

June 9, 1964

T. H. REBELE  
SPLIT MULLION BAR  
Filed Feb. 1, 1960

3,136,395

Fig. 1.

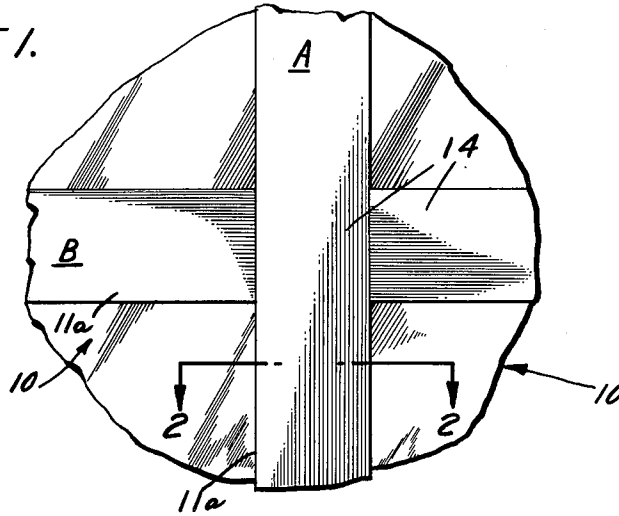
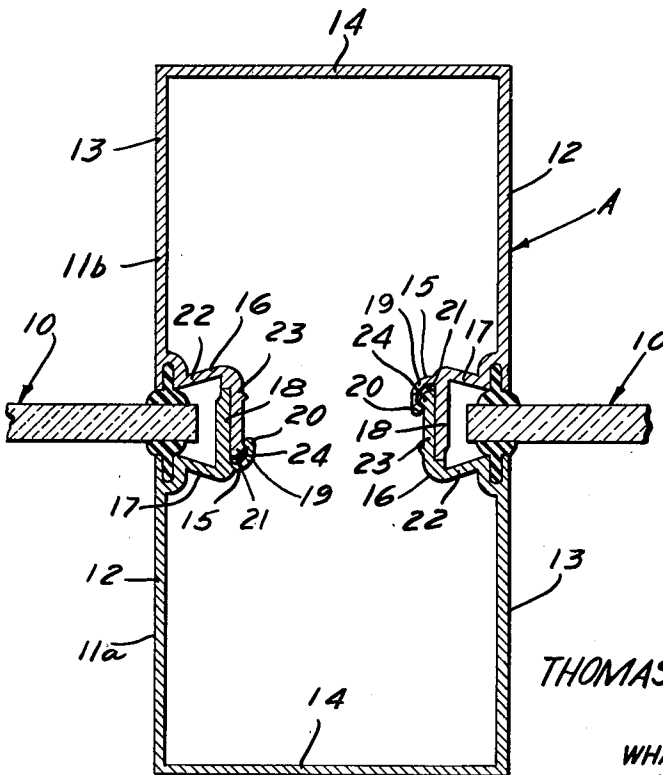


Fig. 2.



THOMAS HALLETT REBELE,

INVENTOR.

WHANN & McMANIGAL  
Attorneys for Applicant

by *Charles H. Hannon*

1

3,136,395

## SPLIT MULLION BAR

Thomas Hallett Rebele, 2945 Gertrude Ave.,  
La Crescenta, Calif.

Filed Feb. 1, 1960, Ser. No. 5,749

4 Claims. (Cl. 189—34)

The present invention relates generally to wall structures and is more particularly concerned with frames and framing structures for wall panels and especially glass panels.

With the modern trends in architectural designs, glass is being utilized more and more for building entrances, store fronts, etc. because of its mechanical durability and its decorative beauty.

The use of large glass panels has necessitated the use of improved types of framing, which in the main has been fabricated from extruded members of aluminum and other appropriate metals. Heretofore, however, the framing members have been so constructed that visible screws were required for assembling the framing sections. These screws detracted from the appearance of the installation and did not fit well into the overall decorative design. Moreover, the construction of the framing was such as to make the setting of the glass a laborious and time consuming process.

In its broad concept, the present invention has for one object the provision of a framing member such as a mullion bar which is constructed of two sections which are so arranged that, when placed in confronting relation, they will cooperate to form a panel edge receiving groove, and upon movement to completely cooperative assembled relation will be interlocked automatically and retained against separation.

A further object is to provide a split-mullion bar of two sections which may be assembled to form a composite structure, and in which the glass panes or panels may be positioned on all four sides prior to assembly of the final section of the bar, thus overcoming the labor and time consuming problems of the prior art arrangements.

Still another object is to provide a split mullion bar having a pair of interconnectible sections, which are automatically interlocked in assembled relation, and in which the means for securing the sections in interlocked relation is entirely concealed.

Further objects of the invention will be brought out in the following part of the specification, wherein detailed description is for the purpose of fully disclosing the invention without placing limitations thereon.

Referring to the accompanying drawings, which are for illustrative purposes only:

FIG. 1 is a fragmentary elevational view of a wall section having glass panels and embodying frame members according to the present invention; and

FIG. 2 is a section taken through one of the frame members substantially on line 2—2 of FIG. 1.

Referring now more specifically to the drawings, for illustrative purposes, there is shown in FIG. 1 a wall structure composed of a vertical frame member A and horizontal frame member B which may be secured in any conventional manner for supporting glass panels as generally indicated at 10. The construction of the frame structure of the present invention will be described as a mullion bar, but it will be readily apparent to those skilled in the art that the frame structure may be utilized as a horizontal bar as well as a vertical bar.

