

[54] **DOOR CASING ASSEMBLY**

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[51] Int. Cl. **E06b 1/04**

[58] Field of Search 49/399, 400, 401,
49/501, 504; 16/129, 130

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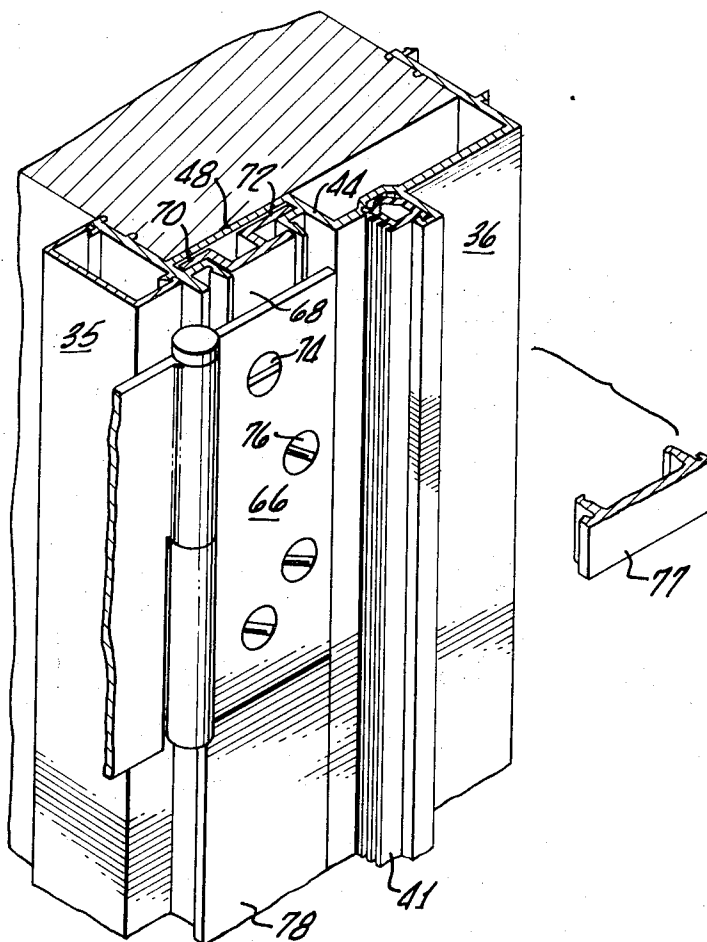
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[57] **ABSTRACT**

An extruded metal jamb of a door casing is formed with a channel shaped elongated support member having a pair of laterally spaced and longitudinally extending guides. A plurality of hinge leaf mounting plates are slidably mounted to the channel guides for longitudinal adjustment relative to each other and to the door jamb so that hinge leaves may be fixed to the mounting plates and the assembly of hinge leaf and mounting plate fixedly secured to the jamb. The adjustable mounting of the hinge leaves to the jamb enables much simplified installation of a door having factory mortised hinge leaves. The extruded jamb section is formed with longitudinally extending laterally spaced slots for ready securement of either a cover or a strike plate or both, so that the jamb is readily applicable to either side of the door opening. Several types of adjustable hinge leaf mounting plates and cover sections are shown.

14 Claims, 10 Drawing Figures



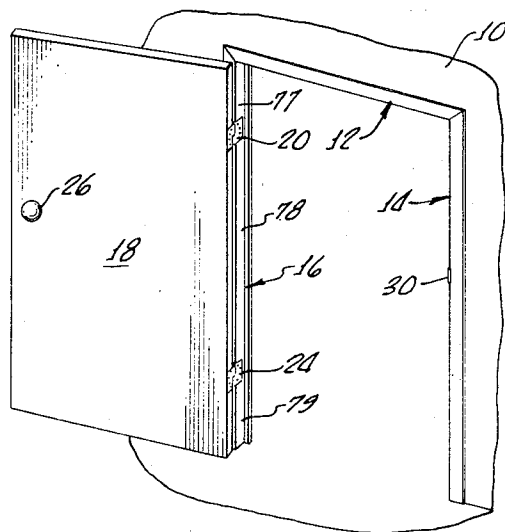


FIG. 1.

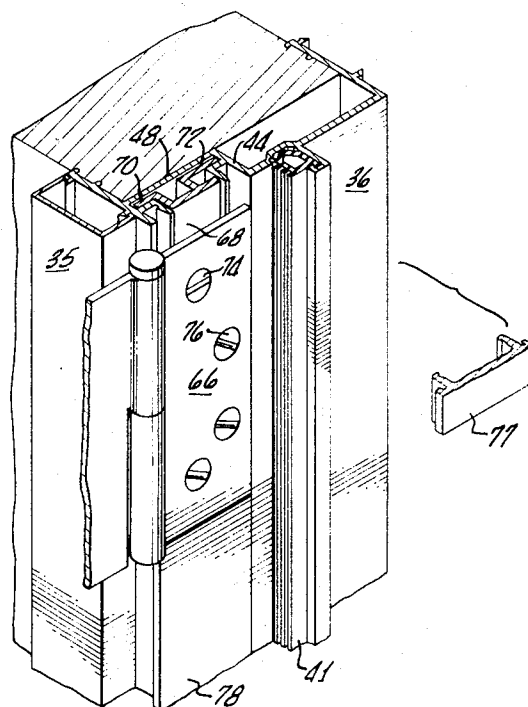


FIG. 2.

