the center of the doorway, movement of the sections in the other direction being prevented by the contacting of the opposing projections 77 on the folded panels.

By forming all of the shoulders 36 on a single plate 34, the proper spacing between adjacent shoulders is always assured, without the necessity of the carpenter accurately measuring to determine the locations thereof. It will also be noted that by disposing the soffit plate 34 at an elevated point in the guideway, with the molding or facing strip 24ª disposed below the same, this plate is sub-

stantially concealed so that it does not detract from the finished appearance of the upper portion of the doorway.

Referring, now, to the mounting of each partition section on its two castor wheels 13, it will be observed from Figs. 3 to 7, inclusive, that each castor wheel has swivelled mounting in a support which is recessed in the lower corner of the panel.

Such support, which is designated 38 in its entirety, comprises two side plates 39, an end or edge plate 41, and a box-like frame 42 which is supported between the side plates 39. The frame or bracket 42 is set into a notch cut out of the lower corner of the panel, and the side plates 39 close the sides of such notch and the sides of the frame 42. As shown in Figures 5 and 7, the plates 39 have bosses 43 extending inwardly therefrom and recessed in the sides of the panel, screws 44 passing between such bosses and securing the side plates to the door. The end plate 41 is secured between the edges of the side plates 39 by screws 45, which pass through the side plates and tap into threaded openings in the end plate 41. The outer face of the plate 41 is formed with a vertically extending groove 46, in which is mounted the removable joining bar 47, which I shall hereinafter describe. The frame or bracket 42 is secured to the inner side of the end plate 41 by screws 48 which pass through openings in the plate and tap into threaded holes in the vertical wall of the bracket 42. As clearly shown in Figure 5, said bracket comprises two vertically extending side walls 49 and horizontally extending cross walls 51 and 52. Screws 53 may be extended through the inner vertical wall of the bracket into the panel, if desired, such screws being inserted through openings in the opposite or outer side wall, as will be hereinafter described.

The castor wheel 13 has ball bearing support on a pivot pin 55 which extends between the sides of a yoke-shaped housing 56 which straddles the wheel 13. As shown in Figure 6, the lower rail or track 14 is of U-shaped cross section, and the castor wheel has a central flange or annulus which travels in the groove portion of the track, the weight of the door being borne on the laterally extending side portions of the wheel which roll along the upper portion of the track on each side of the downwardly extending groove.

The provision of the central flange on the wheel, engaging in the grooved center of the track, maintains the castor wheel in alignment with the track, preventing the wheel from swinging with the folding movement of the panels. As an additional means for holding the castor wheel in proper alignment with respect to the track, a lug or finger 57 may be extended down from the housing 56, so as to be disposed in the groove of the track in advance of the wheel 13. Such lug extends down slightly below the intermediate flange of the wheel, so as to clear from the groove any foreign matter which might interfere with the free and easy movement of the wheel along the track.

The yoke-shaped housing member 56 of the castor wheel is rigidly secured to a shank 59 which has rotatable and slidable bearing support in the lower wall 52 of the bracket 42. The upper end of said shank is threaded for screwing through the threaded bore of a collar 61 which is rotatably mounted in an opening in the upper wall 51. The collar 61 has shouldered or flanged engagement with the upper and lower sides of the wall 51, so that it can carry the downward thrust acting through the bracket 42 and imposed on the shank 59. A lock nut 62 screws over the lower portion of the threaded shank and is adapted to abut the lower end of the collar 61. The latter is provided with suitable sockets 63 in its annular face, adapted to receive a spanner wrench or the like, by which the collar may be rotated for adjusting the castor wheel vertically with respect to the door. With the castor mounted upon the door, such adjustment is effected by the removal of either one or both of the side plates 39, and then rotating the collar 61 to screw the shank 59 either upwardly or downwardly.

It will be observed from Figure 5, that the bracket 42 is formed with a depending lug 64 extending down from the inner side wall thereof. This lug will be struck by the depending finger portion 57 of the castor wheel housing 56, if it is attempted to revolve such housing through a half revolution for disposing the finger portion 57 on the opposite or inner side of the wheel. Thus, the provision of this lug prevents any possibility of erroneous assembly of the device with the finger 57 projecting toward the hinges 12 instead of toward the free edge of the panel.

