Feb. 26, 1957 S. B. RADUNS 2,783,114

SHEET METAL INTEGRAL TELEVISION CABINET

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FIG. 1.

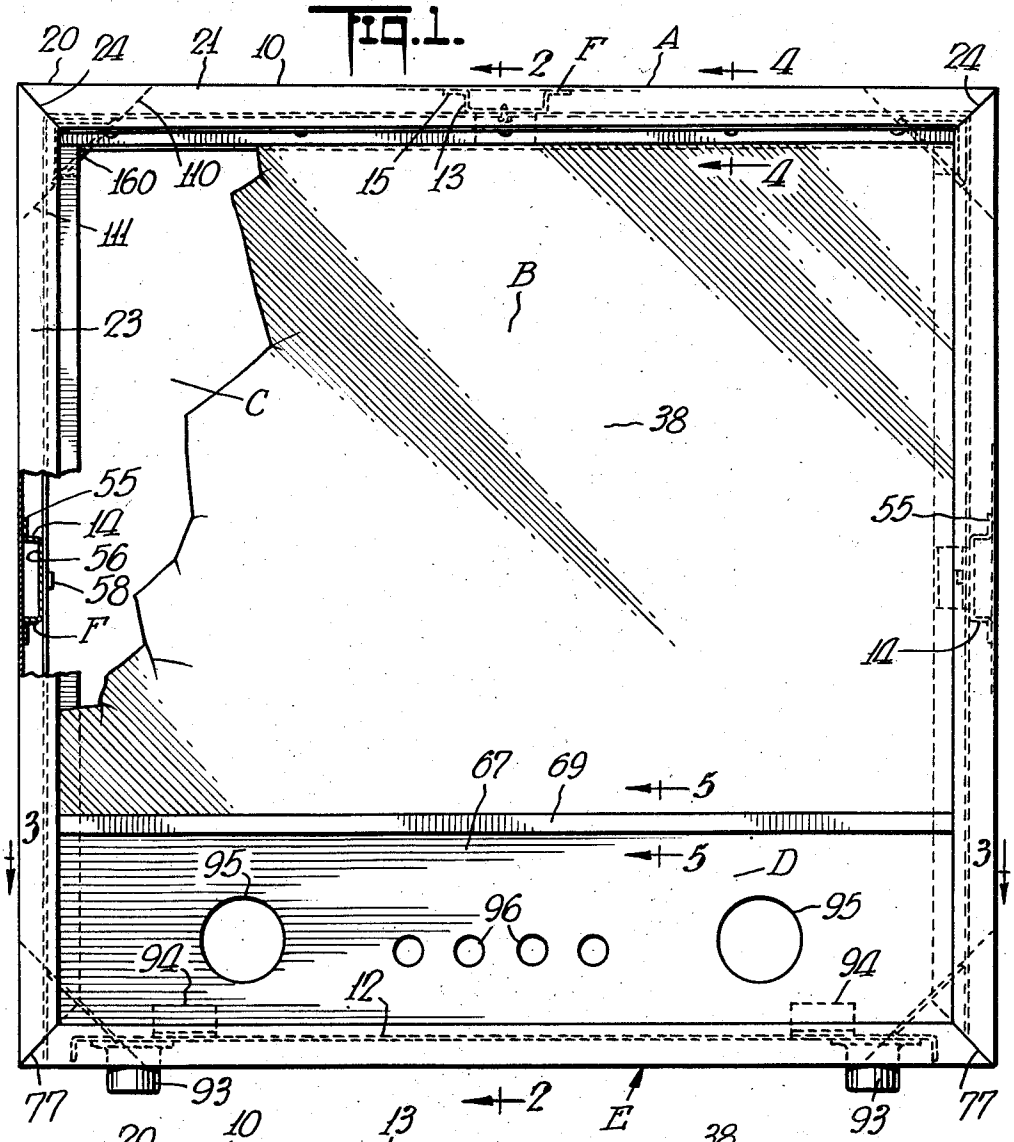


FIG. 4.