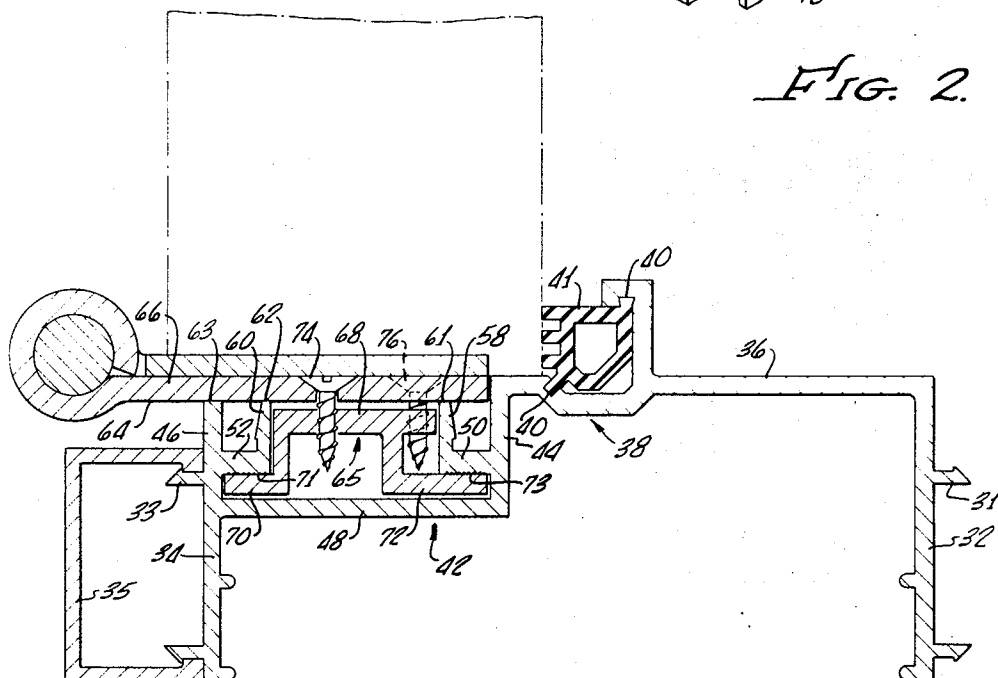


FIG. 3.

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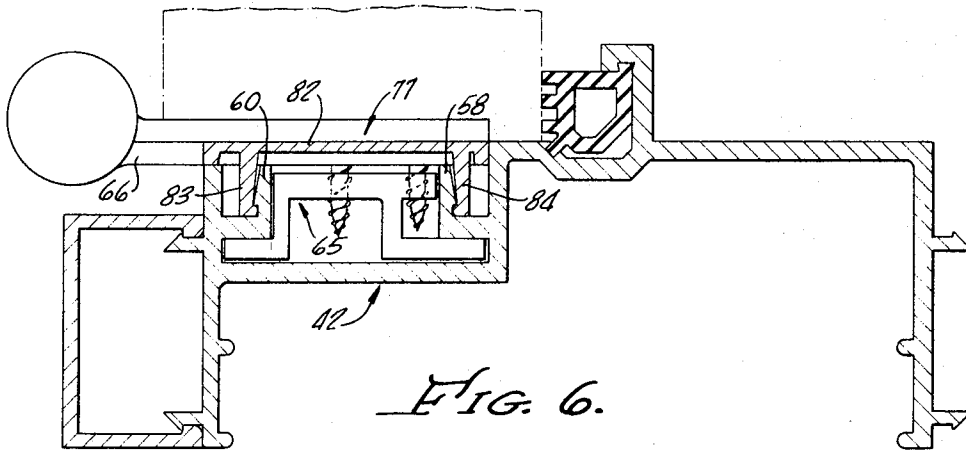


FIG. 6.

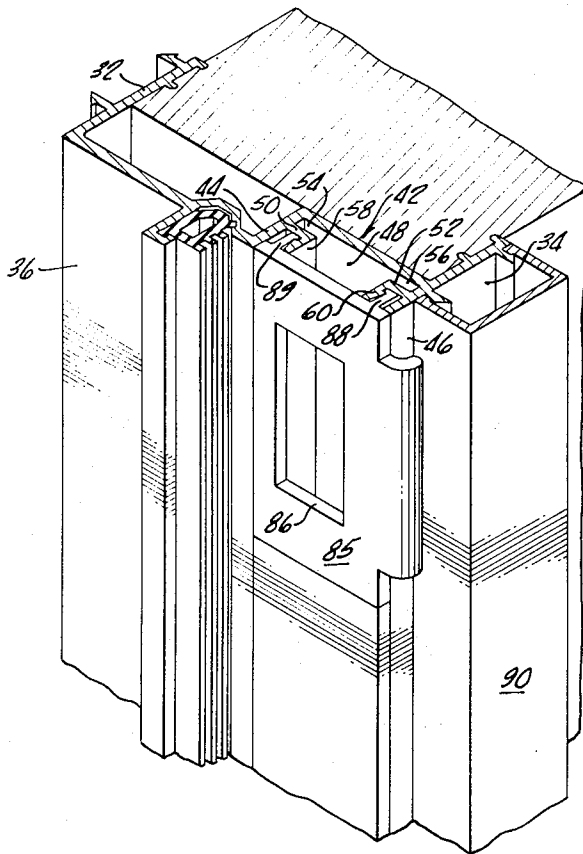


FIG. 5.

