

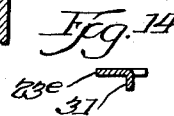
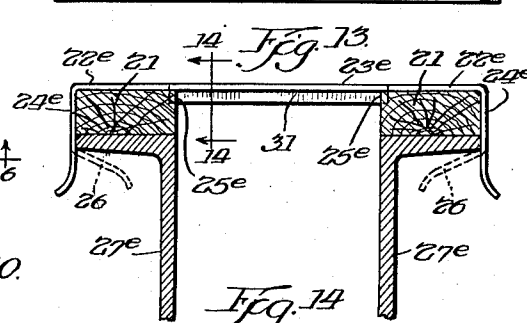
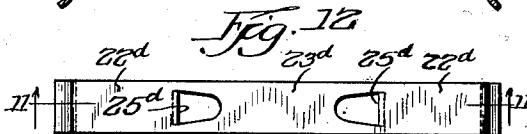
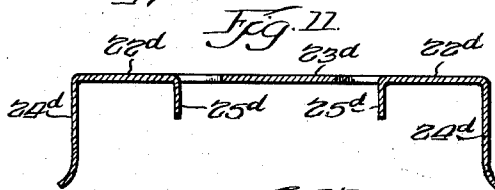
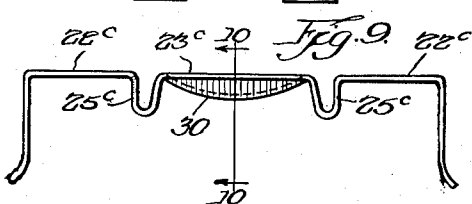
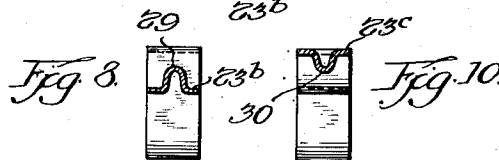
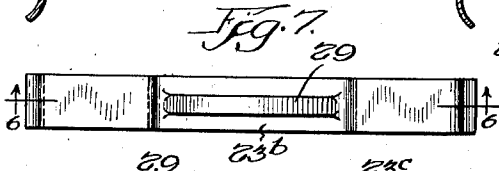
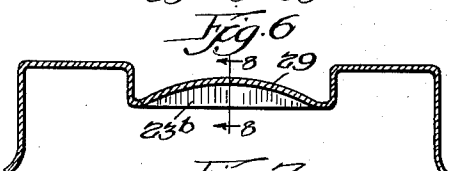
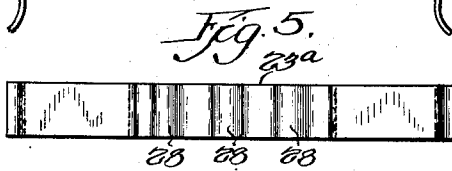
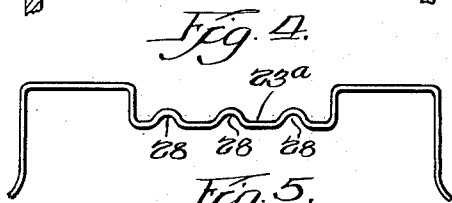
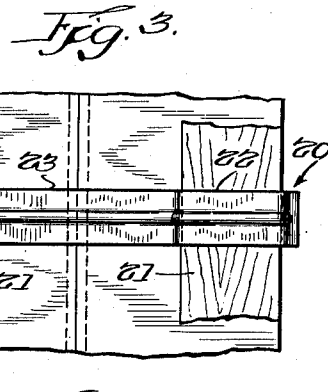
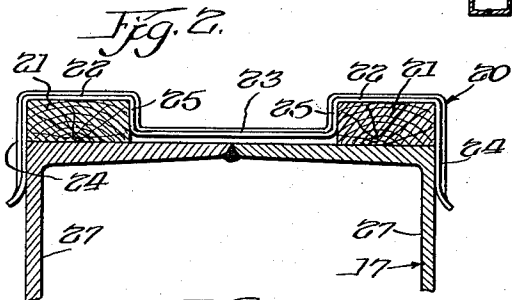
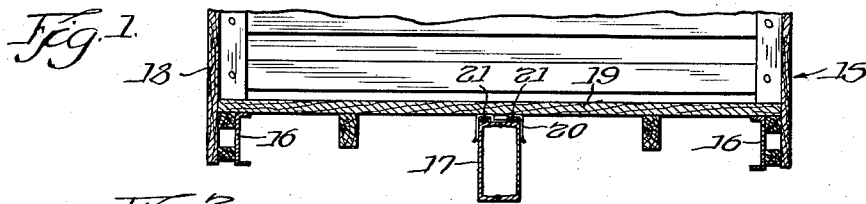
April 24, 1945.