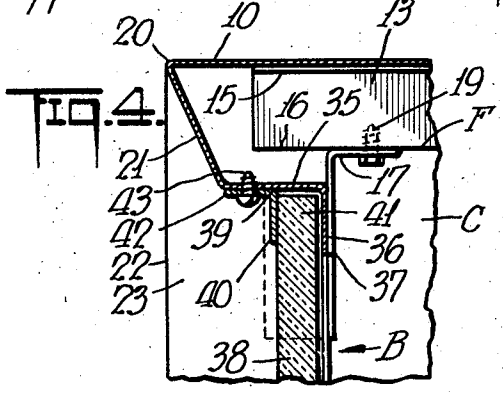
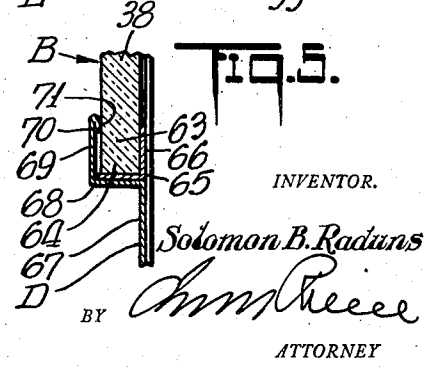


FIG. 5.



INVENTOR.

Solomon B. Raduns

BY

ATTORNEY