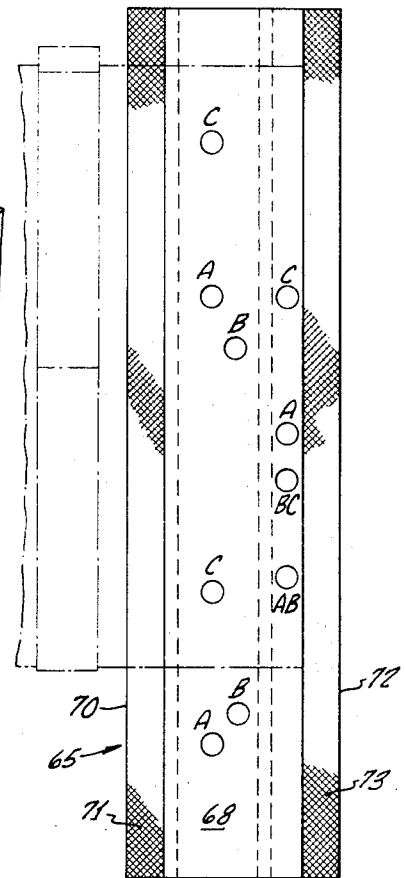
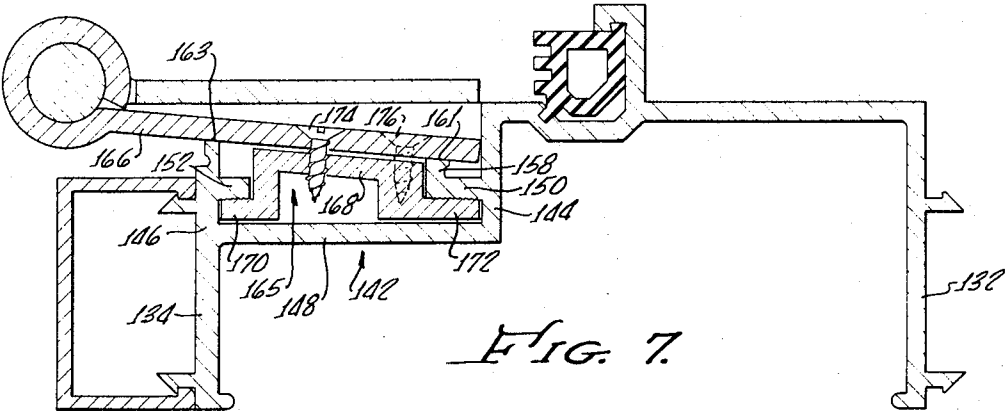
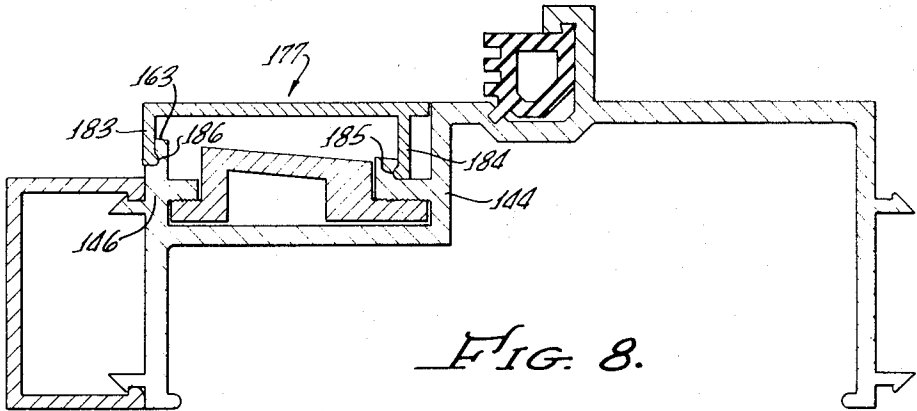
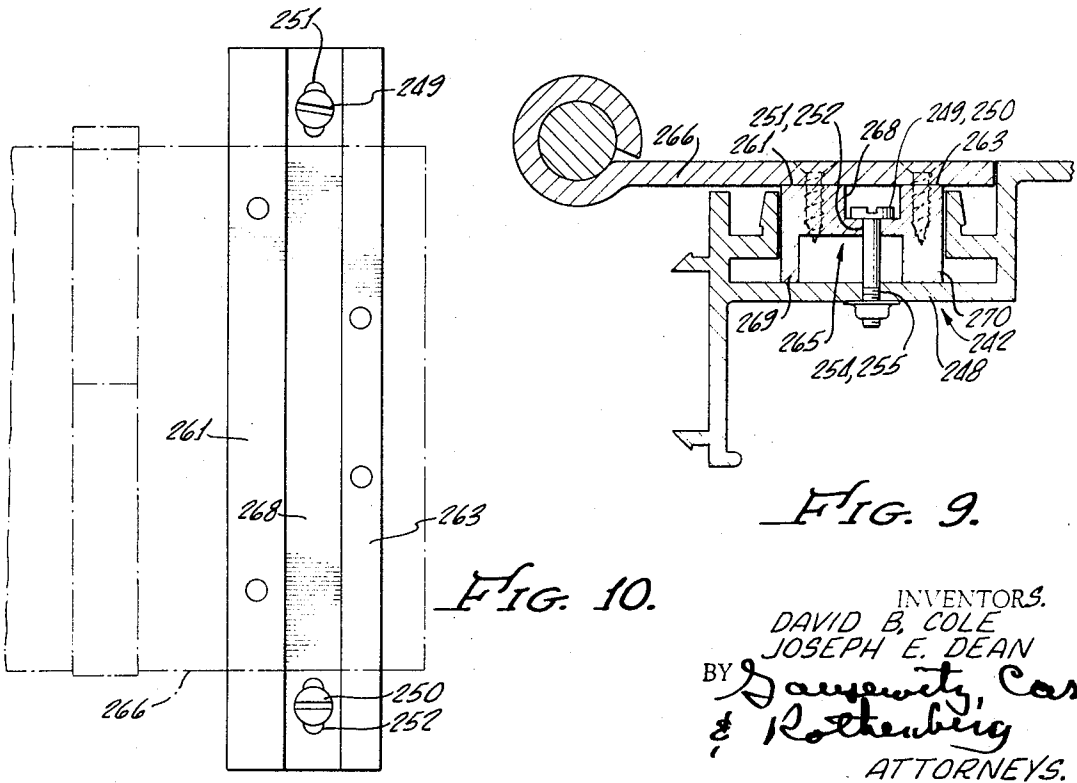


FIG. 4.

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DOOR CASING ASSEMBLY

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to door casing assemblies and more particularly concerns a casing that enables simple and adjustable mounting of hinge leaves.

2. Description of Prior Art

Hinge leaves as employed in mounting of a door to a door jamb, are generally mortised into the door and jamb respectively so that the edge surface of the door and the facing surface of the jamb each presents a smooth substantially unbroken continuous surface that is co-planar with the exposed hinge leaf surfaces. The location and formation of the several mortises is a precision operation and, when performed by hand, requires a skilled and experienced craftsman. To minimize hand labor involved in the mortising of doors and jambs, it is desirable to form the mortises, to as great an extent as possible, by machine or in the factory. However, because of variations in casing and door dimensions, and sagging and other variations inherent in building construction, together with the precision alignment required of mortises formed in the door and the jamb, it is not practical to factory mortise both the door and the jamb. In particular, where the parts are mass produced and three or more hinges are employed for a single door, alignment problems are a major reason for the common practice of factory mortising only one of the door and jamb parts.

In a common steel door casing the jamb is factory formed with a door stop and hinge leaf mortises. For installation of the door, the position of the door edge mortises are determined from the jamb mortises after the jamb has been installed. Therefore the door mortises are necessarily cut in the field, on the job. An opposite arrangement that employs factory mortised doors is common in the use of extruded metal door casings, such as the casings shown in U.S. Pat. No. 2,910,154 to Hammit et al. and U.S. Pat. No. 3,287,856 to A. E. Passovoy. In the arrangement of Hammit et al a cover plate for the door jamb is cut away at those points where the hinges are to be located so as to provide a recess for the hinge leaf that is secured to the jamb. This positioning and cutting of the cover undesirably and unnecessarily extends the time and effort for installation. Where the arrangement is employed with a factory mortised door the jamb hinge leaf must be carefully positioned and the holes for securement thereof must be made on the job.

