Nov. 13, 1956 H. BLOMBERG 2,770,198

LADING STRAP ANCHORS

Filed June 8, 1951

FIG-3

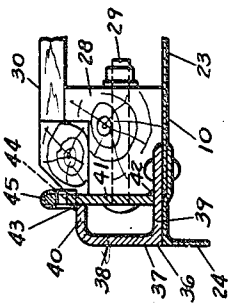


FIG-5

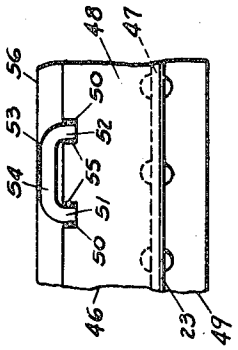


FIG-2

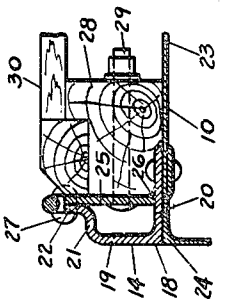


FIG-4

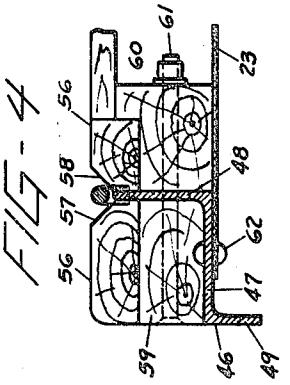
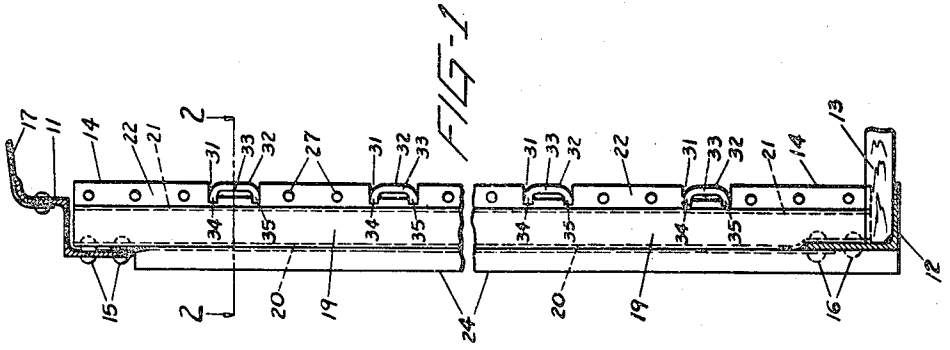


FIG-1



INVENTOR
HARRY BLOMBERG
by Samuel Reese
ATT'Y

United States Patent Office 2,770,198 Patented Nov. 13, 1956

2,770,198

LADING STRAP ANCHORS

Harry Blomberg, Cleveland, Ohio, assignor to The Youngstown Steel Door Company, Cleveland, Ohio, a corporation of Ohio

Application June 8, 1951, Serial No. 230,585

5 Claims. (Cl. 105—369)

This invention relates to lading strap anchors and is concerned primarily with lading strap anchors for railway freight cars.

It is an object of this invention to provide lading strap anchors for posts of the side walls of railway freight cars.

A further object is to provides posts for the side walls of railway freight cars which shall embody lading strap anchors.

A further object is to provide posts for the side walls of railway freight cars which shall embody lading strap anchors and effect a strengthening of the posts.

A further object is to provide posts for the side walls of railway freight cars which shall incorporate lading strap anchors in a relatively inexpensive manner.

A further object is to provide posts for the side walls of railway freight cars which shall embody lading strap anchors which do not project beyond the posts.

Other objects of the invention will become clear as the description thereof proceeds.

In the drawings forming part of this specification:

Fig. 1 is a transverse vertical section taken through the door opening in a side of a railway freight car, an intermediate portion being broken away in order to permit an increase in the scale of the section.

Fig. 2 is a horizontal section taken on line 2—2 of Fig. 1.

Fig. 3 is a horizontal section similar to Fig. 2 of a modified form of the invention.