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FIG. 2.

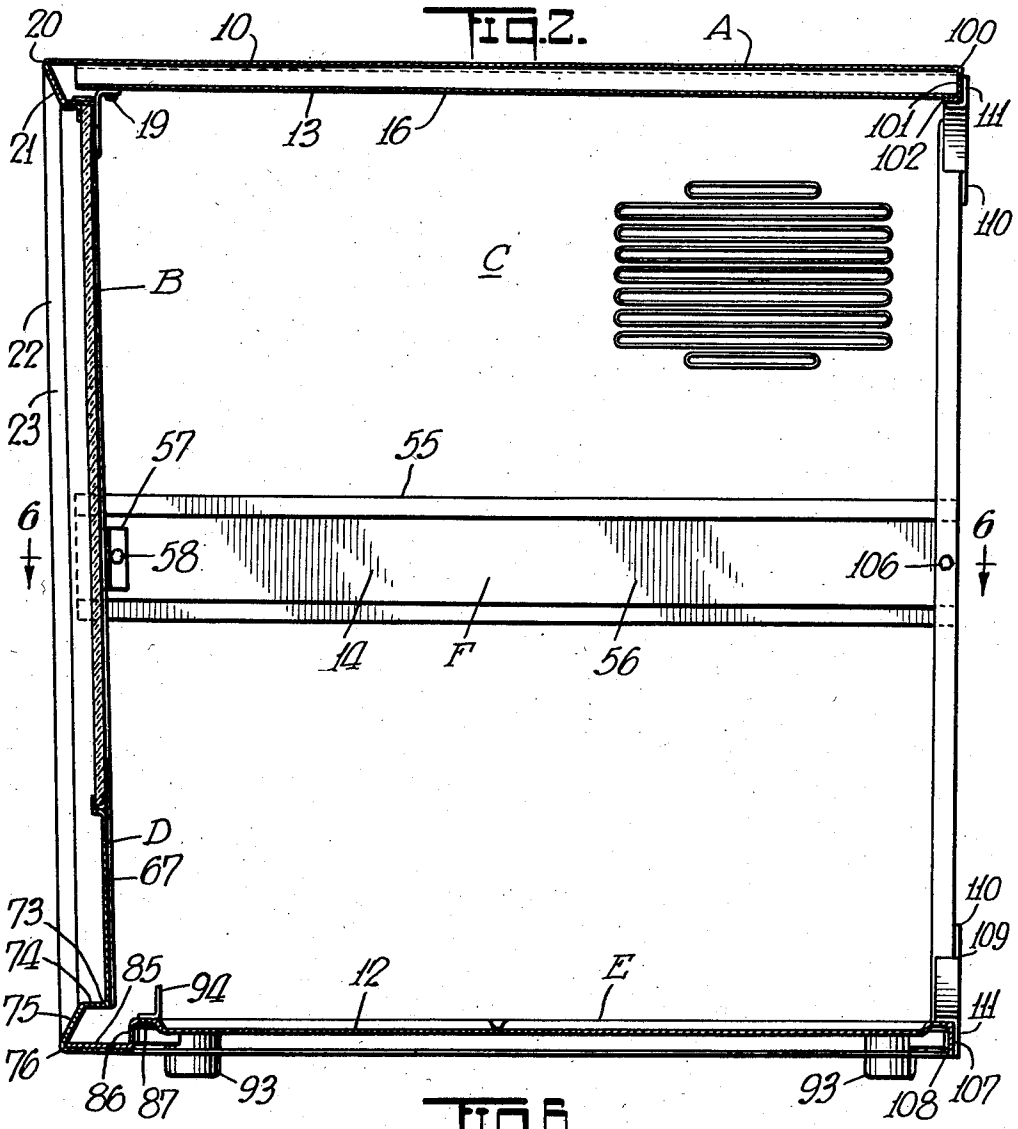
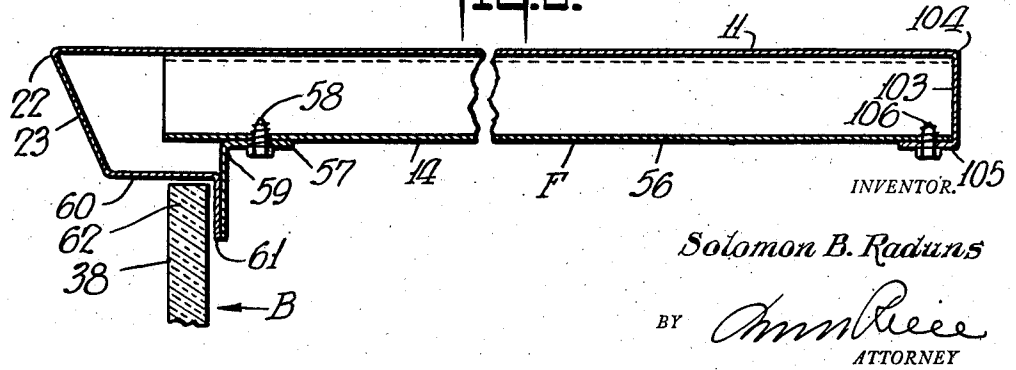