The arrangement of the Passovoy patent enables use of factory mortised doors with an extruded metal casing that requires no field mortising, but which nevertheless, provides a smooth and aesthetic jamb face. Passovoy employs snap-on cover members extending between and flush with outer jamb hinge leaf surfaces to achieve the desired effect. Nevertheless, the arrangement of Passovoy still requires careful location of jamb hinge leaf mounting holes on the job. Neither in the Passovoy arrangement, nor in any other prior art known to applicant is there provided any adjustability of a hinge mounting to facilitate on the job adjustable assembly without mortising.

Not only would adjustable mounting of the jamb hinge leaf facilitate initial installation but it would permit ready and simplified rehanging of a door as may be required due to wear, sag or minor building damage.

Accordingly, it is an object of the present invention to provide a door casing assembly that permits adjustable hinge leaf mounting.

SUMMARY OF THE INVENTION

In carrying out principles of the present invention in accordance with a preferred embodiment thereof, a door casing jamb includes a portion forming an elongated support member to which a plurality of hinge leaf mounting plates are secured for longitudinal adjustment relative to the jamb and relative to each other. Means are provided to secure hinge leaves to the respective mounting plates and to lock the several assemblies of leaf and mounting plate to the jamb in a desired adjusted position. The support member is provided with means for attachment of a longitudinally extending cover so as to provide a smooth substantially continuous jamb surface in close proximity and parallel to the edge of the door when the latter is closed.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a pictorial illustration of a casing and door constructed in accordance with principles of the present invention;

FIG. 2 is a partly exploded view of a jamb, hinge leaf and cover of a preferred form of the present invention;

FIG. 3 is a cross section of the door jamb of FIG. 2 showing the jamb hinge leaf in position and showing in phantom lines a part of the door secured thereto;

FIG. 4 is a plan view of the hinge leaf mounting plate of FIG. 3 showing an attached hinge leaf in phantom lines;

FIG. 5 is a pictorial view of the door jamb having a strike plate mounted thereto;

FIG. 6 is a cross section of the door jamb showing the cover member mounted thereto;

FIGS. 7 and 8 are cross sectional views of a modified door jamb showing the mounting of the jamb hinge leaf and the cover section respectively;

FIG. 9 is a cross sectional view of a modification of the door jamb of FIG. 2 employing a different mounting plate, and

FIG. 10 is a plan view of the mounting plate of FIG. 9 showing an attached hinge leaf in phantom lines.

DETAILED DESCRIPTION

As illustrated in FIG. 1 a wall 10 has an opening therein to which is affixed a door casing comprising a head section 12, a first jamb 14 and a second jamb 16. A door 18 is pivoted to jamb 16 by means of hinges 20, 24, which are conventional hinges in any suitable number and position. A door knob 26 operates a bolt (not shown) that is arranged to engage a strike plate 30 that is fixed to the door jamb 14 to retain the door in closed position.

As readily seen and as well known, both leaves of each of the hinges are mortised into the respective door and jamb surface or otherwise mounted so that the outer surface of each hinge leaf is substantially coplanar with the surface of the member to which it is mounted. The mortising of door and jamb must be accomplished with precision. It is a task that requires a highly skilled craftsman unless performed by machine during fabrication of the parts. It is common practice to factory mortise the door edge in many types of casing constructions, particularly for use with extruded metal casings of the type shown in the above-identified

patent to Passovoy. However, when such factory mortised doors are employed, the position of jamb mortises and jamb hinge leaf mounting holes cannot be determined until the door has been matched to the jamb on the job, after installation of the jamb. Even though arrangements such as shown by Passovoy avoid the need for forming the mortise on the job, major installation problems are still presented by the required precision positioning of jamb hinge leaf mounting holes. Should one or more of these holes be initially positioned in error, it may be difficult, if not impossible to reposition them to correct the error, particularly where the error is in the order of the diameter of the hinge leaf mounting screw. The present invention provides an arrangement for adjustably mounting such jamb hinge leaves and thus eliminates this difficulty.

Even though the present invention has been initially adapted for use with an extruded relatively soft metal door casing of the type shown in the Passovoy patent it will be readily appreciated that the several embodiments of adjustable hinge mounting to be described may be readily applied to other extruded jamb sections and to other casing constructions, including those fabricated of interconnected, or otherwise formed steel parts.

Illustrated in FIGS. 2 and 3 is the jamb 16 to which the hinge leaves are mounted. It will be readily apparent as the description proceeds, that the extruded jamb section 16 is identical with, and fully and completely interchangeable with the jamb section 14, differing only in that the latter has the strike 30 secured thereto, whereas the former has leaves of hinges 20 and 24 secured thereto.

Jamb 16, in cross-section, includes first and second side portions 32, 34 that are adapted to extend along the sides of the wall in which the door opening is formed and to be fixedly secured to the wall. Extending across the jamb from side portion 32 toward side portion 34, for a major portion of the width of the jamb, is a jamb facing panel 36 in which is formed a trough 38 having notches 39 and 40 that receive and retain projecting flanges of a resilient bumper cushion or door stop 41 that extends the length of the jamb to provide a close fit against the door surface when the door is closed. Bumper cushion 41 may be replaced with similar cushions having a dimension as measured normal to the surface of the closed door, greater or smaller than that illustrated in the drawing, so as to properly accommodate doors of lesser or greater thickness.

Extending from the trough 38 is a support member particularly arranged to carry the jamb hinge leaves, cover members, or a strike plate as will be more particularly described. In the illustrated embodiment the support member takes the form of a channel 42 having first and second side members 44, 46 that extend inwardly of the jamb section (in the plane of the doorway) for connection to a channel web 48. Side members 44 and 46 each have a respective shoulder 50, 52 projecting inwardly of the channel toward the other side member to thereby form, together with the web 48, first and second guideways 54, 56 (see FIG. 5). Projecting outwardly of the jamb section from the inner ends of each of the shoulders 50, 52 are respective securing dogs 58, 60. It will be seen that the channel side members of which the securing dogs 58, 60 and shoulders 50, 52 all form an integral part, are each formed with outer bearing surfaces 61, 62, 63 that are mutually co-planar,

lying in a plane that is contiguous with the inner surface 64 of a hinge leaf 66 that is to be fixed to the jamb 16.