The lower corner of each panel 10 is provided with locking means which cooperates with the locking lug 33 on the upper corner for holding the section in its folded position at one side of the doorway. Such locking means comprises a bar 65 which is adjustably mounted in the castor wheel support 38, and which has its lower end projecting downwardly beyond the lower edge of the door for co-operating with a stop plate 66 secured to the floor (Figures 3 and 4). The stop shoulder afforded by the plate 66 is so related to the upper stop shoulder 36 that when the panel 10 swings laterally in a folding movement of the section, the lower locking bar 65 will engage the plate 66 substantially at the same time that the lug 33 at the upper edge of the panel engages the locking shoulder 36. Thus, the upper and lower edges of the panel are both locked and unlocked simultaneously in the folding and unfolding movements of the door section. If

desired, the lower locking shoulders 66 for the several sections may all be formed in a single plate, similarly to the construction of the upper plate 34, but I find it preferable to employ separate plates at the lower edge of the door.

It is desirable that each plate 66 be of a relatively low height, so that it will not be obtrusive in appearance, and so that it will not constitute a projection which might be stumbled over in passing through the doorway. Hence, it is desirable that the bar 65 be vertically adjustable to accommodate vertical adjustment of the panel with reference to the castor wheel, whereby the bar will not drag on the track, nor on the floor, but will still effect firm locking engagement with the plate 66. Referring to Figures 5 and 7, it will be seen that the bar is disposed between the end plate 41 and the bracket 42, and has vertical sliding adjustment in a groove 67 which is formed in the inner face of the end plate 41. The bar is clamped in any predetermined adjustment by screws 68 which pass through aligned holes in the joining bar 47 and in the end plate 41. The locking bar is provided with vertically extending slots 69, through which such screws pass, said slots permitting vertical adjustment of the bar relative to the screws. As shown in Figure 6, the inner ends of the screws 68 extend into relatively large openings 71 formed in the outer wall 49 of the bracket 42 and receive nuts 72, which engage non-rotatably in the openings 71. Lock washers 73 may be interposed between the nuts 72 and the inner side of the locking bar 65. It will be evident that, by loosening the two screws 68, the heads of which are readily accessible at the edge of the panel for such operation, the clamping pressure exerted against the locking bar 65 through the nuts 72 and washers 73 will be removed, thereby permitting the bar to be adjusted upwardly or downwardly, with reference to the castor wheel support. By again tightening the screws 68, the locking bar 65 will be rigidly secured in its desired adjustment.

It will be noted that the wood screws 53 can be inserted through the openings 71 before the end plate 41 has been mounted between the side plates 39. The above described construction of castor wheel unit can be employed at the lower corner of the other panel 11, without any material modification or rearrangement. In such use of the unit, the locking bar 65 is removed from the assembly, or is merely adjusted to a raised point where it will not interfere with the operation of the section.

Referring to Figure 2, it will be seen that the abutting edges of all of the panels making up the partition are provided with cooperating tongue and groove formations, so that a rabbet joint is established between each pair of adjoining panels, when the panels are in alignment. It is desirable that such rabbet joint be extended down to the lower edge of each panel, and such is provided for by the removable joining bar 47 which is mounted in the end plate 41. As shown in Figure 8, said bar is of hexagonal cross section correspondng to a rabbet joint having sloping side surfaces. The vertical groove 46 which the bar fits is of like formation, corresponding to the groove portion of the joint. The outer side of the bar 47 is formed with countersunk seats 75 for receiving the heads of the screws 68, and similarly the inner side of the groove 46 is formed with countersunk seats 76 for receiving the heads of the screws when the bar 47 is removed. When the castor wheel unit is mounted on a panel, the corresponding edge of which is provided with the tongue portion 47′ of the joint, as shown in Figures 3 and 4, the joining bar 47 will be seated in the groove 46 and will be secured therein by passing the screws 68 therethrough. In such position, the joining bar forms a continuation of the tongue 47′.

If, on the other hand, the edge of the panel is provided with the groove portion of the joint, the bar 47 will be removed, and the screws 68 will be moved inwardly to have their heads engage in the countersunk seats 76. In such relation of the parts, the groove 46 will constitute a continuation of the groove portion of the joint. The parts are so proportioned that, when the screws 68 are thus moved inwardly, the lower screw will not strike nor interfere with the rotation of the castor wheel shank 59. To replace the nuts 72 and lock washers 73 after the screws 68 have been withdrawn in the operation of replacing or removing the joining bar, either or both of the side plates 39 are removed, thereby affording convenient access to the interior of the bracket 42. It will be evident that the foregoing construction readily adapts a single type of castor wheel support to panels on which either the tongue or groove portion of the rabbet joint is formed. The side plates 39 are formed with laterally projecting protuberances 77, which assist the similar protuberances on the upper brackets 29 in serving to maintain adequate spacing between the panels when the latter are folded together, so that there is no possibility of the edges of the panels striking and jamming with each other in the folding or unfolding movements of the panels, and in serving to assist the upper protuberances in effecting registry between the stop devices.