FIG. 6.



INVENTOR.

Solomon B. Raduns

BY

ATTORNEY

Feb. 26, 1957 S. B. RADUNS 2,783,114

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FIG. 3.

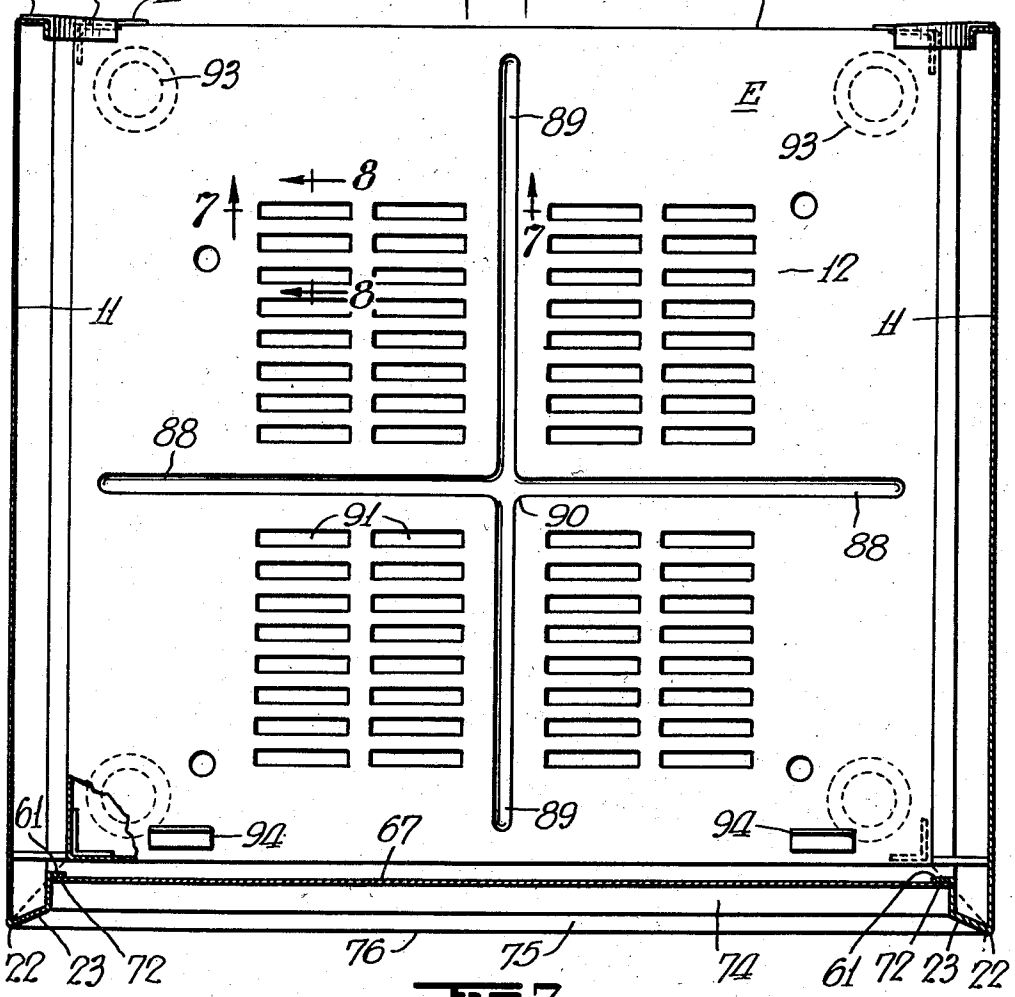


FIG. 7.

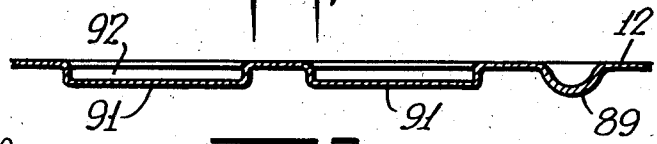


FIG. 9.

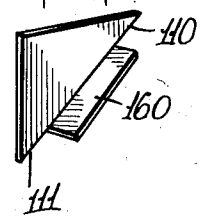
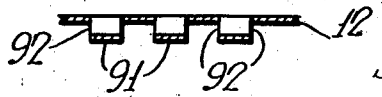


FIG. 8.



INVENTOR.

Solomon B. Raduns

BY

ATTORNEY

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2,783,114

SHEET METAL INTEGRAL TELEVISION CABINET

Solomon B. Raduns, Brooklyn, N. Y., assignor to National Plainfield Corporation, Plainfield, Conn., a corporation of Connecticut

Application April 13, 1954, Serial No. 422,813

3 Claims. (Cl. 312—7)

It is among the objects of the present invention to provide a sheet metal integral television cabinet, which is of unitary construction and which will have the same decorative appearance as a wooden cabinet, and at the same time will not affect the tone but will rather enhance the quality and timbre of the tone.

Another object is to provide a durable unitary sheet metal cabinet to replace the wooden cabinet in use, which will be durable, which will protect the various tubes and circuitry therein, which will permit ready access for repair servicing when assembling and dismantling, which will be of lightened weight, and which will stand considerable abuse and treatment without damage, scoring or marring.

Still further objects and advantages will appear in the more detailed description set forth below, it being understood, however, that this more detailed description is given by way of illustrtaion and explanation only and not by way of limitation, since various changes therein may be made by those skilled in the art without departing from the scope and spirit of the present invention.

In accomplishing the above objects it has been found most satisfactory, according to one embodiment of the present invention, to construct a sheet metal one piece integral television cabinet made substantially of a tube positioned on its side and of rectangular cross-section, and of which the front frame or panel carrying portion will be constructed with inturned flanges, which will form a peripheral receptacle for the glass front, which will also carry the various knobs, controls and switches.

At the same time the interior will be reinforced in such a manner as to prevent vibrations of the side which will in any degree be similar to or cause interference with the sound which originates in connection with the picture broadcasting.

In the preferred form, the front frame is welded inwardly and then upwardly to form a double thickness peripheral recess into which the glass pane may be inserted.

The interior sides may be provided with reinforcement channels welded thereto for the purpose of strengthening the same and reducing any vibration thereof.

The entire construction of the enclosure should be such that the metal side, top, bottom and front walls will have a normal period of vibration, far outside the normal audible range and this range of vibration should not be in any frequency which will be harmonic in respect to the sound which is produced in the television receiver.