Jamb sides 32, 34 are provided with outwardly projecting connection dogs such as shown at 31, 33 to which a garnish strip 35 may be snapped for aesthetics.

It will be understood that in the preferred embodiment jamb 16 is an aluminum extrusion, wherefore the illustration of FIG. 3 depicts the cross-section of the jamb at any point throughout its length. Thus, all of the described elements, the section side portions 32, 34, the facing panel 36, trough 38, door stop or bumper cushion 41, support member or channel 42, together with all of the portions thereof and the connecting dogs are all elongated elements, continuous throughout the entire length of the jamb, and all formed as a single integral extrusion.

In order to provide an adjustable support and mounting for the hinge leaf 66 a plurality of hinge leaf mounting plates are adjustably mounted to and within the channel 42. One such hinge leaf mounting plate is provided for each hinge leaf that is to be attached to the jamb. Thus, for the door assembly illustrated in FIG. 1, two such hinge leaf mounting plates, each identical to each of the others, it is adjustably mounted within the jamb 16. Thus, a description of one of the mounting plates will suffice to fully describe each of the mounting plates.

As illustrated in FIGS. 3 and 4, each mounting plate has a length in the direction of the extent of the door jamb somewhat greater than corresponding dimension of the hinge leaf, but only a small fraction of the length of the jamb. Each plate has a cross section in this embodiment as shown in FIG. 3. Mounting plate 65 of FIG. 3, includes a body portion 68 that extends entirely across the width of the channel between dogs 58 and 60. A pair of integral outwardly extending flanges 70, 72 are fixedly carried by, but spaced inwardly of the body portion 68, so that the latter is positioned considerably closer to the hinge leaves. Each of the flanges 70, 72 extends into and is captured within a respective one of the guides 54, 56 that are formed in the support member between the channel web 48 and the respective shoulders 50, 52. The several parts are dimensioned so that the mounting plate is a close, but sliding fit within the channel 42.

A plurality of hinge leaf mounting holes are formed in body portion 68 of the mounting plate. These holes will provide at least one group of holes to match holes formed in the hinge leaf to be mounted thereto. Conveniently, several different groups of holes are preformed within the body of mounting plate 65, so that any one of a number of hinge leaves of different size hinges may be readily secured thereto. For example, as illustrated in FIG. 4, the four holes labeled A may be employed for mounting hinge leaves of a first group of sizes. The four holes labeled B may be employed for mounting hinge leaves of a second group of sizes and the four holes labeled C may be employed for mounting hinge leaves of a third group of sizes. Conveniently, certain ones of the holes may be employed for different size groups, as indicated by the holes labeled AB and BC.

Conventional hinge leaf mounting screws such as the pair designated 74, 76 in FIG. 3 extend through the hinge leaf 66 into a matching set of holes in body 68 of the mounting plate 65. Conveniently the holes in mounting plate 65 are not threaded, wherefore the screws 74, 76 are self threading. It will be readily ap-

preciated that the holes in the mounting plate may be tapped, wherefore the threaded fasteners 74, 76 need not be of the self threading variety.

For installation of the hinge leaf 66 and other leaves of a set of hinges that mount a given door, each of the group of mounting plates 65 captured within the channel 42 before it is erected, will have a mating hinge leaf, such as leaf 66, relatively loosely secured thereto by one or more of its fasteners 74, 76. The desired position of the jamb hinge leaves is then determined from comparison with, or measurement from the position of the factory mortised door hinge leaves. The assembly of mounting plate 65 and relatively loosely attached leaf 66 is properly positioned and fasteners 74, 76 tightened to securely lock the jamb hinge leaves to the jamb.

Fasteners 74, 76 perform a dual function, acting both to securely attach the hinge leaf to the mounting plate and to securely lock the mounting plate to the channel 42. As the fasteners 74, 76 are tightened, hinge leaf 66 and mounting plate 65 are drawn toward each other. Hinge leaf 66 has its surface 64 tightly abutting the three co-planar bearing surfaces 61, 62, 63 of the channel side members. Surfaces 71, 73 of the upper surfaces in the illustration of FIG. 3 of mounting plate flanges 70, 72 are drawn tightly against the facing surfaces of shoulders 52, 50 as the fasteners are tightened. Preferably, surfaces 71, 73 are roughened, or provided with both longitudinal and transverse scoring. The facing surfaces of shoulders 50, 52 are likewise roughened or provided with longitudinal scoring (in the course of the extrusion process) to enhance the securement of the mounting plate to the support member or channel 42 when the hinge leaf fasteners 74, 76 are tightened.

To prevent insertion of the mounting plate 65 in reverse position, and to thus insure proper position and orientation of the preformed hole patterns of the mounting plates, the latter are made longitudinally asymmetrical relative to the channel 42. Thus, flange 72 is considerably wider than flange 70 so as to prevent reverse insertion of the mounting plate in the two guideways. As best seen in the cross-section of FIG. 3, body 68 overhangs the wider flange 72 to facilitate location of the fastener holes in the plate.

If deemed necessary or desirable, other fasteners may be inserted through one or more of the unused holes in mounting plate 65 and into engagement with the channel web 48 to further enhance attachment of the mounting plate to the jamb. Alternatively, holes may be formed in flange 72 and one or more of screws 74, 76 may be made long enough to extend past or through the flanges 71, 72 into threaded holes formed in web 48. In any event, the on-the-job mounting of the jamb hinge leaf in a precisely determined position, is greatly facilitated. Should adjustment be necessary either because of error in the initial mounting or because of subsequent wear or sag, it is a relatively simple matter to accomplish. It is only necessary to loosen fasteners 74, 76 to thereby free the mounting plate 65 for longitudinal adjustment relative to channel 42, move the mounting plate, together with the hinge plate attached thereto, to the new position, and then retighten and resecure the fastening means 74, 76. Note that even though the repositioning of the hinge leaf 66 requires movement equal to or less than one diameter of the fasteners 74, 76 the adjustment may be readily accomplished. The described arrangement has avoided the problem that is commonly faced when a second hole has to be drilled

closely adjacent or intersecting an existing hole. The slidable mounting provides unlimited adjustability without forming any new holes.

