March 29, 1966 W. SONDHEIM 3,242,833

JOINTS FOR STEEL FORMS, FACINGS AND THE LIKE

Filed March 11, 1964

FIG. 1

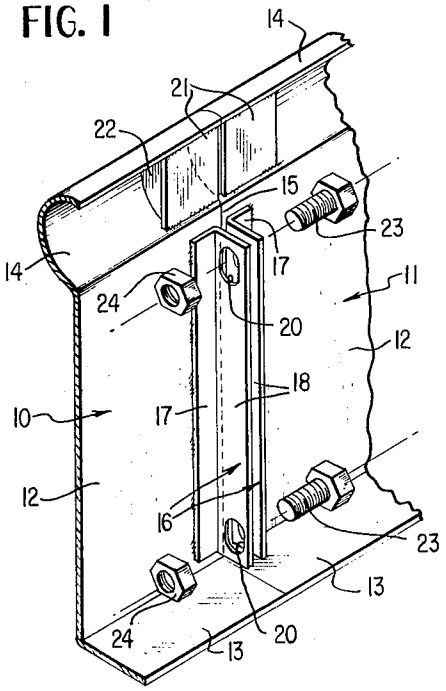
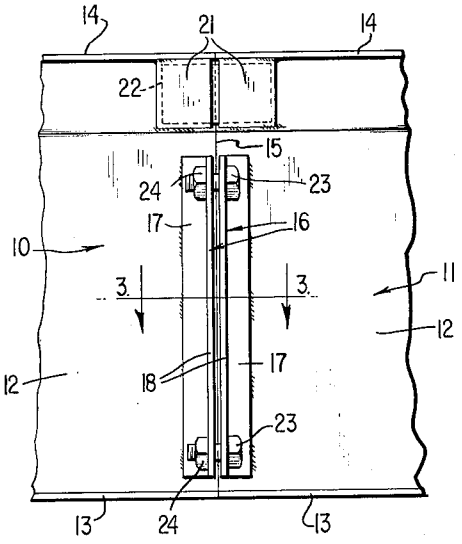


FIG. 2



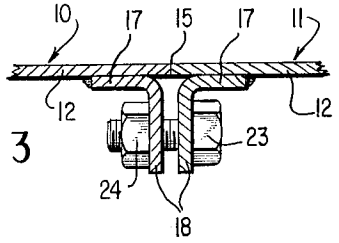


FIG. 3

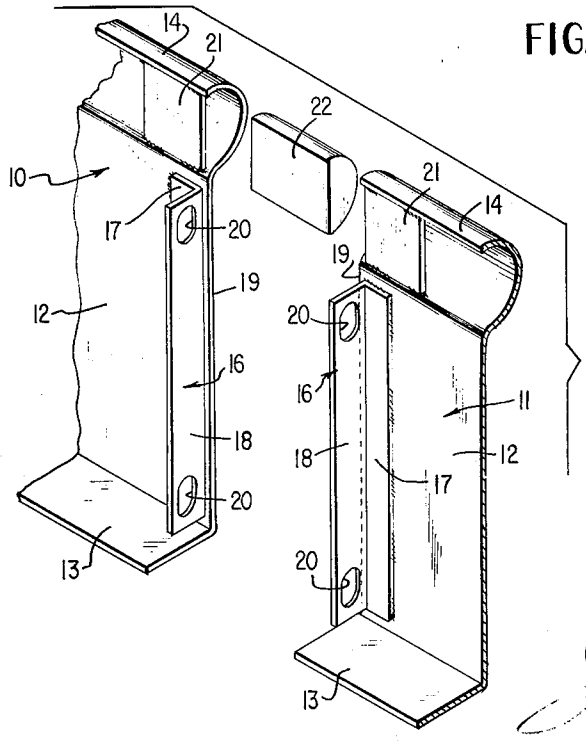


FIG. 4

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JOINTS FOR STEEL FORMS, FACINGS AND THE LIKE

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1 Claim. (Cl. 94—31)

This invention relates to improvements in joints for steel forms, facings and the like.

More particularly, the invention is a highly simplified and economical joint for permanent steel forms, sheet metal curb facings, filling station island facings and the like.

A major object of the invention is to provide a joint structure of the mentioned character which is entirely symmetrical, eliminating the need for right and left hand or male and female parts, the elements forming the joint also serving to reinforce or strengthen the sections of form or facing.

Another object is to provide a joint between form or facing sections which is substantially a hairline butt joint.