With the foregoing and other objects in view the invention consists of the novel construction, combination and arrangement of parts as hereinafter more specifically described and illustrated in the accompanying drawings, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations, and modifications can be resorted to which fall within the scope of the claims hereunto appended.

In the drawings wherein like reference characters denote corresponding parts throughout the several views:

Fig. 1 is a front elevational view of the cabinet with the glass panel in position therein.

Fig. 2 is a transverse vertical fragmentary sectional view upon the line 2—2 of Fig. 1, and upon an enlarged scale as compared to Fig. 1.

Fig. 3 is a transverse horizontal sectional view upon the line 3—3 of Fig. 1 and upon an enlarged scale as compared to Fig. 1.

Fig. 4 is a fragmentary transverse vertical sectional view upon the line 4—4 of Fig. 1 and upon an enlarged scale as compared with Fig. 1.

Fig. 5 is a fragmentary transverse vertical sectional view upon the line 5—5 of Fig. 1 and upon an enlarged scale as compared to Fig. 1.

Fig. 6 is a transverse horizontal sectional view upon the line 6—6 of Fig. 2 and upon the same scale as Fig. 2.

Fig. 7 is a fragmentary transverse vertical sectional view upon the line 7—7 of Fig. 3 and upon an enlarged scale as compared to Fig. 3.

Fig. 8 is a transverse vertical sectional view upon the line 8—8 of Fig. 3 upon an enlarged scale as compared to Fig. 3.

Referring to Figs. 1, 2, and 3, there is shown a television cabinet A having a front viewing enclosure B, an upper interior section C for receiving the television tube, a lower control board D below the viewing section, a base structure E, and side and top reinforcement structures F.

The cabinet A proper is provided with a top wall **10**, side walls **11**, and a bottom wall **12**.

The top wall **10** is provided with the reinforcing channel or strengthening brace **13** which extends the full length of the cabinet and the side walls **11** are provided with the reinforcing channels or strengthening braces **14**.

The top reinforcing brace member **13** has the side flanges **15** which are welded to the under side of the top plate **10**.

The bottoms **16** of the channels **13** carry the angle support members **17**, the legs **18** of which are screwed thereto as indicated at **19**.

The front edges **20** of the top wall **10** are turned rearwardly and obliquely downwardly into the oblique sections **21**.

At the front edges **22** of the side walls **11**, the metal also turns obliquely inwardly as indicated at **23**.

The edges **20** and **22** with the oblique portions **21** and **23** will give an artistic front frame to the television cabinet A.

Encircling the window B and at the corners, the meeting edges of the oblique sections **21** and **23** will be welded together as indicated at **24**.

As is best shown in Fig. 4, the oblique face **21** will be turned inwardly as indicated at **34** and will have a downturn flange **36** which will be welded to the downturned portion **37** of the angle **17**.

The glass panel **38** will be held in position against the flange **36** by the angle member **39**.

The angle member **39** has a downwardly directed flange **40** which forms a recess at **41** with respect to the rear flange **36** to receive the edge **41** of the glass panel **38**.

The horizontal flange **42** of the angle member **39** is held in position on to section **38** by the screw **43**. By removing the screw **43**, it is possible to remove the angle member **39** and remove the glass **38**.

The angle member **39** as best shown in Fig. 1 will extend the full width of the window B.

The reinforcement members F for the side walls **11** consist of the channels **14** which have the outstanding flanges **55**, which are welded to the outside face of the side walls **11**.

On the base **56** of the channels **14** will be mounted angle brackets **57** by the screws **58**.

The front flanges 59 of the angle members 57 extend inwardly in back of the glass channel 38 to support the rear of the edge thereof.

The oblique inwardly directed portion 23 of the side walls 11 has an inturn flange portion 60 and then a further inturn portion 61 which is welded to the flange 59 of the brackets 57.

The flange 61 will form the rear support for the side edges 62 of the glass pane 38.

The lower edge 63 of the glass pane 38 is held in the channel 64.

The channel 64 is formed by the angle member 65 which extends the full width of the window opening B.

The vertical side edges 72 of the metal 67 are welded to the inturned flanges 61 which are integral with the side walls 11.