W. H. SALE

2,374,623

FLOOR FILLER RETAINER FOR RAILROAD CARS

Filed Sept. 18, 1943



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UNITED STATES PATENT OFFICE

2,374,623

FLOOR FILLER RETAINER FOR
RAILROAD CARS

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Application September 18, 1943, Serial No. 502,865

1 Claim. (Cl. 189—35)

This invention relates to a floor filler retainer for railroad cars and one of its objects is to eliminate the use of nails and puncturing the floor with the resultant trouble caused by nails working up from the floor.

Another object is to provide a retainer which will grip the outer and inner edges and top of floor filler strips that are laid on the center sill of a railroad car and having other members that engage the sill to definitely locate the filler strips on the sill. When a floor is laid on top of the retainer strips it locks or engages the same to the sill and provides perfect aligned supporting member for the center of the floor.

Another object is to provide floor filler retainer composed of a single piece of strip metal formed with filler strip engaging shoulders and a connecting member therebetween whereby to space the filler strips apart upon the center sill upon which they are laid, the retainer having downwardly projecting legs at the ends of the retainer for engaging the sides of the center sill to definitely position the filler strips on the sill.

Another object is to provide a simple, comparatively inexpensive filler strip retainer which can be readily applied to the center sill and fastened thereto.

With these and other objects and advantages in view this invention consists in the several novel features of construction and arrangement of parts hereinafter fully set forth and claimed.

The invention is clearly illustrated in the drawing accompanying this specification in which:

Fig. 1 is a fragmental vertical cross section through a railway car in which a simple form of the present retainer is shown applied to the center sill of the car;

Fig. 2 is a vertical cross section through a fragment of a center sill and two filler strips showing the retainer in place thereon;

Fig. 3 is a fragmental plan of the parts seen in Fig. 2;

Fig. 4 is a side elevation of a slightly modified form of retainer;

Fig. 5 is a plan of the retainer seen in Fig. 4;

Fig. 6 is a central vertical longitudinal section of a second modified form, the line of section being indicated at 6—6 in Fig. 7;

Fig. 7 is a plan of the retainer seen in Fig. 6;

Fig. 8 is a vertical cross section taken on the line 8—8 of Fig. 6;

Fig. 9 is a side elevation of a third modified form of the retainer;

Fig. 10 is a vertical cross section taken on the line 10—10 of Fig. 9;

Fig. 11 is a central vertical longitudinal section of a fourth modified form of the retainer, the section being on the line 11—11 in Fig. 12;

Fig. 12 is a plan of the retainer seen in Fig. 11;

Fig. 13 is a vertical cross section through a fragment of a different type of center sill, two retaining strips and a fifth modified form of retainer applied thereto; and

Fig. 14 is a vertical cross section taken on the line 14—14 of Fig. 13.

Referring to said drawing, and first to Fig. 1, the reference character 15 designates a fragment of a railroad car having the conventional side sills 16, the center sill 17, the sheathing 18 and flooring 19. The reference character 20 designates one form of the retainer and 21—21 designate a pair of filler strips interposed between the center sill and flooring. The filler strips are of suitable length laid end to end upon the center sill and secured thereon by the retainers.

In the form of retainer shown in Figs. 1, 2 and 3, it comprises a metal strip struck up with suitable dies to provide filler strip retaining members 22 connected by a connecting member 23 and having downturned end portions 24 of greater length than the thickness of the filler strip and adapted to engage the side faces of the center sill. The offset end portions 25 of the strip retaining members 22 and downwardly projecting end portions 24 of the retainer form shoulders that engage the side edges of the filler strips whereby to secure them in place, and the connecting member 23 serves to space the filler strip retaining members apart so as to dispose them adjacent the side edges of the center sill. Conveniently the lower ends of the downwardly projecting members 24 are bent outwardly slightly to facilitate placing the retainer upon the center sill.

