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3,390,501

JOINT COVER DEVICE

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2 Sheets-Sheet 1

Fig. 2

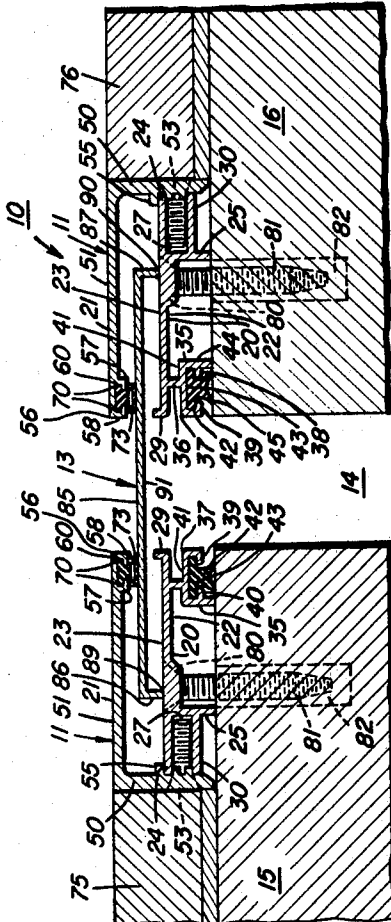
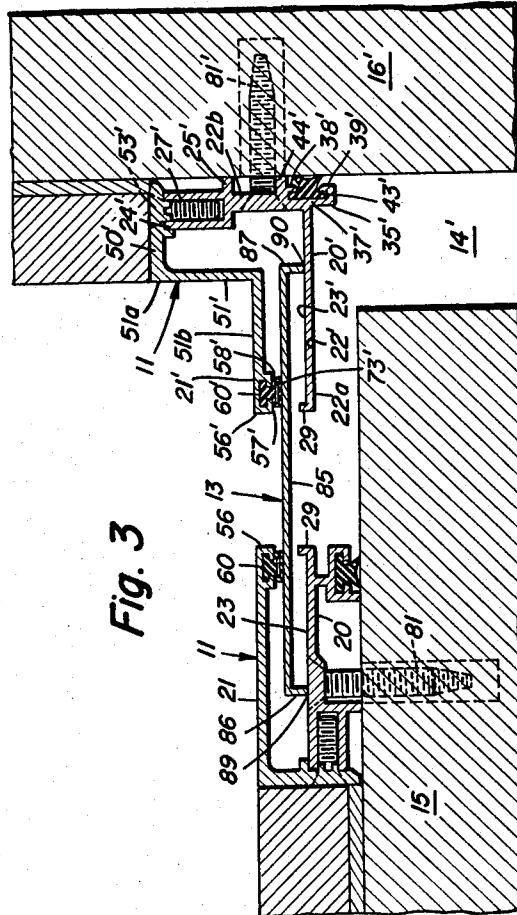
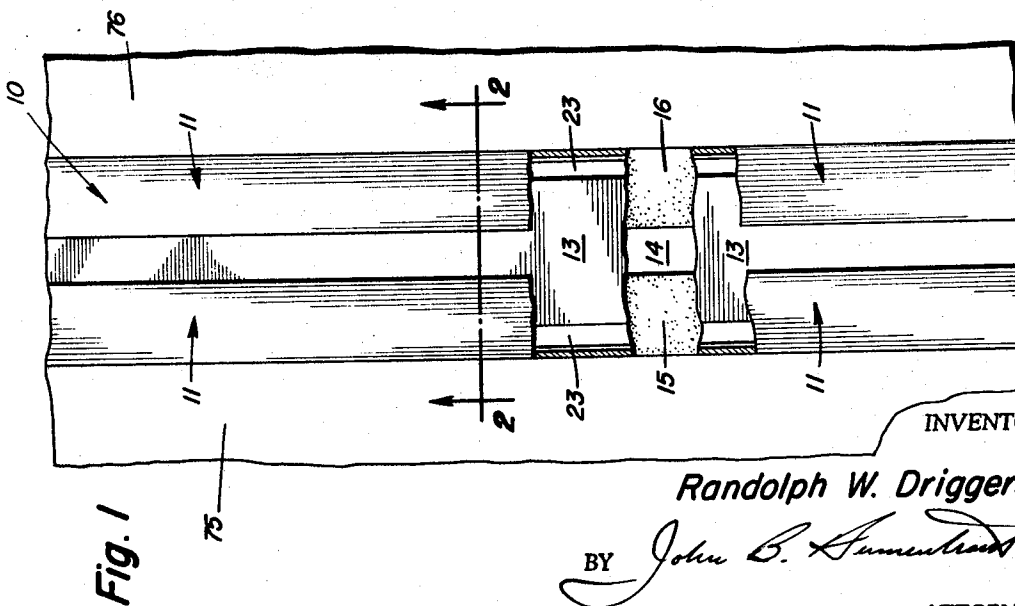