The mounting plate 65 is laterally proportioned so as to be a snug, sliding fit within channel 42. Accordingly, the preformed hole patterns in the mounting plate 65, will laterally position the hinge leaf that is mounted thereto. Such lateral positioning of a hinge leaf cooperates with the upstanding portion of side member 44 so that the free edge of hinge leaf 66 will abut this side member. Accordingly, both the side member 44 and the preformed hole pattern of the mounting plate operate to insure proper lateral positioning of the hinge leaf.

A significant advantage of the described arrangement resides in the fact that mounting holes for the fasteners 74, 76 are all preformed. Conventionally, of course, each hinge leaf has its mounting holes formed during fabrication. In the present invention, the mounting plate 65 has its holes preformed during fabrication, so that no holes need be drilled or punched in the field on the job. Obviously, the preforming of hinge leaf mounting holes not only saves time in assembly and mounting of the door, but enables assembly with fewer tools.

In a manner analogous to the door frame assembly of the above-identified Passovoy patent, a plurality of cover sections 77, 78, and 79 are secured to the support member of jamb 16 and positioned so that outer surfaces are flush with the outer surface of the jamb hinge leaves, whereby the outer surface of the jamb that mounts the hinges presents a smooth co-planar and substantially unbroken surface throughout its length. Each of these cover sections is cut to the desired length from a metal extrusion having a cross section, continuous throughout its length, of the configuration shown in FIG. 6. Thus, cover section 77, comprises an outer face 82 and a pair of oppositely disposed continuous cover flanges 83, 84 that are received in respective ones of the laterally spaced channel slots. These laterally spaced slots, extending for the full length of the jamb, are formed between side members 44, 46 and dogs 58, 60. Each of the cover section flanges 83, 84 is formed with enlargement at its end portion to enable the cover section to be resiliently snapped over and retained by the dogs 58, 60 for attachment to channel 42. Although one of the mounting plates 65 is illustrated in position in FIG. 6 it will be understood that the attachment of the cover section 77 is in no way dependent upon, and the cover section is in no way connected to, the mounting plates.

As shown in FIG. 5 the identical jamb section, including side portions 32, 34, panel face 36 and support member or channel 42 is employed for the opposite jamb (jamb 14 of FIG. 1). Of course, for jamb 14 to which no hinges are mounted, no mounting plates, such as plate 65, are provided. The laterally spaced longitudinally extending channel slots formed between side members 44 and 46 and dogs 58, 60 are employed to mount a strike plate 85 that is conventionally apertured as at 86 to receive the door bolt (not shown). Strike plate 85 is formed with a pair of laterally spaced snap flanges 88, 89 that operate just like flanges 83, 84 of cover section 77 for securement of the strike plate to the laterally spaced channel slots.

Another advantage of the described arrangement, where the jamb is employed for mounting of the strike plate, resides in the fact that the channel provides a deep unobstructed space between the strike plate 85

and the facing portion of the jamb, which in this arrangement is the web 48 of channel 42. Thus, the door bolt may readily extend through the strike plate aperture 86 and well beyond the strike plate without encountering any interfering portion of the jamb. Heretofore, it was required to drill a special hole in the jamb to receive the forward portion of the bolt that protrudes through the strike plate into the jamb, or arrange the assembly so that the bolt would not extend into the jamb (or strike plate) any further than the thickness of the strike plate.

For assembly of the cover sections and strike plate to the jamb 14, it is merely necessary to snap the properly positioned strike plate into the laterally spaced slots of side members 44, 46. Thereafter the cover sections are cut to the desired length, so as to extend from opposite sides of the strike plate to the corresponding ends of the jamb 14. Again, side garnishing strips such as that illustrated at 90, FIG. 5, may be snapped in place to enhance appearance of the jamb.

Illustrated in FIGS. 7 and 8 is a modified jamb section particularly adapted for an arrangement in which a continuous cover section extends along the jamb from top to bottom and entirely overlies the jamb mounted hinge leaves. The jamb of FIGS. 7 and 8, like that previously described, is formed of a metal extrusion having side portions 132, 134 and a support member or channel 142 formed with side members 144, 146 all constructed and arranged substantially the same as are the corresponding elements of the jambs illustrated in FIGS. 2, 3, 5 and 6. Each of the side members is formed with a shoulder 150, 152 that cooperates with a portion of the facing surface of the web 148 of channel 142 to provide a pair of longitudinally extending guideways that are substantially identical in configuration and function to the corresponding guideways of the previously described embodiment.

In the arrangement of FIG. 7, the jamb mounted hinge leaf 166 is to be mounted at an angle as shown in order to accommodate the mounting of a cover section to be described below. Accordingly, the side members are formed with hinge leaf abutment surfaces 161, 163 upon which the hinge leaf bears. Surface 161 is formed as the upper end of a dog 158 that extends outwardly from the free end of shoulder 150. Surface 163 is formed as the upper surface of side member 146.

Adjustably carried within the channel 142 are a plurality of mounting plates such as mounting plate 165, having guide flanges 170, 172 snugly but slidably mounted within laterally spaced guideways formed between web 148 and the facing surfaces of shoulders 150 and 152. Mounting plate 165 is formed with a body portion 168 that extends at an angle laterally across the channel 142 so as to provide a mounting surface that is substantially parallel with the inner surface of the hinge leaf 166. In the same manner as is described in connection with the mounting plate 65, plate 165 is formed with one or more patterns of hinge leaf mounting holes for reception of threaded fasteners 174, 176 that function, as previously described, both to lock the mounting plate 165 in the channel guideways and to securely attach the hinge leaf to the mounting plate. Mutually contacting surfaces of flanges 170, 172 and shoulders 151, 152 are roughened or scored to enhance locking of the mounting plate to and within the channel.

The jamb section of FIG. 7 is illustrated in FIG. 8 with the cover section attached. In this arrangement, cover section 177 is formed in a strip that need not be cut to accommodate the hinge leaves, since the cover 177 will extend over the outer surface of each of the jamb mounted hinge leaves. The cover section is formed with a pair of laterally spaced inwardly projecting flanges 183, 184 having enlarged free ends that cooperate with notches 185, 186 formed in side members 144, 146 respectively. Cover section flanges 183, 184 have a length sufficient to position the inner side of the cover at a distance from bearing surface 163 that is sufficient to accommodate the hinge leaf between the cover section and bearing surface 163. Flange 183 of the cover section is cut away for a length and at a location adequate to allow the jamb mounted hinge leaf to protrude through the cover flange.