Fig. 4 is a horizontal section similar to Fig. 2 of a further form of the invention.

Fig. 5 is a side elevation of the structure illustrated in Fig. 4 looking from the right omitting the wooden lining and furring strip.

Referring to the drawing and first to Figs. 1 and 2 thereof which illustrate one embodiment of the invention, the numeral **10** designates generally one side wall of a railway freight car, a portion only of this wall being illustrated. The side wall **10** embodies the usual side plate **11** and angle side sill **12** upon which the floor **13** of the car is supported. A door post **14** extends between and is secured to the side plate and side sill as by means of rivets **15** and **16**. A roof, indicated generally by the reference numeral **17**, is secured upon the side plate.

The door post **14** of the considered embodiment of the invention embodies a substantially channel-shaped member **18** having a transverse inwardly extending web **19**, an outer longitudinally extending flange **20** and an inner longitudinally extending flange **21**. The flange **21**, as is more clearly shown in Fig. 2 of the drawings, is bent so as to provide a transverse inwardly extending flange **22**. Metallic sheathing **23** and a post protection angle **24** are secured to the flange **20** of the door post.

With further reference to Fig. 2 of the drawings, it will be seen that the door post **14** embodies a plate member **25** which is co-extensive with the post as appears more clearly from Fig. 1 of the drawings and which is secured along one edge as by means of welding **26** to the inner face of flange **20**. The plate member **25** extends transversely in spaced relationship to the web **19** of the channel member **18** and is secured to the transversely extending flange **22** as by means of rivets **27**. The door post construction described embodies accordingly a box section which materially increases the strength of the post.

A furring strip **28** is secured to the plate member **25** by means of bolts such as **29** and an inner wooden lining **30** is fastened to the furring strip **28** in the usual manner.

In accordance with the instant invention, furthermore, the flange **22** and the adjacent portion of the plate member **25** are provided preferably throughout the height of the post with a plurality of vertically spaced recesses **31** shown more clearly in Fig. 1 of the drawings. These recesses extend through the inner edges of the flange **22** and plate member and receive U-shaped anchor members **32**. Each of these anchor members comprises a bight **33** which is arranged vertically and legs **34** and **35**. These legs are welded to the flange **22** and the plate member **25** so that the bight **33** of each of the anchor members **32** lies in spaced relationship to the adjacent portion of the flange **22** and plate member. This construction provides for the insertion of lading straps between the bight and said adjacent portion of the flange **22** and plate member. It will be observed, moreover, from Fig. 1 of the drawings that the anchor members **32** do not project inwardly beyond the inner edge of the door post **14**.

In the embodiment of the invention illustrated in Fig. 3 of the drawings the door post **36** comprises a substantially channel-shaped member **37** having a transverse inwardly extending web **38**, an outer longitudinally extending flange **39** and an inner longitudinally extending flange **40**. In this embodiment of the invention the flange **40** is not bent so as to extend inwardly but lies substantially in a single plane. A plate member **41** substantially coextensive with the channel-shaped member **37** is secured to the flanges **39** and **40** in spaced relationship to the web **38** as by means of welding **42** and **43**. The plate member **41** extends inwardly beyond the flange **40** and is provided with a plurality of vertically spaced recesses, one of which is shown at **44** similar to the recesses **31**. Anchor members, one of which is illustrated at **45**, are secured in the recess **44** in the manner hereinabove described. The anchor members **45** are similar in construction to the anchor members **32**.