Fig. 3



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3,390,501

JOINT COVER DEVICE

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ABSTRACT OF THE DISCLOSURE

A joint cover device is described as having a pair of housings and an intermediate cover web, each of the housings including a base portion and a shielding portion forward of the base portion and the intermediate cover web securely carrying spaced opposed transversely projecting fulcrums extending longitudinally lengthwise of the intermediate cover web, transverse ends of the base and shielding portions of each of the housings being spaced opposed a distance apart and coextending longitudinally of the housing and contact ends of the fulcrums being offset from a face of the intermediate cover web angularly and occupying a plane in common generally parallel to the intermediate cover web, for the fulcrums having the contact ends bearing upon the base portions inside the housings to support the intermediate cover web angularly and rectilinearly movably bridging a variable space laterally outside the transverse ends of the housings. The joint cover device is further characterized by having resilient sealing portions coextending with the shielding portions and the intermediate cover web and disposed in the shielding portions and the intermediate cover web for biasing the contact ends of the fulcrums to contact the base portions inside the housings and resiliently sealing the intermediate cover web to the shielding portions while the intermediate cover web extends laterally outside the opposed transverse ends of each of the housings and rectilinearly and angularly movably bridges a variable space between the housings.

The present application is a continuation of my copending application Serial No. 518,650, filed January 4, 1966, now abandoned and entitled "Joint Cover Device," and the invention relates to joint cover devices which are suited to contribute concealment and accommodate movements transmitted from structure extending within the region concealed, and more especially is concerned with covers for expansion joints.

An object herein is the provision of a cover device which is practical to construct, reliable in operation, being commercially competitive and capable of retaining closure across a joint in an associated structure while components of the device rectilinearly actively may take any of a variety of positions in response to movements of the associated structure, and which components further can adjust relatively angularly in response to particular directional movements of the associated structure while the device still retains closure across the joint in the related structure.

Another object of the present invention is that of providing a joint cover device of the character indicated wherein different angular relations of components thereof are quite satisfactorily attained through fulcrum action while the fulcrums are housed, and adjustments of these same components rectilinearly are readily accomplished by rectilinear sliding action at the fulcrums.

A further object of this invention is the provision of a joint cover device of the character indicated in which the fulcrum and sliding actions are accompanied by worthwhile biasing and sealing effects.

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Another object herein is the provision of a joint cover device in which seals in the device importantly not only exercise a sealing effect, but maintain a biasing effect serving to sustain components of the device slidably and angularly movably in contact with each other.

Other objects of the present invention in part will be obvious and in part pointed out more fully hereinafter.

In the accompanying drawings representing several illustrative embodiments of the present invention,

FIGURE 1 is a front facial view of a joint cover device installed on structural sections, the view being broken away to expose portions of the interiors of the housings and a portion of the joint between the structural sections;

FIGURE 2 is a transverse cross section taken at line 2—2 in FIGURE 1; and

FIGURES 3, 4 and 5 are transverse cross sections comparable to FIGURE 2, but are taken of further embodiments of joint cover devices with the devices installed on structural sections having a joint between the structural sections.

As conducive to a clearer understanding of certain features of the present invention, joint cover devices are in demand largely in the architectural and structural engineering fields and thus often encounter indoor or outdoor use in buildings, pavements, and particularly where joints in a structure need concealment, such as is usually the case between ceiling or wall or floor sections which are formed in constructing a building or are installed prefabricated. This demand further illustratively exists where the joints occur at corners as at the corner of a room, or occur between floor or pavement slabs or between work sections each including a plurality of suitably bonded blocks.

In fact, intermittent interruptions setting apart sections of a structure, to provide gaps or yieldably filled regions between the sections, often are provided for a deliberate purpose in the construction arts, thus for the interruptions to constitute well known expansion joints which protect the structure against the effects of expansion and contraction attributable to thermal changes. Structural sections which respond actively to thermal changes by accordingly expanding and contracting will of course change the width of the joint, but thrusts which differ in direction from this direction of change also may be encountered, for example because of unequal thrusts or vibrations applied to the sections from an external source or, again, for example, by reason of differences in restraint of the sections while having the sections respond to thermal change or external load.

