June 4, 1963 R. O. YOUNG 3,092,219

BUILDING-PARTITIONS OR DIVIDERS

Filed Nov. 16, 1959

FIG. 1

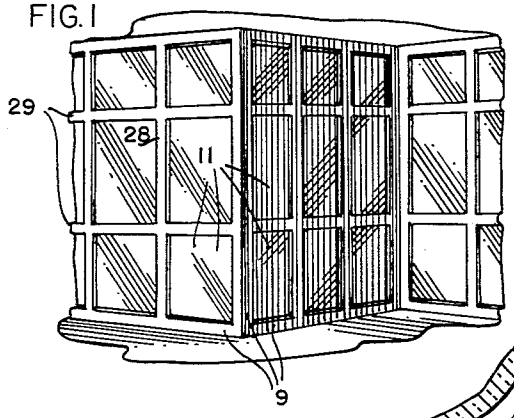
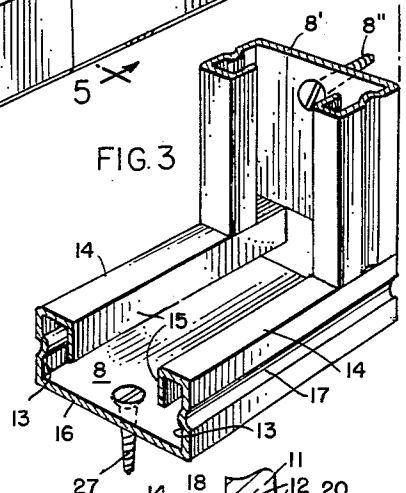


FIG. 2

FIG. 3



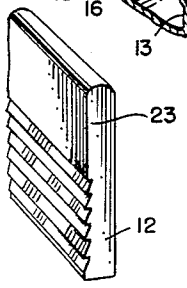


FIG. 7

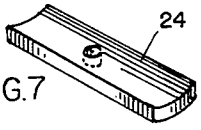


FIG. 6

FIG. 4

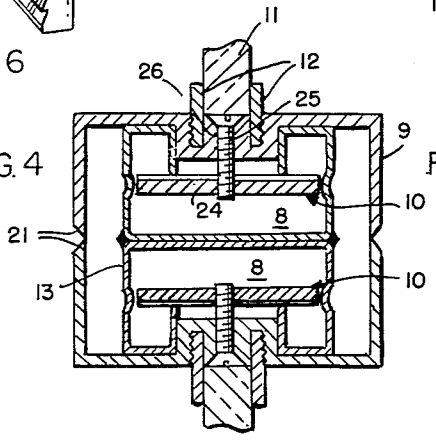
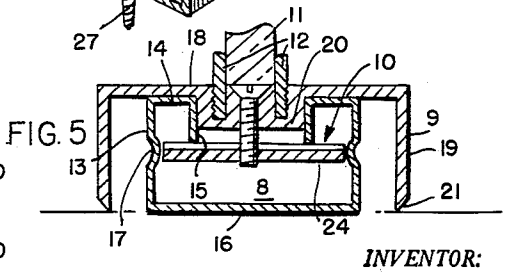


FIG. 5



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BUILDING-PARTITIONS OR DIVIDERS

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This invention relates to improvements in partitioning and/or dividers.

In modern buildings, of practically every construction and use, there is need for varied partitioning of the interiors, after the main exterior walls have been erected. Because of the changing personnel, activities and/or tenants, partitions often have to be added, repositioned or removed.

The main objects of this invention are to provide a new and novel knockdown partition or area divider; to provide improved supports anchorable to building floors, walls and/or ceilings for locating room partitions or dividers in any desired relationship; to provide improved partition supports of this kind having interfitting attachable elements one for anchoring to the building structure and the other for mounting partition panels; to provide improved means for attaching the panel mounting element to the building anchoring element; to provide improved means for retaining panels on mounting elements; and to provide improved partition of this kind of such simple form and interfitting arrangement as to make their manufacture very economical, their assembly and disassembly extremely facile, and the resulting partition or divider of great stability.