Other objects and advantages of the invention will be apparent during the course of the following detailed description.

In the accompanying drawings forming a part of this application and in which like numerals are employed to designate like parts throughout the same,

FIGURE 1 is a fragmentary partly exploded perspective view of a joint embodying the invention,

FIGURE 2 is an interior side elevation of the completely assembled joint shown in FIGURE 1,

FIGURE 3 is an enlarged fragmentary horizontal section taken on line 3—3 of FIGURE 2, and

FIGURE 4 is an exploded perspective view of the joint.

In the drawings, wherein for the purpose of illustration is shown a preferred embodiment of the invention, the numerals **10** and **11** designate companion form sections or curb facing sections or the like formed of steel or other suitable sheet metal. The sheet metal sections **10** and **11** have flat main walls or body portions **12**, lower inwardly projecting flanges **13** at right angles to the walls **12** and upper forwardly projecting rounded hollow beads **14** serving to stiffen the form sections and to improve the appearance thereof during use.

The invention proper, as stated, is a means to improve the joining of the sections **10** and **11** in end-to-end abutting relation so as to form substantially a hairline joint at **15**. This means comprises a pair of identically formed angle bars or brackets **16**, of a length to extend for substantially the entire width of the main wall **12**, near and inwardly of the adjacent end of the form section. As shown in the drawings, corresponding webs **17** of the angle bracket **16** are welded to the flat walls **12**. The other corresponding webs **18** of the angle brackets project inwardly at right angles to the walls **12** and parallel to and just inwardly of the end edges **19**, FIGURE 4, which constitute the hairline butt joint **15** in assembly. The webs **18** have somewhat vertically elongated openings **20** formed therethrough near their upper and lower ends. As shown, the brackets **16** extend substantially from points just above the flanges **13** to points just below the concave beads **14** and thus materially strengthen the form sections across the major portions of their widths.

Rectangular guide plates or clips **21** are securely welded within the beads **14**, just above the brackets **16** and at the open sides of the beads. The plates **21** serve to stiffen the beads **14** adjacent the joint. The plates **21** are spaced a slight amount from the meeting edges **19** and are preferably aligned with the webs **18** as shown in FIGURE 2.

The plates **21** serve also to guide and secure a semi-cylindrical line up pin and wedge **22** which enters the concave beads **14** behind the plates **21**, as shown in FIGURES 1 and 2. The line up pin **22** preferably has a snug wedging action within the beads **14** and behind the plates **21** to further secure, strengthen and line up the joint to almost a perfect hairline at **15**.

Conventional bolts **23** and nuts **24** are employed to draw the brackets **16** together and complete the joint in the manner clearly shown in FIGURES 2 and 3. The elongated openings **20** allow for some adjustment to achieve the best possible alignment. The plates **21** and the pin element **22** materially strengthen the joint due to the spanning or bridging action of the pin element across the hairline **15**. The concave beads **14** are likewise greatly stiffened by the construction.

It will be understood that the identical type of joint is provided between all meeting ends of form or facing sections and the joint shown in the drawings is typical of any number of like joints which might be employed in a particular application of the invention.

It is to be understood that the form of the invention herewith shown and described is to be taken as a preferred example of the same, and that various changes in the shape, size and arrangement of parts may be restored to, without departing from the spirit of the invention or scope of the subjoined claim.

Having thus described my invention, I claim:

In a sectional form and facing involving at least two form sections, each form section having a main flat wall with longitudinal top and bottom edges and end edges, and having a rounded, outwardly offset bead at the top longitudinal edges, the sections being arranged with their adjacent end edges in abutting relationship, a connection joint comprising:

a pair of angle brackets welded to the main walls adjacent to but spaced inwardly of the adjacent end edges thereof;

the angle brackets being substantially coextensive in height and including web portions arranged substantially perpendicularly to the main walls;

the web portions having a plurality of pairs of coaligned apertures formed therein;

the angle brackets extending substantially the full distance between the section longitudinal edges;

detachable fastener means extending through the pairs of coaligned apertures for drawing the sections together;

guide and stiffener plates fixed to the beads adjacent the end edges of the sections, the plates being coextensive with the flat walls of the form sections and fixedly secured to the beads to bridge the same to form a semi-cylindrical socket;

a substantially semi-cylindrical line-up and wedge pin element engageable in the sockets at each joint, the pin element conforming to the sockets and extending into adjacent sockets and bridging the meeting ends of the sections.

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