Certain joint cover devices heretofore known do adjust to externally applied forces besides those forces which promote a strictly rectilinear adjustment of the device, but can do so only by bending of a member or members thereof which actually best retain an initial form permitting a strictly rectilinear adjustment of the device. On receiving external thrusts applied from other directions the device, still bent by the previous thrusts as mentioned, is likely to develop further complications which then or ultimately will impair operation. Endeavors to avoid bending of the character indicated and accomplish articulation can lead to cover devices which are unduly complex in structure, requiring a relatively large number of moving parts and increasing cost of the device and further the likelihood of operational difficulties. The problems associated with articulation become even more pronounced when it is considered that joint cover devices often are needed having a considerable length for covering joints which also may be long, and that whether short or long joints are to be covered there is further an often existing need to shield these with a simple and effective device while articulation is permitted and sealed conditions prevail through the device.

A further object of the present invention accordingly is to achieve improvements in expansion joint covers better to satisfy existing needs in the art.

In accordance with the present invention, joint cover devices are provided in which a pair of housings and an intermediate cover web as components of the device are adapted to be relatively moved angularly and rectilinearly at fulcrums which are securely carried by the intermediate cover web and movable with the intermediate cover web. The fulcrums are contained within the pair of housings to establish axes longitudinally of the housings, this with the intermediate cover web extending laterally movably rectilinearly through openings in the housings and spanning a variable distance between the housings and with the intermediate cover web further being movable within these openings angularly about the fulcrums. The rectilinear and angular movements are tolerated while the fulcrums are biased to stay in slidable contact with substantially plane inside surfaces of the housings by resilient portions of the device which seal the intermediate cover web to the housings.

Referring now more particularly to the embodiment represented in FIGURES 1 and 2 of the drawing a joint cover device designated in general by the reference numeral 10 includes a pair of similar housings 11 and further an intermediate cover web 85 which are constructed for the intermediate cover web to cover a joint 14 between opposite sections 15 and 16 of a structure, the joint for example being a vertical one between sections of a building wall or a horizontal joint between sections of a room ceiling. Each of the housings 11 includes a base member 20 having a base plate 22, and each housing also includes a shielding member 21 which is substantially right angular in cross section. These members of the housings in the present embodiment are separably interconnected rigid extrusions of any suitable materials or material as for example an aluminum base alloy. An inner transverse end 29 of each base member 20 comprises a lip integral with the plate 22 and the lip coextends longitudinally with an outer transverse end 24 of the plate. The inner transverse end 29 of each of the plates is raised out of the plane of the plate. A substantially plane bearing surface 23 of each of the plates 22 is normally inside the related housing 11 and extends laterally throughout the distance between the outer and inner transverse ends 24 and 29 respectively and to the opposite longitudinal ends of the plate.

An outer leg 25 of each base member 20 is marginally inward from the outer transverse end 24 of the plate 22 and projects away from the side of the plate opposite from the substantially plane bearing surface 23, and the leg, intermediately of the length of the leg, supports a longitudinally coextending parallel flange 30 which complements the outer transverse end 24 of the plate by forming therewith a longitudinally extending laterally entrant channel 27 having a portion of the leg 25 for an inner wall.

Each base member 20 also is provided having an inner leg 35 coextending longitudinally with the inner end 29 of the plate and substantially parallel with the outer leg 25. The inner leg 35 is disposed projecting from plate 22 on the side of the plate which is opposite to the substantially plane bearing surface 23. More particularly, an inner longitudinal wall 36 of leg 35 interconnects plate 22 with the base 41 of leg channel 37 and the leg channel recess 38 opens outwardly in the direction of projection of leg 35 away from the plate. The recess 38 of the leg channel 37 is constricted by means of ledges 39 and 40 which are offset from base 41 of the channel for the recess to accommodate an elastomeric seal 42 having a base 43 engaged by the leg channel ledges 39 and 40 and retained in the channel behind these ledges. At least one side portion 44 of the channel of leg 35 terminates outwardly in a plane substantially parallel to plate 22 with the same plane including the outer end of leg 25. An on-

contact sealing portion 45 of the elastomeric seal is inherently biased to project beyond the outer terminal ends of the channel of leg 35.

Plates 22 are drilled at intervals longitudinally of the base members 20 to provide screw openings 80 through which mounting screws 81 are inserted and are engaged with plugs 82 or the like in the structural sections 15 and 16, thus bringing the outer ends of legs 25 and 35 to bear upon faces of these structural sections while the elastomeric seals 42 are held compressed sealingly against these same faces. The mounting furthermore is such that the pair of housings 11 extend generally parallel to each other with inner ends 29 of the plates 22 being spaced apart adjacent to each other across the joint.