In Figs. 1, 2 and 3, the center sill is shown as comprising two channel members 27 disposed with their channels facing each other, but the present invention is applicable to railway cars having a wooden center sill.

In the form of retainer illustrated in Figs. 4 and 5, the connecting member 23a is shown as formed with a number of corrugations 28 extending transversely of the retainer. These corrugations reinforce and stiffen the connecting member besides permitting it to yield slightly when the retainer is applied to a slightly oversized center sill. In other respects the retainer

is of the same construction as the form shown in Figs. 1, 2 and 3.

In the form of retainer illustrated in Figs. 6, 7 and 8 the connecting member 23b is shown as formed with an upwardly struck up longitudinally extending rib 29 for stiffening and reinforcing the connecting member. Otherwise the construction of the retainer is substantially the same as that shown in Figs. 1 to 3 inclusive.

In the form of retainer illustrated in Figs. 9 and 10, the connecting member 23c is aligned with the top members 22c of the filler strip retaining members and the shoulders 25c are formed by downwardly depressing the metal of the strip to form U bends. The connecting member 23c may have a downwardly depressed longitudinal rib 30 formed thereon for the purpose of stiffening the connecting member. In other respects the retainer shown in Figs. 9 and 10 is of the same construction as the form shown in Figs. 1 to 3, inclusive.

In the form of retainer illustrated in Figs. 11 and 12, the connecting member 23d and top members 22d of the strip retaining members take the form of a flat strip of metal and the shoulders 25d are formed by punching up the metal of the strip at two spaced places to provide downwardly projecting tongues which cooperate with the downwardly projecting end portions 24d of the retainer to retain the filling strips therebetween.

In the form of the invention illustrated in Figs. 13 and 14, the connecting member 23e and top members 22e of the filler strip retaining members are aligned and the shoulders 25e are formed by striking down an edge portion of the metal strip to form a downwardly projecting flange 31 the ends of which comprise shoulders that coact with the downwardly projecting end members 24e to position the filler strips upon the center sill which in this case is shown as comprising two channel members 27e disposed with their channels directed outwardly. The flange 31 may be made slightly longer than the distance between the inner edges of the filler strips 21 so as to leave projecting end edge portions that may be driven down into the inner edge portions

of the filler strips whereby to interlock the retainer with the filler strips, and thereby prevent any slippage of the retainer. When applying this form of the retainer to the filler strips, the retainer is struck with a hammer over the end edges of the flange 31 thereby driving it into the inner edge portions of the filler strips. When used with this form of center sill the lower ends of the downwardly projecting end members 24e may be bent underneath the upper flanges of the channel members as shown in dotted lines at 26 in Fig. 13 whereby to securely fasten the retainer to the center sill.

It is to be observed that in all of the forms of the invention shown and described the shoulders and top members of the filler strip retaining members grip the edges and tops of the filler strips, that the connecting member spaces the filler strips apart so as to be disposed adjacent the sides of the center sill and that the downturned end portions engage the center sill thereby definitely locating the filler strips thereon.

Having thus described my invention, it is obvious that various immaterial modifications may be made in the same without departing from the spirit of my invention; hence I do not wish to be understood as limiting myself to the exact form, construction, arrangement and combination of parts herein shown and described, or uses mentioned.

What I claim as new and desire to secure by Letters Patent is:

A floor filler retainer for retaining filler strips on a center sill and comprising a horizontal metal strip having downwardly bent end portions, said downwardly bent end portions functioning to prevent lateral displacement outwardly of filler strips, and the intermediate portion of the horizontal part of the retainer having a downwardly bent flange extending longitudinally of the retainer and functioning to prevent displacement inwardly of the filler strips, the end edge portions of said flange being adapted when applied to the filler strips to be embedded in the inner edge portions of the filler strips, whereby to interlock the retainer thereto.

WILLIAM H. SALE.