I claim:

1. In a folding partition, the combination of upper and lower guideways, a plurality of folding partition sections movable in their extended positions along said guideways and comprising hingedly connected panels, spindles mounted on said panels, rollers carried

by said spindles and engaging in the upper guideway, a stop lug rigidly secured to and projecting from one of said panels into said upper guideway, the side margins of said latter guideway being spaced relatively close together throughout the major portion of said guideway to prevent swinging movement of said stop lug and hence folding movement of said section about the axis of its spindle when the section is disposed in the latter portion of said guideway, and a single stop plate mounted in said guideway adjacent to one end thereof, said stop plate having notches therein to permit swinging movement of said stop lug when said section is disposed at the latter end of said guideway, said stop lug being adapted to engage a shoulder at the end of one of said notches when the panels of said section are folded together and each notch only effecting locking engagement with an individual one of said partition sections.

2. In a folding partition, the combination of upper and lower guideways, a plurality of folding partition sections each comprising two hingedly connected panels, each of said partition sections being movable in its extended position along said guideways, spindles, secured to the upper edges of said panels and extending into the upper guideway, a channel member of the inverted U-shaped cross section disposed in said upper guideway, rollers mounted on said spindle and engaging between the sides of said channel member, a stop lug projecting upwardly into said guideway from one of the panels of each section, said stop lug being spaced from the spindle of the corresponding panel and being rigidly secured to said panel and adapted to swing transversely of said upper guideway when said panel is swung laterally about the axis of said spindle in the operation of folding the partition section, the major portion of said upper guideway being relatively narrow in width to prevent such lateral swinging movement of said stop lug and thereby prevent folding movement of said partition sections when the latter are engaging in the latter portion of said upper guideway, and a single stop plate mounted in said guideway on only one side thereof and having relatively long notches therein into which said stop lugs can swing when said partition sections are disposed at the latter end of said upper guideway, one end of each of said notches forming a locking shoulder for cooperating with one of said stop lugs for preventing sliding movement of said sections when the latter are folded, each notch only effecting locking engagement with an individual one of said stop lugs, said stop plate being recessed in said guideway so as to be substantially concealed therein.

3. In a folding partition, the combination of upper and lower guideways, a folding partition section movable in its extended position along said guideways and comprising hingedly connected panels, means for supporting said panels for sliding movement along said guideways and for swinging movement relative thereto, a fixed stop associated with one of said guideways, a cooperating stop mounted on one of said panels for engaging said fixed stop to limit the sliding movement of the partition section when said panels are folded together, said cooperating stop being vertically adjustable relative to said panel, and means for fixedly securing said latter stop to the panel in any of its adjusted positions.

4. In a folding partition, the combination of a lower guideway, a folding partition section movable in its extended position along said guideway and comprising hingedly connected panels, a fixed stop associated with said lower guideway, a cooperating stop mounted on one of said panels for engaging said fixed stop to limit the sliding movement of the section when said panels are folded, said cooperating stop being vertically adjustable with reference to the panel on which it is mounted, and means for rigidly securing said latter stop to the panel in any of its adjusted positions.

5. In a folding partition, the combination of a lower guideway, a folding partition section movable in its extended position along said guideway and comprising hingedly connected panels adapted to be folded together at one end of said guideway, a castor wheel support secured to one of said panels for supporting said section on said lower guideway, a fixed stop associated with said guideway, a cooperating stop carried by said castor wheel support for engaging said fixed stop to limit the sliding movement of the section when said panels are folded, said cooperating stop having vertically adjustable movement in said castor wheel support and relatively to said castor wheel, and means for securing said latter stop in any of its adjusted positions.

6. In a folding partition, the combination of a lower guideway, a folding partition section movable in its extended position along said guideway and comprising hingedly connected panels, a castor wheel for movably supporting one of said panels on said lower guideway, a support for securing said castor wheel to said latter panel, said support comprising a bracket recessed in said panel and side and end plates enclosing said bracket, said castor wheel having a swivelled mounting in said bracket, a vertical groove defined between said bracket and said end plate, a fixed stop associated with said guideway, a cooperating stop carried by said panel for engaging said fixed stop to limit the sliding movement of the section when the panels are folded, said cooperating stop having a verti-

cally adjustable movement in said groove relatively to said castor wheel, and means for fixedly securing said latter stop in any of its adjusted positions.