The shielding members 21 are generally of right-angle L-configuration in cross section and accordingly have substantially rectangularly disposed walls 50 and 51 which respectively form side and front facial walls of the housings 11. The front facial walls 51 are suitably finished on the outside to be exposed for such purposes as to provide cover and trim in the room of a building for the structural sections 15 and 16. The side walls 50 afford side cover and are laterally drilled at intervals longitudinally of the shielding members to accommodate screws 53 which engage and fasten the shielding members to the base members 20 within the channels 27, as for example by a self-tapped threaded engagement with the plates 22 and flanges 30 inside these channels. Transverse end 24 and the flange 30 thus provide abutments by facially contacting the adjacent surface of side wall 50 of the mounted shielding member 21. Walls 50 are equipped with integral lips 55 which extend longitudinally of these walls and overlie the related plates 22 in contact with the outer margins of the substantially plane bearing surface 23. The arrangement is such that the shielding members when held in position by the screws 53 have the facial walls 51 extending generally parallel with plates 22 of the base members 20. A plasterwork or panelboard finish 75 and 76 is sometimes added to the structural sections 15 and 16 using the housings 11 for grounds and such for example that the exposed surfaces of the finish 75 and 76 are flush with the frontally exposed faces of the front facial walls 51. Inner transverse ends 56 of the walls 51 are held spaced to coextend longitudinally with the inner ends 29 of the plates 22 thus for the space between these ends to afford access to the insides of the housings 11 at the sides of the housings opposite from the side walls 50 of the shielding members. The inner transverse ends 56 of facial walls 51 include channels 70 which are laterally entrant from the insides of the housings 11. The channels 70 are constricted by opposed ledges 57 and 58, and elastomeric sealing members 60 have bases retained in the channels by these ledges and coextend longitudinally with the shielding members 21. Hollow tubular on-contact sealing portions 73 of the elastomeric seals 60 or inherently biased to project from the related transverse ends 56 of the shielding members 21 toward the related base members 20 of the housings 11 in a region adjacent to the transverse ends 29 of the base members. The inner ends 56 of walls 51 in the installed positions of the housings 11 indicated in FIGURE 2 coextend generally parallel and are in a spaced relation to each other laterally across the joint 14.

The intermediate cover web 85 in the joint cover device represented in FIGURES 1 and 2 is a rigid component of an intermediate or channel member 13 made of any suitable material and conveniently by extrusion, the material for example being an aluminum base alloy. Web 85 of the intermediate member has a thickness less than the distance between the spaced opposed transverse ends 29 and 56 of each of the housings 11. Further, the intermediate member 13 has opposed transversely projecting longitudinally extending fulcrums 86 and 87 which in the present embodiment amount to rigid side legs or flanges of the channel-shaped intermediate member, the

fulcrums being interconnected by the web 85. Contact ends 89 and 90 of the fulcrums are offset from face 91 of the web 85 to occupy a common plane generally parallel to this web 85. The distance of offset of the contact ends 89 and 90 of the fulcrums from the web 85 is such that when the fulcrums are disposed having these contact ends upon the substantially plane bearing surfaces 23 of the plates 22 and the web 85 substantially parallel to the plane bearing surfaces 23 the fulcrums support the web 85 between the opposed transverse ends 29 and 56 of each of the housings 11 and in this maintain the web 85 removed from touch with these transverse ends while the web bridges the joint 14 between the housings. This permits free movement of the web 85 angularly with the fulcrums 86 and 87 and rectilinearly laterally in either of opposite directions relative to the housings 11 with the contact ends 89 and 90 bearing slidably and angularly movably in either of opposite directions upon the bearing surface 23 of the base members 20. In these movements the resilient seals 60 longitudinally coextending with the shielding members 21 and the intermediate member 13 are securely interposed between the shielding members and the intermediate member and bias the web 85 and thus the contact ends 89 and 90 of the fulcrums into slidable contact with the bearing surface 23. Seals 60 resiliently sealing offset web 85 slidably and angularly movably from the shielding members 21. Variations in the relative positions in the structural members 15 and 16 such as by thermal expansion or contraction of these structural members bring about variations in the relative positions of the housings 11 in the joint cover assembly and these movements are tolerated regardless of whether they induce change in the relative position of the intermediate member 13 strictly rectilinearly laterally with respect to the housings 11 or whether the change in position of the intermediate member 13 is angular with respect to the housings 11. In rectilinear movements of the character just mentioned there is a sliding action between web 85 and the seals 60 just as is there a sliding action between the contact ends 89 and 90 of the fulcrums on the substantially plane bearing surfaces 23 of the base members 20. Where relative movements in the joint cover device 10 involve articulations or angular movements at the fulcrum contact ends 89 and 90, the seals 60 adjust to this change while still maintaining sealing contact with the web 85 of the intermediate member 13. The joint 14 thus remains sealed through the cover device 10 whether rectilinear or angular movement or combined rectilinear and angular movements are induced in the device.