One specific embodiment is shown in the accompanying drawings, in which

FIGURE 1 is a miniature perspective of a floor-to-ceiling partition constructed in accordance with this invention;

FIG. 2 is an enlarged, fragmentary, perspective of the assembled support elements embodying this invention;

FIG. 3 is a fragmentary perspective showing how an anchoring element is secured to the building structure;

FIG. 4 is a fragmentary, cross-sectional view of two of the partition supports secured together back to back when used as intermediate studs;

FIG. 5 is a transverse, sectional, detail taken on the plane of the line 5—5 of FIG. 2;

FIG. 6 is a perspective view of one end of the panel-retaining bar; and

FIG. 7 is a perspective view of one part of the fastener whereby the partition mounting element is secured to the building anchoring element.

The essential concept of this invention involves two channel-shaped elements, one a stamping and the other an extrusion, interlocked in interfitting opposition by removable fasteners, one of which elements is adapted for removable anchoring to the building structure and the other of which is ornamentally contoured and grooved to seat removable bars for retaining panels in place on the support.

A partition-support embodying the foregoing concept comprises a pair of channel-shaped elements **8** and **9** adapted to be secured in embracive, interfitting opposition by fasteners **10** and supporting panels **11** in place by retaining bars **12**.

The channel-shaped element **8** here is shown as a metal stamping simulating an angular-shaped **C** in cross-section, the transverse parallel sides **13** of which have opposed integral coplanar parts **14** terminating in flanges **15**. The flanges **15** are spaced apart a distance about half the over-all width of the element **8**. Preferably, the lateral sides **13** are medially depressed at **17** to enhance

the compressible strength of the element. This element **8** is adapted to be secured to the building structure, the floors, walls, and/or ceiling, where it is desired to arrange a partition or divider, somewhat as indicated in FIG. 1.

The element **9** here is shown as extruded metal, preferably aluminum, and is of substantial **E** cross-section with a base **18**, sides **19** and the medial part **20**. As will be apparent from the drawings, the transverse distance between the sides **19** is considerably greater than the transverse width of the element **8**. However, the inside depth of the element **9** is preferably substantially the same as the outside depth of the element **8**, but it is obvious the depth of the element **9** may be greater than the outside depth of the element **8**. Thus, as seen in FIG. 5, when the two elements **8** and **9** are fixed in embracively-opposed relationship, the edges of the sides **19**, of the element **9**, are disposed in substantially the same plane as the external plane of the base **16** of the element **8**. To enhance the ornamental appearance of the element **9**, the edges of the sides **19** are beveled as shown at **21**.

The medial part **20**, of the element **9**, in transverse width or thickness is substantially the same as the transverse distance between the opposed parallel sides of the flanges **15**. Hence, when the elements **8** and **9** are assembled, the medial part **20** fits between the flanges **15** and precludes any relative transverse shifting of the two elements, when anchored together. In depth, the medial part **20** is somewhat less than the depth of the flanges **15**, as clearly shown in FIGS. 4 and 5, and for reasons which will be apparent presently.

A pair of transversely-spaced grooves **22** are formed longitudinally in the exposed face of the medial part **20** of the element **9**. These grooves are for the reception of the bars **12** to retain the panels **11** in place on the supports. The transverse spacing of the grooves **22** is such that when the bars **12** are in place in the grooves **22**, a seat is formed between them for the edges of the panel **11**. Such a seat is provided by reason of the fact that the width of the bars **12** is materially greater than the depth of the grooves **22**, hence the bars **12** extend above the exterior face of the element **9**. To enhance the ornamental appearance of these panel supports, the exposed faces of the bars **12** are formed with longitudinal serrations **23**, as most clearly shown in FIG. 6. Also in use the bars **12** are cut to exact lengths and widths of the panel used in the installation and each are cut on a 45° angle so as to form a mitered joint as shown in FIG. 2. It should be obvious that the bars **12** when inserted in the channels **22**, when such channels are positioned as shown in the lower portion the illustration of FIG. 4 shimming or the like (not shown) may be provided to prevent accidental or other displacement therefrom.

The fastener **10** here is shown as comprising a bar **24** and screw **25**. As best indicated in FIG. 7, the bar **24** is of elongated rectangular form and of arcuate cross-section. These fasteners **10** secure the elements **8** and **9** in opposed embracive relationship by positioning the bars **24** transversely of the assembled elements with the convex faces of the bars in contact with the inner ends of the flanges **15** and with the screws **25** extending through suitably-placed holes **26** in the medial part **20** of the element **9** between pairs of grooves **22**. The manner in which such positioning is effected will be explained presently.

The panel **11**, although here shown as glass, may be of practically any desired material, of which there are many standard types on the market and for which these improved supports are especially designed for use. These panels involve any of the forms of hardboard, plywood, pressedwood, wallboard, plastic, metal, cement asbestos boards, etc.