7. In a folding partition, the combination with a lower guideway and a folding partition section comprising two hingedly connected panels, of a castor wheel for movably supporting one of said panels on said lower guideway, a bracket recessed into said panel, said castor wheel having swivelled mounting in said bracket, side and end plates enclosing said bracket, a fixed stop associated with said guideway, a cooperating stop carried by said panel for engaging said fixed stop to limit the sliding movement of the section when said panels are folded, a vertically extending guide groove defined between said bracket and said end plate, said cooperating stop having vertically adjustable movement in said groove relatively to said castor wheel, and screw means actuatable from the edge of said panel for securing said latter stop in its different adjusted positions.

8. In a folding partition, the combination with a lower guideway and a partition section comprising two hingedly connected panels, of castor wheels rolling along said guideway and supporting said panels for sliding and folding movement, a fixed stop associated with said guideway, a cooperating stop mounted on one of said panels for engaging said fixed stop to limit the sliding movement of the section when said panels are folded, said cooperating stop being vertically adjustable relative to the panel on which it is mounted, and means actuatable from the edge of said latter panel for securing or releasing said cooperating stop.

9. In a folding partition, the combination of upper and lower guideways, a plurality of folding partition sections movably supported in said guideways, the adjoining edges of said sections being oppositely formed with tongues and grooves to form lap joints between the sections when the edges of the sections are in abutting relation, a castor wheel support on each of said sections for engaging said lower guideway, said castor wheel support having a vertical groove therein along the edge of the section, and a joining bar removably mounted in said groove, the removal of said bar adapting said castor wheel support to the edge of a section wherein the grooved portion of the lap joint is formed, and the replacing of said bar in said groove adapting said castor wheel support to a section on which the tongue portion of the joint is formed.

10. In a folding partition, the combination of upper and lower guideways, a plurality of folding partition sections movable along said guideways, each of said sections comprising two panels having their adjacent edges hingedly connected together, the opposite edges of said panels being formed alternatively with tongues and grooves to form rabbet joints between the sections when the edges thereof are in abutting relation, castor wheels mounted at the lower opposite corners of said panels for movably supporting said panels on said lower guideway, each of said castor wheels comprising a support for mounting the same on its respective panel, a vertically extending groove in the edge portion of one of said castor wheel supports, a joining bar removably mounted in said groove, the removal of said bar adapting said castor wheel support to mounting on a panel wherein the groove portion of the rabbet joint is formed, and the replacing of said joining bar in said groove adapting said support to mounting on a panel on which the tongue portion of said rabbet joint is formed and means for removably securing said joining bar in said groove.

11. A castor wheel support for mounting on the panel of a folding partition, comprising a castor wheel, a bracket in which said castor wheel has swivelled adjustable mounting, side and end plates enclosing said bracket, a vertical guide groove defined between said bracket and said end plate, a stop bar adjustably mounted in said guide groove and adapted to cooperate with a fixed stop associated with the partition, a vertical groove formed in the outer face of said end plate, a removable joining bar adapted for mounting in said latter groove, the presence or absence of said joining bar adapting said castor wheel support alternatively to panels which are tongued or grooved for forming the rabbet joint between adjacent sections, and screw means for clamping said stop bar in any of its vertically adjusted positions, said screw means also passing through said removable joining bar and serving to hold the latter in place.

12. The combination with a folding partition section and a grooved track relative to which said partition section has sliding and swinging movement, of means for movably supporting said section on said grooved track comprising a caster wheel, a bearing member on which said wheel is supported, a shank extending from said bearing member, a bracket adapted to be secured to the section and in which said shank has swivelled mounting, a finger extending downward from said bearing member into the groove of said track for holding said bearing member in proper position with respect to the track, said castor wheel being adapted to be assembled on said section with said finger facing in a predetermined direction with respect to said section, and a stop on said bracket adapted to be engaged by said bearing member to prevent erroneous assembly of the castor wheel on the section with said finger facing in the opposite direction.

13. In a folding partition, the combination of upper and lower guideways, a plurality of folding partition sections movable along said guideways, a stop plate disposed in said upper guideway adjacent to one end thereof, said stop plate having a plurality of relatively long notches formed therein, each notch only effecting locking engagement with an individual one of said partition sections, one end of each notch forming a locking shoulder, locking lugs stationarily mounted on said partition sections adapted to engage said locking shoulders when the sections are folder together, for holding said sections against movement towards the center of the doorway, and spacing projections on the sides of said sections adapted to contact with each other between the folded sections for preventing movement of said sections in a direction towards the side of the doorway.