The joint cover device 10 hereinbefore described is well suited for installations which demand a straight-away cover, the exposed faces of the front facial walls 51 contributing in this regard while the exposed front face of the web 85 is neatly recessed and yet is visible to promote the cover effect across the joint. In a modified joint cover device 10', represented in FIGURE 3, an angular or corner covering effect instead is readily accomplished across a joint 14' formed between structural members 15' and 16' which extend in an angular relation to each other from the joint. The cover device 10' includes a housing member 11 and an intermediate member 13 which are similar to those described with reference to the embodiments of FIGURES 1 and 2, and further the cover device 10' includes a housing 11' in which the base member 20' and the shielding member 21' are extrusions of any suitable materials or material, such as an aluminum alloy, and coextend longitudinally with the housing 11 and the intermediate member 13 in the assembly as installed. Portion 22a including plate 22' of the base member 20' has an inner transverse end 29'. A right-angle extension 22b of the base member 20' includes a laterally entrant channel 27' and a leg 25' which coextend longitudinally of the base member. The leg 25' is marginally set in from the outer end 24' of the base member 20'. Further marginally inwardly from outer end 24' is a second leg 44' and the

plate extension 22b between the legs 25' and 44' has openings drilled at longitudinally spaced intervals for the accommodation of screws 81' which are suitably anchored in the structural section 16' for mounting the base member 20' to the structural section. A leg 35' in the region of the junction of portions 20a and 20b flanks a channel 37' which is constricted by ledges 38' and 39' for retaining in the recess of the channel the base of an elastomeric sealing member 42' and a portion of the sealing member projects externally of the channel and is inherently biased to be in contact sealingly with the structural section 16'. Leg 44' flanking the other side of channel 37' bears in cooperation with leg 25' against the structural section 16' while the sealing member 43' contacts the section, the bearing ends of the legs 25' and 44' being in a plane which is perpendicular to the substantially plane bearing face 23' of plate 22'. Housings 11 and 11' as installed upon the structural sections 15' and 16' have their bearing surfaces 23 and 23' substantially in a coplanar position across the joint 14'. The shielding member 21' of the housing 11' is of generally reversed right-angle Z-configuration in cross-section, there being frontally a facial wall 51' which includes a wall portion 51a having for oppositely directed substantially right-angle extensions the front facial wall portion 51b and side wall 50' of the shielding member 21'. The side wall 50' is drilled at intervals longitudinally of the shielding member 21' and accommodates screws 53' which enter the channel 27' and secure the shielding member to the base member 20' as by self-tapping engagement with the side walls of the channel. The securement maintains the front facial wall portions 51a and 51b in spaced substantially parallel relations respectively to the plate portions 22b and 22a of the base member 20'. Further an inner transverse end 56' of the shielding member 21' is thus held spaced laterally opposite from transverse inner end 29' and longitudinally coextends with the latter end for the housing 11' to have a longitudinal slit permitting access laterally into the inside of this housing at the side opposite from the plate extension 22b, it being understood of course that the inner transverse ends 29 and 56 also provide a longitudinal slit for access to be had into the inside of the housing 11. The inner transverse end 56' includes a channel 70' which is laterally entrant from the inside of housing 11'. Channel 70' is constricted by opposed ledges 57' and 58', and elastomeric sealing member 60' having opposed grooves receiving these ledges longitudinally coextends with the shielding member 21' and a hollow tubular on-contact sealing portion 73' of the elastomeric seal is inherently biased to project from the transverse end 56' of the shielding member toward the base member 20' in a region adjacent to transverse end 29' of the base member.

In the transversely spaced mounted relation of the housings 11 and 11' indicated in FIGURE 3, the intermediate member 13 has the contact ends 89 and 90 of the fulcrums 86 and 87 bearing slidably laterally of the intermediate member upon the substantially plane bearing surfaces 23 and 23' of the base members to support the web 85 between the opposed transverse ends 29 and 56 of the housing 11 and between the opposed transverse ends 29' and 56' of the housing 11'. In this position the intermediate member 13 is relatively movable rectilinearly and angularly with respect to the housings and for this purpose the web 85 is supported removed from touch with the transverse ends 29, 29', 56 and 56'. The resilient sealing portions 60 and 60' of the joint cover unit 10' longitudinally coextended with the shielding members 21 and 21' and the intermediate member 13 and are securely interposed between the shielding members and the intermediate member so as to bias the contact ends 89 and 90 of the fulcrums into laterally slidable contact with the substantially plane bearing surfaces 23 and 23'. Further, the sealing portions 60 and 60' sealingly interconnect the intermediate member 13 slidably and angularly movably with the shielding members 21 and 21' when the web 85

extends between the ends 29 and 56 and between the ends 29' and 56' and is sustained removed on the fulcrums 86 and 87 from these ends in bridging a space between the housings which may vary as by thermal expansion and contraction of the structural sections 15' and 16'.