The elements **8** and **9** and the bars **12** are intended to

be formed in a variety of standard lengths, such as 4, 8, 12 and 16 feet, from which sections of the required length may be selected or formed for the required partition set-up.

For use at corners, two sections of the element **9** are each mitered at one end and the two bonded together as shown in FIG. 2. For intermediate division of a partition structure, such as shown in FIG. 1. Assembled lengths of the back to back elements **8** and **8'''** may be bonded together back to back as shown in FIG. 4 to form intermediate vertical and horizontal studs **28, 29** respectively.

This improved form of partition support is used in the following manner.

First.—A desired length element **8** is anchored to the building structure, floor, wall, or ceiling, by the use of screws **27** (FIG. 3) or bolts, set in any of the conventional anchoring plugs provided for inserting into holes bored in the building structure. The vertical section **8'** of element **8** is placed on the horizontal section and anchored to the vertical wall by screws **8''** or the like.

Secondly.—A desired length of element **9** has one or more of the fasteners **10** set in place with the screw **25** suspending the plate **24** on the end of the screw and longitudinally disposed of the element **9**. This will permit the plate **24** to pass through the slot between the flanges **15** and below the inner edges thereof.

Thirdly.—The element **9** is then simultaneously set down over the element **8** which disposes the plate, or plates **24** below the inner edges of the flanges **15**.

Fourthly.—The screw, or screws, **25** is turned which results in turning the plate **24** until the convex face initiates contact with the inner edges of the flanges **15**. Such contact arrests any further turning of the plate **24**. Thereupon, the further turning of the screw **25** will draw the plate **24** up tightly against the flanges **15** as shown in FIGS. 4 and 5.

Fifthly.—Suitably dimensioned panels **11** are then set in place between the grooves **22** and the bars **12** are dropped into the grooves, thereby abutting the opposed perimetrical faces of the panel so as to secure it in place to the support.

When it is desired or necessary to remove a partition the reversed sequence of these steps will make that operation extremely facile, leaving exposed on the floor, wall or ceiling only the apertures left by the screws. Also if different panelling material is desired than that already in place it should now be obvious that only the bars **12** from one side of the panel need be removed and the old panel simply removed and replaced and the bars **12** replaced.

Although but one specific embodiment of this invention is herein shown and described it will be understood that details of the construction shown may be altered or omitted without departing from the spirit of the invention as defined by the following claims.

I claim:

1. A building-partition support comprising,
   a. an anchoring element
      of angular C-shaped cross-section having a flat base part with spaced transversely-disposed parallel parts disposing coplanar parts extending in inward opposition and terminating in flanges extending inwardly toward the base part and adapted to be anchored to a floor and wall,

   b. a panel-mounting element
      of E-shaped cross-section having the inwardly-extending medial part of a width to fit between the inwardly-extending flanges of the anchoring element and having a pair of parallel grooves disposed longitudinally inward from the exterior face of the medial part defining a panel-supporting part between the grooves,
   c. a pair of flat bars
      greater in width than the depth of the grooves removably positioned in the grooves and forming a seat between the bars for the edge of a panel resting on the medial part, and
   d. fasteners
      for securing the elements in opposed nested relationship.

2. A building-partition support comprising,
   a. an anchoring element
      of angular C-shaped cross-section having a flat base part with spaced transversely-disposed parallel parts disposing coplanar parts extending in inward opposition and terminating in flanges extending inwardly toward the base part and adapted to be anchored to a floor and wall,
   b. a panel-mounting element
      of E-shaped cross-section having the inwardly-extending medial part of a width to fit between the inwardly-extending flanges of the anchoring element and having a pair of parallel grooves disposed longitudinally inward from the exterior face of the medial part defining a panel-supporting part between the grooves,
   c. a pair of flat bars
      greater in width than the depth of the grooves removably positioned in the grooves and forming a seat between the bars for the edge of a panel resting on the medial part, and
   d. fasteners
      for securing the elements in opposed nested relationship
      each comprising
         a narrow plate of arcuate cross-section in width less than but in length greater than the space between the flanges on the coplanar parts and having a central threaded aperture and
         a screw extending through an aperture in the medial part of the mounting element threaded into the plate aperture for fixedly positioning the plate crosswise below the inwardly extending flanges to secure the two elements in opposed nested relationship.

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