Sept. 28, 1965 E. A. DOMES 3,208,790

TOP RAIL CONSTRUCTION FOR A TRUCK BODY

Filed May 29, 1963

Fig. 1

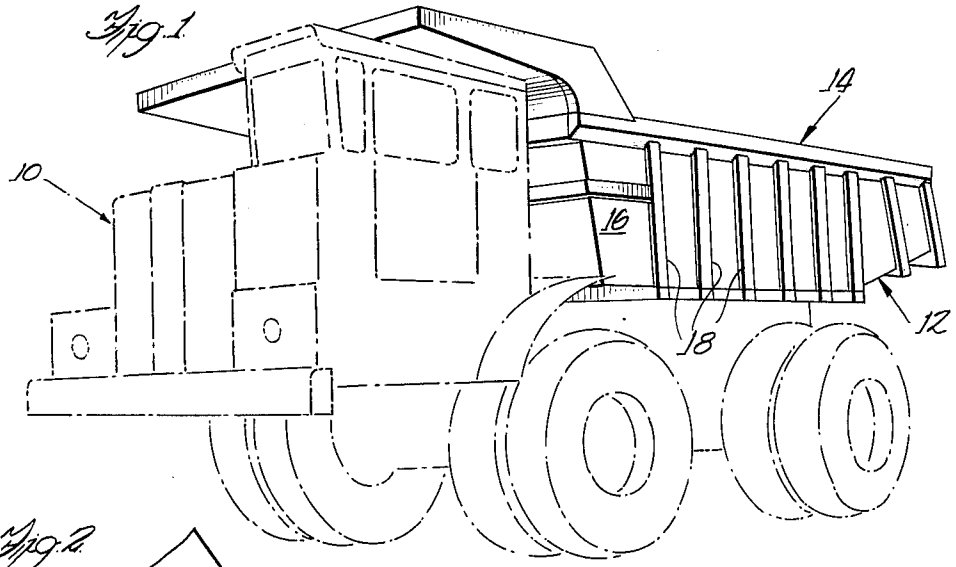


Fig. 2

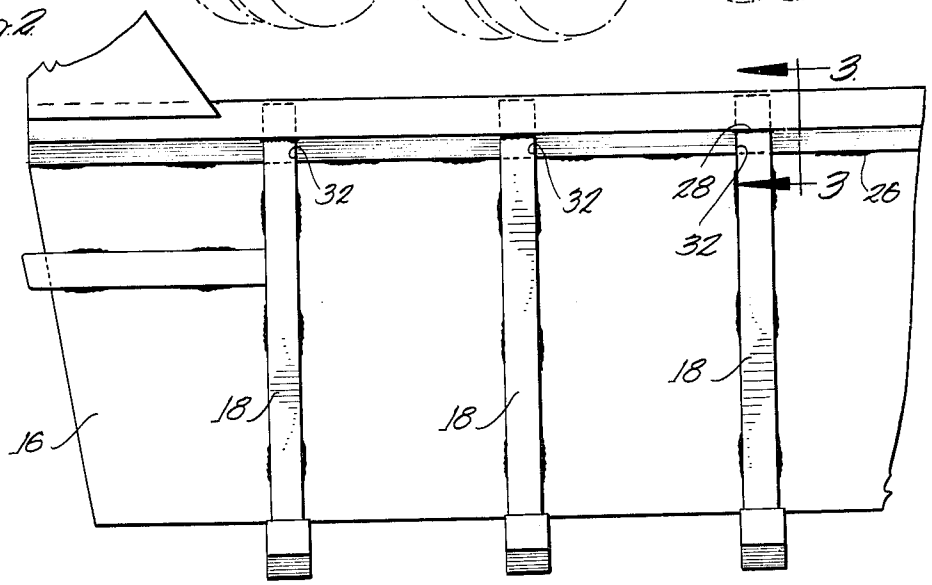
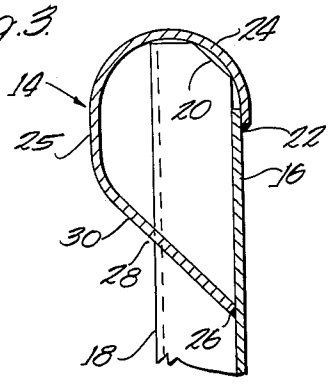


Fig. 3



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TOP RAIL CONSTRUCTION FOR A TRUCK BODY

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The present invention relates to a structural arrangement for the body of a vehicle such as a dump truck or the like, and more particularly to the top rail construction for such a body.

In the construction of the top rail for the dump body of a load carrying vehicle, it has been customary in the past to utilize an inverted U-shaped channel secured to the side plate of the body. Often a flat plate was secured between the side of the body and the over-hanging open edge of the U-shaped member, which plate was utilized to close off and strengthen the U-shaped member. It was also conventional, in the construction of top rails, to secure by means of welds an angle member or channel to protect the upper portion or surface of the U-shaped member. Such a construction was heavy, required many parts and labor to assemble them, and in addition was conducive to being easily damaged by being hooked by the loader or shovel.