In certain embodiments the intermediate member is provided with supplemental projections for engaging sealing portions of the joint cover device which are carried on the shielding members, thus for the intermediate member to be resiliently held laterally while these same sealing portions bias the fulcrums into slidable contact with the housings and seal the intermediate member slidably to the housings. In such an arrangement, the intermediate member quite suitably is a rigid extrusion of H-configuration in cross section as shown in the embodiments represented in FIGURES 4 and 5 or is otherwise constructed and arranged to have fulcrums along with supplemental projections adapted for the intermediate member to engage sealing portions of the joint cover devices and thus be constrained laterally within the housings. In the embodiment represented in FIGURE 4 the intermediate member 113 of the joint cover device 110 more particularly includes laterally spaced longitudinally coextending parallel fulcrums 186 and 187 and is further characterized by laterally spaced integral flanges 200 and 201 longitudinally coextending parallel with the fulcrums on the opposite side of web 185 from the fulcrums, the contact ends 189 and 190 of the fulcrums being in a plane substantially parallel to the web 185 and being offset from the web. Each of a pair of similar housings 111 includes a base member 120 and a shielding member 121. The base member 120 of each of the housings has a side wall 210 which in the installed position of the housing occupies a location outward from the joint 114 while a base plate 122 of the housing extends transversely from junction with the side wall 210 and has an inner end 129 adjacent to the joint 114. Toward the frontal region of each of the housings the related side wall 210 is shaped to contribute a marginal front facial portion 211 to the housing and has a ledge or an abutment 212 set rearwardly from the marginal front facial portion, the ledge face 213 being forward of the substantially plane bearing surface 123 of base plate 122 of the housing and substantially parallel to the bearing surface just mentioned. A dovetail groove 214 in the ledge 212 coextends longitudinally of the housing with the side wall 210 and retains a seal 215 such as of vinyl resin, the seal being inherently biased to project forward of the ledge face 213 and be compressed sealingly against the rearward face 216 of shielding member 121 of the housing. This shielding member is in the form of a plate having a series of apertures 217 spaced longitudinally thereof which receive screws 218 in engagement with suitable threads securely in openings into the side wall ledge or abutment 212 for drawing the shielding member compressionally against seal 215. On this mounted position the shielding member 121 coextends longitudinally with the related base member 120 and rigidly sustains an inner end 156 in a spaced opposed position forwardly in the housing from inner end 129 of the base plate 122. The rearward face 216 of the shielding member moreover extends generally parallel to the substantially plane bearing surface 123 of the base member 120 while the front facial area 219 of the shielding member is exposed frontally of the housing. Where the cover device 110 is installed in association with structural sections to support traffic such as foot or wheel traffic the facial area 219 of the shielding member of each of the housings is beneficially substantially flush with the marginal front facial portion 211 of the related base member 120 to avoid impediment. A seal 220 made of elastomeric strap of a generally T cross sectional configuration has a body portion 221 and oppositely directed lips 223 and 224 extending from the body portion, all resting facially upon web 185 of the intermediate member 113 and more particularly resting upon that face of the

latter web which is most proximate to the rearward faces 216 of the shielding members in the assembly. Body portion 221 of the seal has a forward facial end 222 which normally is facially substantially flush with the front facial areas 219 of the shielding members. The outer ends of the lips 223 and 224 terminate against the flanges 200 and 201 of the intermediate member 113, and in the installed condition of the seal 220 these lips are held under compression against faces 216 of the shielding members by screws 218, thus thrusting the fulcrums 186 and 187 to bear slidably upon the bearing surfaces 123 at the contact ends 189 and 190 of the fulcrums. Housings 111 meanwhile are securely on the structural sections 115 and 116 which in the present embodiment are of concrete into which external anchors 230 of the housings extend laterally rearwardly from the junctures between side walls 210 and base plates 122 of the housings and longitudinally of the housings and advantageously carry anchor extensions 231 thus securing the housings to the set concrete on opposite sides of the joint 114. The substantially plane bearing surfaces 123 of the housings 111 as installed are substantially coplanar though for such reasons as thermal contraction and expansion of the structural sections 115 and 116 are prone to move relatively. Also, as installed, the housings 111 occupy positions in which the shielding members 121 exercise compressional thrust toward each other at their inner transverse ends against the opposite sides of body portion 221 of the elastomeric seal 220. This same body portion beneficially is hollow internally such as by having a plurality of parallel grooves therein coextending longitudinally with the shielding members 121 and entrant from the side of the seal 220 which is next to the web 185 of the intermediate member 113. The intermediate member 113 thus bridges a space laterally between the housings 111 and covers the joint 114. Web 185 is supported between the opposed transverse ends 129 and 156 of each of the housings while the fulcrums having their contact ends 189 and 190 biased by the resilient sealing portions 223 and 224 of the elastomeric seal 220 slidably against the bearing surfaces 123 support the web 185 from touch with the aforementioned transverse ends within limits of permissible angular and rectilinear movement of the intermediate member 113 relative to the housings 111. As the housings 111 move with the structural sections 115 and 116 the body portion 221 of the elastomeric seal 220 compresses and distends as may be demanded by the relative movements of the inner transverse ends 156 of the housings and fills the space between these ends. Flanges 200 and 201 of the intermediate member 113 are resiliently retained by the elastomeric seal 220 to restrict lateral displacement of the intermediate member 113 in the housings.