Although the embodiments of FIGS. 3 and 7 are preferred for maximized stability and firmness of attachment of the mounting plates to the jamb support member, it will be readily appreciated that other means of adjustably securing a hinge leaf mounting plate to the jamb may be employed. So too, other mounting plate configurations may be used. For example, instead of forming the channel with a pair of guideways and providing guide following flanges on the mounting plate, as described in FIG. 3 and FIG. 7, the arrangement of the guide means may be reversed so that guideways are formed on the mounting plate interengaging with guide following flanges formed on the channel side members. Arrangements of a pair of laterally spaced interengaging guideways and guide flanges are preferred because of the maximized lateral stability of the mounting plate attachment to the jamb.

In the described arrangements, particularly where the jamb is formed of an extruded metal section, it is convenient to make the guiding portions that are formed in the jamb section to extend for the entire length thereof. However, although on-the-job adjustment of the hinge leaf is a great advantage in the hanging of the door, it will be readily appreciated that such adjustment need provide but a relatively limited amount of motion longitudinally of the jamb. Ordinarily, nominal positions of all the hinges are predetermined. Accordingly, longitudinal adjustment need be sufficient only to accommodate minor errors in mortise positioning, uneven construction or sagging of the building. In most instances, the mounting plate need be capable of no more than a total of one-half inch of adjustable movement longitudinally of the jamb. Therefore, the guide means need not extend for the entire jamb length.

Illustrated in FIGS. 9 and 10 is one such alternative arrangement for limited adjustment of hinge leaf mounting plate, also showing a modified mounting plate configuration. In this embodiment a jamb section includes an elongated support member, or a channel 242 that may be substantially similar in all respects to the channel and jamb section illustrated in FIG. 3. Cover sections and strike plates (not shown) are mounted just as in the above described embodiments. Adjustably mounted to the channel 242 is a mounting plate 265 formed with hinge leaf bearing surfaces 261 and 263 and a longitudinally extending groove 268. Mounting plate 265 includes a pair of laterally spaced channel bearing members 269, 270 that bear upon the inner surface of web 248 of channel 242. A pair of

threaded fasteners, or bolts 249, 250 extend through holes 251, 252 formed in the bottom of groove 268 and thence through holes 254, 255 formed in the web 248, the latter holes being located to provide a nominal positioning of the mounting plate 265.

To provide a limited longitudinal adjustment of mounting plate 265 relative to the channel 242, either pair of holes, either the holes 254, 255 in web 248 or the holes 251, 252 in mounting plate groove 268, are longitudinally elongated. The latter is illustrated in FIG. 10.

In mounting of door hinge leaves with the arrangement of FIGS. 9 and 10, the several mounting plates 265 are loosely secured in position to and against the channel web 248 by means of bolts 249, 250. The precise position of the hinge leaf mounting holes is then determined by measurement from or comparison with the door mounted hinge leaves. Mounting plates 265 are then longitudinally adjusted (bolts 249, 250 moving in elongated holes 251, 252) as determined from such measurement or comparison. The bolts 249, 250 are then tightened to securely lock the mounting plate to the channel 242. The hinge leaves are fastened to the mounting plates 265 by fasteners extending through the leaves and into a group of hinge leaf mounting holes that have been formed in the mounting plate 265 and which extend through the bearing surfaces 261 and 263. Preferably the hinge leaf mounting holes in bearing surfaces 261 and 263 are preformed and if deemed necessary or desirable tapped in the factory.

Mounting plate 265 is longer than the hinge leaf 266 so that it may extend on either side thereof. Holes 251, 252 of the mounting plate may be located as shown in FIG. 10 so that they are not covered by the mounted hinge leaf. Thus the plate (and hinge leaf) may be readily adjusted after the leaf has been mounted.

In the arrangement of FIGS. 9 and 10 different sets of fastening means secure the mounting plate to the web on the one hand and the hinge leaf to the mounting plate on the other hand. Thus with the arrangement of FIGS. 9 and 10, the hinge leaf bears directly upon the mounting plate and not upon the bearing surfaces of the web (The channels sides are shorter than in the other embodiments). On the other hand, in arrangements previously described and illustrated in FIGS. 3 and 7 the hinge leaf bears directly upon surfaces of relatively longer side members of the channel support member and not upon the mounting plate. Obviously either arrangement for providing hinge leaf bearing surfaces may be employed with any of the arrangements for connecting the mounting plate to the channel support member. Likewise, the mounting plate of FIGS. 9 and 10 may be readily employed to provide an inclined hinge leaf mounting and continuous cover section, such as illustrated in FIGS. 7 and 8.

There have been described several different arrangements of door casing assemblies in which the jamb is provided with longitudinally adjustable hinge leaf mounting plates and co-operating cover sections so that hinge leaves may be more readily mounted and accurately positioned on the job without compromising operation or aesthetic appearance of co-planar hinge leaf and jamb surfaces. The described constructions also enhance mounting and operation of the strike plate by affording unobstructed passage for the door bolt. The provision of preformed patterns of holes in adjustable mounting plates affords a near universal ap-

plication of the jamb sections, avoiding the need to form any hinge mounting holes on the job.

The foregoing detailed description is to be clearly understood as given by way of illustration and example only, the spirit and scope of this invention being limited solely by the appended claims.