A further embodiment of the invention is illustrated in Figs. 4 and 5 of the drawings. The door post **46** of this embodiment is substantially Z-shaped in cross section and is arranged relative to the side wall of the car so that the web **47** extends longitudinally and the flanges **48** and **49** extend transversely of the wall. The inwardly extending flange **48** is provided with a plurality of vertically spaced recesses **50** as is more clearly shown in Fig. 5 of the drawings. These recesses are adapted to receive the legs **51** and **52** of U-shaped anchor members **53** in such a manner that the bight **54** of each of the anchor members lies in spaced relationship to the inner edge of flange **48**. Legs **51** and **52** are secured to the flange **48** within the recess **50** as by means of welding **55**. It will be understood that the anchor members **53** are spaced vertically along the post so as to provide a plurality of anchorages to which lading straps may be secured. In this embodiment of the invention the anchor members **53** project inwardly beyond the inner edge of the flange **48** but lie within the inner plane of the lining **56** as is shown in Fig. 4 of the drawings. As there shown, moreover, the lining **56** adjacent to the anchor members is sloped as indicated at **57** and **58** in order to provide guide surfaces for lading straps to increase the ease of securement of these straps to the anchor members.

Furring strips **59** and **60** are bolted to the flange **48** of the door post as shown at **61** and metallic sheathing **23**

is secured to the web 47 of the door post as by means of rivets 62.

The construction of the posts illustrated in Figs. 2 and 3 not only provide great strength and resistance to the pull exerted by lading straps fastened thereto, but also effect a savings in the amount of lumber used for the furring strips.

It will be apparent that numerous changes and modifications in the details of the invention will be clear to those skilled in the art. It is intended, therefore, that all such modifications and changes be comprehended within this invention, which is to be limited only by the scope of the claims appended hereto.

I claim:

1. In a railway freight car having a side wall embodying a side plate and a side sill, a post extending between and secured to said side plate and side sill, said post comprising a vertical flange extending transversely of said side wall, said vertical flange presenting an edge to the interior of the car which lies outwardly of the inner face of said side wall, vertically spaced recesses extending into said flange from said edge, U-shaped lading strap anchors disposed in said recesses in alinement with said flange, each of said anchors having legs and a vertically arranged bight spaced inwardly from the adjacent portion of said flange, and welding material securing said legs to said flange.

2. A post for the side walls of railway freight cars comprising a substantially channel-shaped member having a web and spaced flanges, a plate member secured to said flanges in spaced relationship to said web, said plate member extending beyond one of said flanges, said extending portion of said plate member presenting an edge lying beyond said one flange, vertically spaced recesses extending into said extending portion of said plate member from said edge thereof, U-shaped lading strap anchors disposed in said recesses inwardly of said edge and in alinement with said plate member, each of said anchors having legs and a vertically arranged bight spaced from the adjacent portion of said extending portion of said plate member and welding material securing said legs to said extension.

3. A post for the side walls of railway freight cars

comprising a substantially channel-shaped member having a web and spaced flanges, one of said flanges being bent to form a portion extending beyond said one flange in spaced substantially parallel relation to said web, a plate member secured to the other of said flanges and to said portion of said one flange in spaced relationship to said web, said plate member and said portion presenting edges lying beyond said one flange, vertically spaced recesses extending into said portion and said plate member from said edges thereof, U-shaped lading strap anchors disposed in said recesses inwardly of said edges and in alinement with said portion and said plate member, each of said anchors having legs and a vertically arranged bight spaced from the adjacent portions of said flange portion and plate member, and welding material securing said legs to said flange portion and plate member.

4. A substantially Z-shaped post for the side walls of railway freight cars, said post comprising a web and oppositely extending flanges, one of said flanges presenting an edge remote from said web, vertically spaced recesses extending into said one flange from said edge, U-shaped lading strap anchors, each of said anchors having legs and a vertically arranged bight, said legs being disposed in said recesses in alinement with said one flange, said bight being spaced from said edge of said flange, and welding material securing said legs to said latter flange.

5. A post for the side walls of railway freight cars, said post comprising a flange presenting an edge, said flange being provided with vertically spaced recesses extending into said flange from said edge, U-shaped lading strap anchors, each of said anchors having legs and a vertically arranged bight, said legs being disposed in said recesses in alinement with said flange, said bight being spaced from the adjacent portion of said flange, and welding material securing said legs to said flange.

References Cited in the file of this patent

UNITED STATES PATENTS

Re. 23,394	Logmann et al.	July 24, 1951
2,577,504	Barber	Dec. 4, 1951
2,583,257	Dietrichson	Jan. 22, 1952