A further structural feature sometimes availed upon in the practice of the present invention entails having a supplemental seal bridge the space across the joint and interconnect the housings in the joint cover device rearward of the intermediate member in the assembly. A form of the latter arrangement is represented in the embodiment of FIGURE 4, and includes seal fastening components 241 which extend rearwardly of the assembly as C-shaped channels, these channels being open laterally of the joint 114 and extending longitudinally of the joint, thus receiving in a securely mating relation corresponding opposite fastener ends 245 and 246 of the elastomeric sheet seal 244 which bridges and seals the joint to the seal fastening components 241.

Referring to the embodiment of FIGURE 5, the joint cover device 110' therein represented is suited for concealing a joint 114' existent between structural sections 115' and 116' which for example may respectively be a portion of a building floor and a portion of a wall of the building. As shown, the housing 11a is mounted in concrete or the like and is similar to one of the housings 111 in the embodiment of FIGURE 4, though having a stepped extension 120a from the transverse end 129' of

the base member plate 122', the extension terminating adjacent to the joint 114' and there being provided with a seal fastening component 241'. Housing 111b is without the anchor means 230' and 231' of housing 111a, and instead has as a front facial extension, including the mounting plate 210a', integrally in prolongation of the side wall 210' outwardly beyond the shielding member 121' and at about right angle to the latter and in a plane which is substantially at right angle to the base plate 122a. The front facial extension plate coextends longitudinally with the shielding member 121' and laterally has screw openings at intervals longitudinally which receive the screws 81a for securement of housing 111b to the structural member 116'. In the vicinity of the juncture of side wall 210' with the base plate 122a, the housing 111b has a seal fastening component 242' which is laterally entrant externally of the housing. The seal fastening components 241' and 242' of the housings 111a and 111b are available for the same purpose as hereinbefore described with reference to the seal fastening components 241 in the joint cover assembly of FIGURE 4.

As the invention lends itself to many possible embodiments and as many possible changes may be made in the embodiments hereinbefore set forth, it will distinctly be understood that all matter described herein is to be interpreted as illustrative and not as a limitation.

I claim:

1. A joint cover device comprising, a pair of housings and an intermediate cover web, each of said housings including a base member and a shielding member, said base members of the housings each having a substantially plane bearing surface to be contacted inside said housing and said intermediate cover web securely carrying spaced opposed transversely projecting fulcrums extending longitudinally lengthwise of said intermediate web, a transverse end of said base member and a transverse end of said shielding member of each of said housings being spaced opposed a distance apart and coextending longitudinally of the housing and contact ends of said fulcrums being offset from a face of said intermediate cover web a distance and occupying a plane in common generally parallel to said intermediate cover web, for said fulcrums having said contact ends bearing slidably laterally of said intermediate cover web upon said substantially plane bearing surfaces of said base members to support said intermediate cover web removed from touch with said transverse ends of each of said housings and angularly and rectilinearly movably between said transverse ends of each of said housings while said intermediate cover web bridges a variable space laterally between said housings, and the joint cover device further comprising resilient sealing portions coextending with said shielding members and said intermediate cover web and securely interposed between said shielding members and said intermediate cover web for biasing said contact ends of said fulcrums to laterally slidably contact said substantially plane bearing surfaces of said base members and resiliently sealingly offsetting said intermediate cover web rectilinearly and angularly movably from said shielding members while said intermediate cover web extends between said opposed transverse ends of each of said housings and is sustained removed on said fulcrums from said transverse ends in bridging a variable space between said housings.

2. A joint cover device as set forth in claim 1, wherein said transverse ends of said shielding members include sealing channels opening laterally towards said intermediate cover web and said sealing channels contain sealing strips projecting laterally out of said sealing channels and contacting said intermediate cover web slidably for biasing said contact ends of said fulcrums into contact with said substantially plane bearing surfaces of said base members and resiliently sealingly offsetting said intermediate cover web from said shielding members.