More specifically, as shown in FIG. 2, the bar is of composite construction and is composed of a pair of extruded or otherwise fabricated similar metallic sections 11a and 11b of aluminum or other suitable material.

2

Since the construction of the sections are exactly the same, only one section will be described in detail herein.

Considering the section 11a, it will be observed that the section comprises a substantially rectangular member of basically U-shaped cross section in which side walls 12 and 13 in parallel spaced apart relation extend at right angles from an integrally formed common wall 14. The edge margins of the side walls 12 and 13 are respectively provided with integrally formed inwardly extending flange portions 15 and 16 of essentially L-cross section.

The flange portion 15 includes a base leg 17 which is connected at one side to the associated side wall 12 and joined at its other side with a leg portion 18, it being observed that this leg portion extends in substantially parallel relation to the side wall 12. Along the base portion of the leg 18 there is provided a curved projecting tongue 19 having a longitudinally extending edge bead 20 thereon. The projecting tongue 19 is spaced from the leg 18 and cooperates therewith to form a receiving groove 21.

In the case of the flange portion 16, there is a base leg 22 and a connected leg 23 which in this case extends in parallel relation to the adjacent side wall 13. The leg 23 is provided along its outer edge margin with a longitudinally extending rib 24.

Considering further the illustration in FIG. 2, it will be observed that, since the sections 11a and 11b are similarly constructed, when brought together in confronting relation, the flange portions 15 and 16 of the sections will be in reversed order. When so positioned, the legs 18 and 23 will have overlapping relation, and that the edge portion of the leg 23 in each case will be so positioned as to enter the adjacent groove 21 associated with the leg 18. With one of the sections, for example section 11b, installed in its operative position, the glass panels 10 may be positioned on all sides prior to assembling the other section, in this case section 11a. The section 11a may then be positioned as shown in FIG. 2 and upon the application of pressure tending to push the sections together, the ribs 24 in each case will snap past the beads 20 into latched position with respect to the tongues 19—19 so as to retain the two sections of the composite frame structure in interconnected assembled relation. Due to the fact that the latching means are placed within the interior of the sections, the latching means will be concealed, thus providing an installation of pleasing appearance. It will be observed that the sections 11a and 11b may be connected without the use of any tools and that such connection may be accomplished quickly and conveniently.

Various modifications may suggest themselves to those skilled in the art without departing from the spirit of my invention, and, hence, I do not wish to be restricted to the specific form shown or uses mentioned, except to the extent indicated in the appended claims.

I claim:

1. A split mullion bar for mounting a wall panel, comprising: a pair of substantially U-shaped complementary channel sections arranged to be assembled into cooperative relationship with their side walls in edge-to-edge engaged relation after first setting the panel in one of the sections, said side wall edges respectively having integrally formed parts operable in the assembled sections to cooperatively form a panel edge receiving groove and including overlapping edge portions respectively of said sections to provide the groove bottom, and means including interlocking parts within the assembled sections carried by said overlapping edge portions for securing said sections against separation.

2. A split mullion bar, comprising: a pair of substantially U-shaped complementary channel sections arranged

to be assembled into cooperative relationship with their side walls in edge-to-edge engaged relation, said side wall edges respectively having integrally formed parts operable in the assembled sections to cooperatively form a panel edge receiving groove and including overlapping parallel edge portions respectively of said sections in face engagement forming the groove bottom, and means within the assembled sections for securing them against separation, said means including interlocking tongue members carried by said overlapping portions and being also operative to retain the edge portions in face engagement.

3. A mullion bar structure, comprising: a pair of elongate complementary frame members having confronting sides, said members being arranged to be laterally pushed together into confronting relation to form an assembled composite structure, wall portions extending inwardly from the confronting sides of said members arranged to overlap in the assembled structure and cooperatively form a panel edge receiving groove having a double walled bottom, a longitudinally extending internal rib on one of said wall portions, and an inner projecting tongue-like projection extending longitudinally of the other of said wall portions, said tongue-like projection having an edge portion for making interlocking engagement with said rib at the groove bottom, when the frame members are moved into assembled cooperative relationship whereby the frame members are retained in assembled relation and the walls of the groove bottom in face engagement.

4. As an article of manufacture, a mullion bar having a pair of complementary elongate sections adapted to be interlockingly interconnected in assembled relation, each of said sections having the same construction and comprising an elongate generally U-shaped channel having parallel spaced side walls of substantially the same length extending at right angles to a connecting wall, said side walls along their outer edges each having an integrally formed substantially inwardly laterally offset angular flange portion of substantially L-shaped cross section with one leg thereof extending substantially parallel to the associated side wall and forming an extension thereof, an inwardly directed rib extending along the outer edge of said one leg of one of the flange portions, and an inwardly projecting spaced tongue extending along the base of said one leg of the other of the flange portions, whereby the ribs and tongues of said sections may be interlockingly engaged to retain the sections in cooperative associated assembled relation.

#### References Cited in the file of this patent

##### UNITED STATES PATENTS

908,858	Goddard	Jan. 5, 1909
1,192,838	Abel	Aug. 1, 1916
1,965,598	Koenig	July 10, 1934
1,987,498	Stolp	Jan. 8, 1935
2,765,057	Stiefvater	Oct. 2, 1956
2,914,145	Benson	Nov. 24, 1959
2,976,969	Gillespie	Mar. 28, 1961