The panel 67 has a lower corner 73 where it turns outwardly as indicated at 74 and then downwardly obliquely as indicated at 75 to the corner 76.

The oblique portion 75 conforms with the oblique portion 21 at the top of the cabinet and 23 along the side of the cabinet in respect to width and angle and it is joined to the side sections 23 along the weld line 77.

From the lower corner 76, the metal is turned inwardly as indicated at 85, then upwardly and then rearwardly as indicated at 87.

The base wall 12 may constitute an integral continuation of the portion 87.

The bottom or base 12 has the transverse reinforcement groove or rib 88 and the longitudinal groove or rib 89 which cross at 90.

Each section of the base is provided with a series of ventilating and reinforcement depressions which are shown in small scale in Fig. 3 and in large scale in Figs. 7 and 8.

These depressions 91 are pressed out of the metal of the base 12 and they are arranged in two rows in each of the quarters formed by the crossing ribs 88 and 89.

These depressed portions 91 have side openings 92 and permit air to enter and flow upwardly through the body of the cabinet A.

The base 12 also carries a series of feet 93 consisting of rubber members which have base flanges 94 and which are positioned on the lower face of the corners of the floor or base plate 12.

The base also has the angle members 94 which are spot welded to the inside face thereof and act as forward stops.

The control board D also is provided with the openings 95 and 96 which enable attachment of the various adjustment knobs and controls to the shaft on the interior of the set.

The rear of the cabinet may be left open or receive a closing panel.

At the top, as shown in Fig. 2, the metal of the top plate 10 is turned downwardly at 101 from the corner 100 and is inturned integrally as indicated at 102 and may be welded at its middle section to the base 16 of the reinforcing channel 19.

In connection with the side walls 11 as best shown in Fig. 6, the metal is turned inwardly as indicated at 103 from the corner 104 and then has a forwardly directed flange 105 which is screwed into position as indicated at 106.

The screw 106 extends through the base 56 of the side reinforcement channel 14.

At the lower rear, the metal may also be turned downwardly as indicated at 107 and then inwardly as indicated at 108.

At the rear corners, the reinforcement elements 109 may be inserted with the flanges 110 and 111 welded in position so as to give a reinforced corner construction.

The entire unit or cabinet A may be welded together so that it will be substantially integral and will form a tube of rectangular or square cross section with the frame 21—23—75, forming an artistic, pleasing front and carrying the glass pane 38 directly above the instrument panel D.

The glass pane is held in position by the lower channel 64 and the upper removable strip 39.

The strip 39 may be removed by loosening the screws 43.

The entire structure is shown with its flanges and elements welded together so as to form an integral unitary housing which will form an all metal receptacle for the chassis, the tubes, and the circuitry.

The housing may be used in lieu of the wood structures now presently employed and will be more durable and effective and of lesser weight.

The shell as shown may be made of sheet metal, sheet aluminum, and other sheet metals, and the interior and exterior thereof may be suitably decorated so as to form an artistic piece of furniture.

As many changes could be made in the above sheet metal integral television cabinet and many widely different embodiments of this invention could be made without departing from the scope of the claims, it is intended that all matter contained in the above description shall be interpreted as illustrative and not in a limiting sense.

Having now particularly described and ascertained the nature of the invention, and in what manner the same is to be performed, what is claimed is:

1. A rectangular box-like integral sheet metal television cabinet having a window front and an open back and also having an integral front frame and integral side, bottom and top walls, the forward edges of said side, bottom and top walls having firstly inturned forward edges substantially perpendicular to said side, bottom and top walls, then rearwardly turned edges parallel to said side, bottom and top walls and then finally inturned edges perpendicular to said side, bottom and top walls, said rearwardly turned edges and said last mentioned inturned perpendicular edges forming a rectangular recess for reception of a front cover glass, and said last inturned perpendicular edge integral with said bottom wall extending upwardly to form a panel board with a plurality of laterally aligned openings to receive control knobs and its upper edge completing the lower edge of said recess for reception of said cover glass.

2. The cabinet of claim 1, the inside faces of said side and top walls having channel members extending from the front frame to the open back and the side walls of said channel members having outstanding flanges welded to said walls.

3. The cabinet of claim 2, in which angle members extend from the front ends of said channel members to the last mentioned flanges to reinforce the same.

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