3. A joint cover device as set forth in claim 1, wherein each of said shielding members has a front facial wall

and a side wall, and each of said side walls has a row of apertures therethrough spaced in the row longitudinally of said side wall and each of said base members has transverse abutments longitudinally of the base member and a fastening channel extending longitudinally between said abutments and opening outwardly laterally toward said apertures in said side wall of the shielding member, for self-tapping screws to enter said channel through said apertures and be in self-tapped engagement with opposed sides of said fastening channel and sustain said shielding member mounted to said base member of the housing while said side wall rests against said abutments of said base member of the housing.

4. A joint cover device as set forth in claim 3, wherein each of said base members includes a pair of legs on one side and has said substantially plane bearing surface on an opposite side thereof, said legs having outer ends in a plane substantially parallel to said bearing surface and said bearing surface being that of a base plate integral with said legs of the base member.

5. A joint cover device as set forth in claim 3, wherein said front facial wall of one of said shielding members is substantially right angular in cross section and said base member associated with said one shielding member includes a base plate and a substantially right angle extension from said base plate, said extension including said fastening channel and said abutments of said base member.

6. A joint cover device as set forth in claim 5, wherein said base member associated with said shielding member includes a pair of legs integral with said extension on one side of said extension, said legs having outer ends in a plane substantially normal to said substantially plane bearing surface.

7. A joint cover device as set forth in claim 1, wherein said fulcrums are laterally spaced rigid flanges integral with said web.

8. A joint cover device as set forth in claim 1, wherein said intermediate cover web on the side opposite from said fulcrums supports a sealing strap having said resilient sealing portions extending between said shielding members and said intermediate cover web, and a body of said strap interconnecting said sealing portions and sealingly contacting said transverse ends of said shielding members between said housings for closing off said transverse ends of said shielding members.

9. A joint cover device as set forth in claim 8, wherein said intermediate cover web securely carries a pair of laterally spaced flanges engaging ends of said resilient sealing portions inside said housings.

10. A joint cover device as set forth in claim 8, wherein said base members include base plates and side walls integral with said base plates inwardly of said housings from said transverse ends of said base members, said substantially plane bearing surfaces being those of said base plates and said side walls forwardly in said housings having frontal abutments and rows of openings entering said walls at said abutments at spaced intervals longitudinally of the rows, said side walls having screw threads tapped therein in said openings, and said shielding members including cover plates resting on said abutments and having apertures receiving screws into engagement with said threads in said openings for mounting said cover plates on said base members.

11. A joint cover device as set forth in claim 10, wherein said side walls of said base members have ledges forming said abutments and terminate front facially endwise marginally outside said cover plates substantially flush with front facial areas of said cover plates.

12. A joint cover device as set forth in claim 10, wherein said base member of one of said housings has a mounting extension of said side wall projecting forwardly of said cover plate of the housing and said extension being in a plane substantially normal to said cover plate and said base plate of said one of said housings.

13. A joint cover device comprising, a pair of housings and an intermediate cover web, each of said housings having a base portion and a shielding portion forward of said base portion and said intermediate cover web securely carrying spaced opposed transversely projecting fulcrums extending longitudinally lengthwise of said cover intermediate web, transverse ends of said base and shielding portions of each of said housings being spaced opposed a distance apart and coextending longitudinally of the housing and contact ends of said fulcrums being offset from a face of said intermediate cover web a distance and occupying a plane in common generally parallel to said intermediate cover web, for said fulcrums having said contact ends bearing upon said base portions inside said housings to support said intermediate cover web angularly and rectilinearly movably bridging a variable space laterally outside said transverse ends of said housings, and the joint cover device further comprising resilient sealing portions coextending with said shielding portions and said intermediate cover web disposed on said shielding portions and said intermediate cover web for biasing said contact ends of said fulcrums to contact said base portions inside said housings and resiliently sealing said intermediate cover web to said shielding portions while said intermediate cover web extends laterally outside said opposed transverse ends of each of said housings and rectilinearly and angularly

movably bridges a variable space between said housings.

14. A joint cover device as set forth in claim 13, wherein said intermediate cover web on the side opposite from said fulcrums supports a sealing strap between said housings, and said sealing portions being portions of said strap disposed on said transverse end of said shielding portions and said intermediate cover web for biasing said contact ends of said fulcrums to contact said base portions inside said housings and resiliently sealing said intermediate cover web to said shielding portions while said intermediate cover web extends laterally outside said opposed transverse ends of each of said housings and rectilinearly and angularly movably bridges a variable space between said housings.

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