We claim:

1. A door jamb for adjustably mounting a hinge leaf comprising
 - an elongated channel having
 - a pair of side members extending substantially in the direction of the plane of the doorway in which the jamb is to be mounted and a web fixedly interconnecting said side members, each said side member having a bearing surface lying in a plane that spans said channel, said bearing surfaces being adapted to receive and bear upon the face of a hinge leaf that is to be mounted to said channel,
 - each said side member having a shoulder extending inwardly of said channel toward the opposite side member, thereby to define a pair of guideways between said web and surfaces of respective shoulders that face toward said web, and
 - an adjustable mounting plate having first and second laterally extending flanges slidably mounted within respective ones of said guideways, whereby a hinge leaf may be mounted to said channel in abutment with said side member bearing surfaces and may be loosely secured to said channel and to said mounting plate by fastening means interconnecting the hinge leaf and mounting plate, thereby to permit adjustment of both said hinge leaf and mounting plate as a unit along said jamb, and whereby said hinge leaf may be securely fixed in place to said channel by tightening said fastening means to draw said hinge leaf and mounting plate toward each other so that said mounting plate flanges bear tightly upon said surfaces of said side member shoulders and lock said mounting plate and hinge leaf to said channel.
2. The door jamb of claim 1 wherein said channel is formed with first and second laterally spaced slots extending outwardly thereof and substantially throughout the length thereof, and including
 - an elongated cover section extending along said jamb,
 - said cover section having first and second mutually spaced flanges projecting therefrom and adapted to be snapped into said first and second slots, respectively,
 - said cover section having a transverse extent sufficient to span said side members and substantially cover the opening in said channel between said side members.
3. The door jamb of claim 9 wherein said channel is formed with first and second laterally spaced slots opening outwardly thereof and extending substantially throughout the length thereof, and
 - wherein the jamb is to be employed to mount a strike plate for the latch bolt of a door so that no adjustable mounting plate need be used,
 - and including a strike plate having an extent transverse to the extent of said channel at least sufficient to span the opening of said channel,

said strike plate including a pair of flanges projecting into respective ones of said laterally spaced slots for securement of said strike plate to said channel,

said strike plate including an aperture therein for receiving a door bolt,

said strike plate being positioned relative to said web so that said strike plate is spaced from said web by a distance sufficient to receive a portion of a door bolt extending through said strike plate aperture and beyond the strike plate into the channel.

4. The door jamb of claim 1 wherein each of said shoulders extends but a relatively short distance toward the other of the side members and wherein each of said shoulders includes a dog upstanding from the free end thereof so as to form together with the associated side members first and second laterally spaced outwardly opening slots, and wherein said bearing surface of at least one of said side members is formed by the outer end surface of said dog affixed thereto.

5. The door jamb of claim 4 wherein both of said dogs and one of said side members have an outer end surface lying in a common plane to provide said bearing surfaces, and

wherein the other of said side members extends beyond said common plane to provide a stop for firmly positioning a member secured to and across said channel opening.

6. The door jamb of claim 5 wherein at least one of said shoulder surfaces and the surfaces of said adjustable mounting plate that bear thereon are provided with a surface roughness that helps to restrain relative sliding motion therebetween when mounting plate flanges are caused to bear upon said surfaces of said side member shoulders.

7. The door jamb of claim 5 wherein said mounting plate includes a hinge leaf securing portion fixedly connected with said flanges and having a surface facing outwardly of said channel that is spaced from said channel web.

8. The door jamb of claim 7 wherein said hinge leaf securing portion of said adjustable mounting plate has at least one set of apertures formed therein for receiving threaded fastening members.

9. The door jamb of claim 1 wherein said adjustable mounting plate is formed with a plurality of different sets of apertures for alternatively receiving threaded fastening members extending through different sets of holes in different hinge leaves, whereby said hole patterns may be preformed in said mounting plate during manufacture of said door jamb, and said mounting plate may be slidably adjusted along said channel during installation of a door thereto, to properly position and appropriate set of said mounting plate holes so as to enable a hinge leaf to be secured thereto at a position determined by the position of a mortise that has previously been formed in a door to be attached to said hinge leaf.

10. The door jamb of claim 1 wherein said adjustable mounting plate has a length in the direction of the extent of said door jamb that is considerably less than the length of the jamb.

11. The door jamb of claim 1 wherein said side member bearing surfaces lie in a plane that extends across said channel at an acute angle relative to the jamb, and wherein a cover section is attached to and extends

along said jamb and overlies a hinge leaf secured to said mounting plate.

12. A door frame assembly comprising

a head section,

a first jamb,

a second jamb,

means for securing said sections to each other,

an adjustable mounting plate,

means for adjustably mounting said plate to said first jamb,

means for securing a hinge leaf to said mounting plate, and

means for fixedly connecting said adjustable mounting plate to said first jamb to thereby lock both said adjustable mounting plate and said hinge leaf attached thereto to said first jamb section, said second jamb being formed with first and second laterally spaced slots opening outwardly thereof and extending substantially throughout the length thereof, and including a strike plate having an extent transverse to the extent of said jamb at least sufficient to span the space between said slots,

said strike plate including a pair of flanges projecting into respective ones of said laterally spaced slots for securement of said strike plate to said jamb, said strike plate including an aperture therein for receiving a door bolt,

said second jamb having an elongated portion thereof that is laterally positioned in alignment with the aperture of said strike plate and spaced inwardly of said jamb to provide an unobstructed space between said strike plate and the jamb so that a door bolt protruding through said strike plate aperture will not impinge upon said jamb, and a plurality of elongated cover sections extending along said second jamb and having a first and second mutually spaced flanges projecting therefrom and snapped into said first and second slots respectively,

said cover sections of said second jamb having exterior surfaces that are co-planar with the exterior surface of said strike plate to provide a smooth, substantially unbroken exterior surface of said second jamb.

13. A door casing jamb comprising

an elongated support member extending longitudinally on the jamb,

said support member comprising a channel having a pair of continuous side members and a continuous web interconnecting inner ends of the side members,

guide means formed in said channel comprising a pair of laterally spaced inwardly facing continuous guideways formed in said side members,

a hinge leaf mounting plate including means for fixedly securing a hinge leaf thereto, said mounting plate including a guide follower having a pair of outwardly facing flanges each slidably extending into a respective one of said guideways,

means for fixedly connecting said mounting plate to said support member in a desired position of longitudinal adjustment, said last-mentioned means comprising means for securing a hinge leaf to said mounting plate,

said channel web being spaced inwardly from the outer edges of the side members thereof for a distance sufficient to receive a door bolt therein with-

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out interference with the normal longitudinal travel of the bolt, whereby an apertured strike plate may be mounted at any position on said door jamb and the inwardly spaced web will provide adequate clearance for reception of a door bolt that extends through the strike plate.

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14. The door jamb of claim 13 wherein outer surfaces of said side members form bearing surfaces for reacting against a hinge plate that is secured to said hinge leaf mounting plate.

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