14. In a folding partition, the combination of upper and lower guideways, a plurality of folding partition sections movable along said guideways, spindles projecting from the upper edges of said sections, rollers mounted on said spindles and engaging in the upper guideway, a stop plate disposed in said upper guideway adjacent to one end thereof, said stop plate being substantially concealed in said guideway and having a plurality of relatively long notches formed therein individual to the folded position of each partition section, one end only of each notch forming a locking shoulder, a locking lug projecting upwardly from and fixedly mounted on each of said partition sections adjacent to the respective spindles for engaging an individual one of said locking shoulders when said partition sections are folded together, the engagement between said shoulder and said lug holding said section against movement toward the center of the doorway, and protuberances projecting laterally from each of said partition sections and adapted to contact with each other between the folded sections for preventing movement of said sections in a direction towards the side of the doorway when the sections are folded.

15. In a folding partition, the combination of upper and lower guideways, a plurality of folding partition sections movable along said guideways, rollers carried by said sections and engaging in the upper guideway, brackets secured to said sections and on which said rollers are mounted, said brackets having angular depressions at their corners requiring the notching of said partition sections to permit the brackets to be mounted thereon, so that the notched corners of the sections will clear one side of the upper guideway when the sections are folded together.

16. In a folding partition, the combination of upper and lower guideways, said upper guideway comprising a stop strip extending along one side thereof, a plurality of folding partition sections, each comprising two hingedly connected panels, brackets secured to the upper outer corners of said panels, spindles extending upwardly from said brackets, and rollers mounted on said spindles and engaging in the upper guideway, said brackets being formed with angular depressions at their corners requiring the corners of said panels to be notched out correspondingly to permit the brackets to be mounted thereon, whereby said panels are necessarily provided with the required form of notch to clear said stop strip when said sections are folded together.

17. A castor wheel support for mounting on the panel of a folding partition, comprising a castor wheel, a bracket in which said castor wheel has swivelled mounting, said bracket having a vertical guide groove, a stop bar adjustably mounted in said guide groove and adapted to cooperate with a fixed stop associated with the partition, a removable joining bar adapted for mounting on said bracket, the presence or absence of said joining bar adapting said castor wheel support alternately to panels which are tongued or grooved for forming the rabbet joint between adjacent sections, and screw means for clamping said stop bar in any of its vertically adjusted positions, said screw means also passing through said removable joining bar and serving to hold the latter in place.

18. A castor wheel support for mounting on the panel of a folding partition, comprising a castor wheel, a bracket in which said castor wheel has swivelled mounting, a stop bar carried by said bracket and being vertically adjustable to cooperate with a fixed stop associated with the partition, a removable joining bar adapted for mounting on said bracket, the presence or absence of said joining bar adapting said castor wheel support alternately to panels which are tongued or grooved for forming the rabbet joint between adjacent sections, and means for securing said stop bar and said joining bar to said bracket.

19. A castor wheel support for mounting on the panel of a folding partition, comprising a castor wheel, a bracket in which said castor wheel has swivelled adjustable mounting, side and end plates enclosing said bracket, a vertical guide groove defined between said bracket and said end plate, a stop bar adjustably mounted in said guide groove and adapted to cooperate with a fixed stop associated with the partition, a vertical groove formed in the outer face of said end plate, and a removable joining bar adapted for mounting in said latter groove, the presence or absence of said joining bar adapting said castor wheel support alternately to panels

which are tongued or grooved for forming the rabbet joint between adjacent sections.

20. The combination with a folding partition section and a grooved track relative to which said section has sliding and swinging movement, of means adapted for movably supporting said section on said track comprising a castor wheel, a bearing member on which said wheel is supported comprising an inverted U-shaped structure, said wheel mounted on an axle extending between the vertical sides of said inverted structure, a shank extending upwardly from said bearing member, a bracket adapted to be secured to the partition section and in which said shank has a swivelled vertically adjustable mounting, said castor wheel having a peripheral flange projecting centrally therefrom whereby laterally extending shoulders are formed on either side of the flange, said flange being adapted to extend into the groove of said track, the shoulders of the wheel being adapted to rest on the track on either side of the groove thereof, a finger extending downwardly from said bearing member and adapted to extend into the groove of said track for holding said bearing member in proper position when said partition section is supported on said track, said castor wheel being adapted to be assembled on said partition section with said finger facing in a predetermined direction with respect to said section, and a stop on said bracket adapted to be engaged by said bearing member to prevent erroneous assembly of the castor wheel on the section with said finger facing in the opposite direction.

In witness whereof, I hereunto subscribe my name this 14th day of June, 1928.

ELLIS J. G. PHILLIPS.