It is, therefore, an object of this invention to provide a top rail construction which requires few pieces, is of light weight, and is of high strength.

It is a further object of this invention to provide a top rail construction which presents a smooth arcuate surface on its exterior, and which will deflect the loader or shovel rather than being hooked or engaged by the same.

Other objects and many of the attendent advantages of the present invention will be apparent when considered with the following specification and the accompanying drawings which illustrate a preferred embodiment and wherein:

FIGURE 1 shows a perspective view of an assembled vehicle body;

FIGURE 2 is a fragmentary side elevation of the dump body showing the present invention; and

FIGURE 3 is a section taken on line 3—3 of FIGURE 2 showing the details of the construction of the top rail.

Referring now to FIGURE 1, there is shown a truck indicated generally at **10** having a dump body indicated generally as **12** with a top rail **14** mounted thereon. The dump body **12** is equipped with side plates **16**. The side plates are strengthened by a plurality of bolsters **18** secured thereto by conventional means, such as welds. The bolsters **18** extend above the side plates **16**, as best shown in FIGURE 3, and are chamfered or angled on their inner edges as shown at **20**. The top rail **14** is formed of a single piece of material, preferably of steel plate having a high strength and a high wear resistance. The top rail **14** is secured at its upper edge to the side plate **16** by any conventional means such as weld **22**. The top rail extends in a substantially semi-circular arc **24** outwardly from its point of attachment to the side plate **16** over the top of bolster **18**. The top rail then extends downwardly through section **25** substantially parallel to side plates **16** from where it curves inwardly and angles down through angled portion or member **30** until it again contacts side

wall **16** to which it is attached by conventional means such as weld **26**. Notches **32** are provided in the angled portion **30**, as best shown in FIGURE 2, to accommodate bolsters **18**. The top rail is also secured at notches **32** to the bolsters by conventional means such as weld **28**.

In the preferred embodiment the semi-circular arc **24** is attached to the inner edge of the side plate **16** for guiding the material entering the dump body **12**. However, the top rail **14** would function in the same manner is secured to the side plate **16** by means of a simple butt joint rather than an overlapping joint as shown in FIGURE 3. It is also within the scope of this invention to make the members **24**, **25**, and **30** separately and to join them by conventional means such as welding.

Thus it can be seen that the top rail presents a curved surface which would resist any downward load applied to the top rail and is stronger than a simple flat surface or angular surface. It is also apparent that the top rail **14** provides through angled portion **30** a means for guiding or deflecting the loader or shovel which may inadvertently engage the rail during loading operations.

As an alternative form of construction, the angled portion **30** of the rail **14** could comprise a uniformly straight member, i.e. without notches **32** formed therein, and the bolsters **18** could terminate adjacent to and abut against the angled portion **30**, where they could be fastened or joined by conventional means.

Having described the preferred embodiments of my invention, I claim:

1. A top rail construction for a dump body having side plates comprising: a rail member of unitary construction having a substantially semi-cylindrical portion, a downwardly extending portion and an angled portion, said semi-cylindrical portion secured to and extending outwardly from said side plate of the body, said downwardly extending portion located beneath said semi-cylindrical portion and being substantially parallel to and spaced from said side plate of the body and said angled portion located beneath said downwardly extending portion and angling inwardly into contact with said side plate of the body at less than a right angle and secured thereto whereby said rail member presents an inclined exterior undersurface to prevent hooking during loading operation.

2. A top rail construction for a dump body having side plates and a plurality of vertically extending horizontally spaced bolsters secured to said side plates comprising: a rail member having a substantially semi-cylindrical portion secured to said side plates and extending outwardly from the interior of said dump body, a downwardly extending portion located beneath said semi-cylindrical portion and being substantially parallel to and spaced from said side plates, and an angled portion beneath said downwardly extending portion and angled inwardly into contact with said side plates and secured thereto, said angled portion having a plurality of notches therein, said notches being positioned to accommodate said bolsters, said bolsters being secured to said angled portion.

3. A top rail construction for a dump body having side plates and a plurality of vertically extending horizontally spaced bolsters secured to said side plates comprising: a rail member having a substantially semi-cylindrical portion secured to said side plates and extending outwardly from the interior of said dump body, a downwardly extending portion located beneath said semi-cylindrical por-

tion and being substantially parallel to and spaced from said side plates, and an angled portion beneath said downwardly extending portion and angled inwardly into contact with said side plates at an acute angle and secured thereto, said angled portion having a plurality of notches therein, said notches being positioned to accommodate said bolters and permit the same to extend into contact with the interior surface of said semi-cylindrical portion, said bolsters being secured to said angled portion.

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