

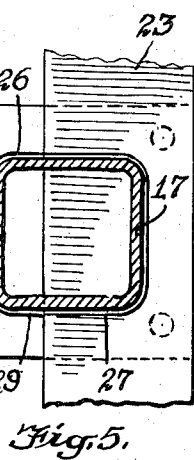
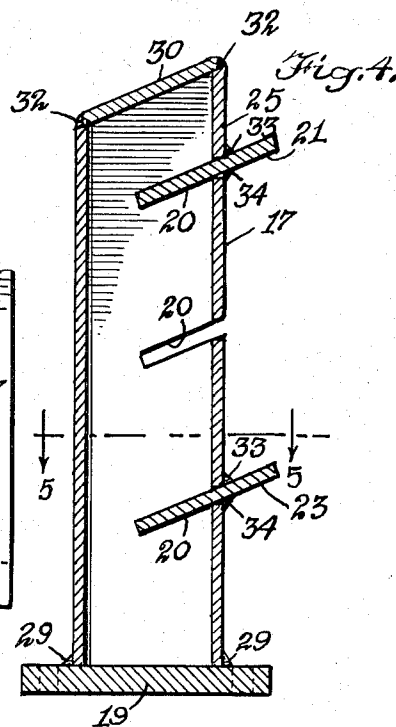
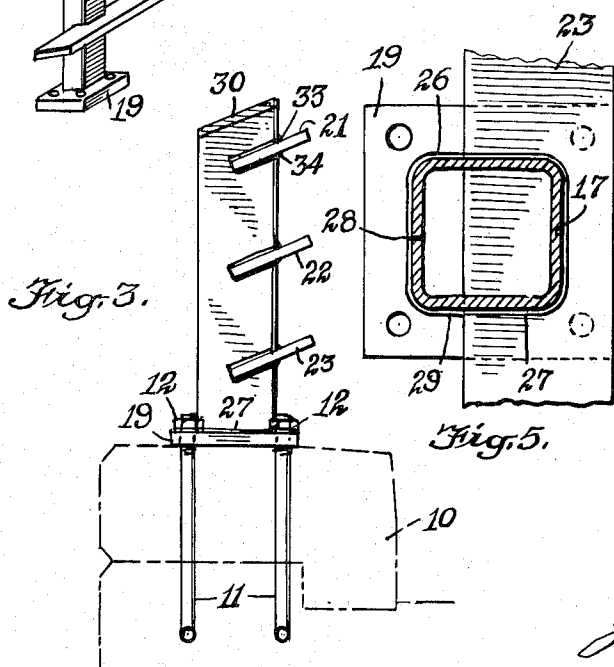
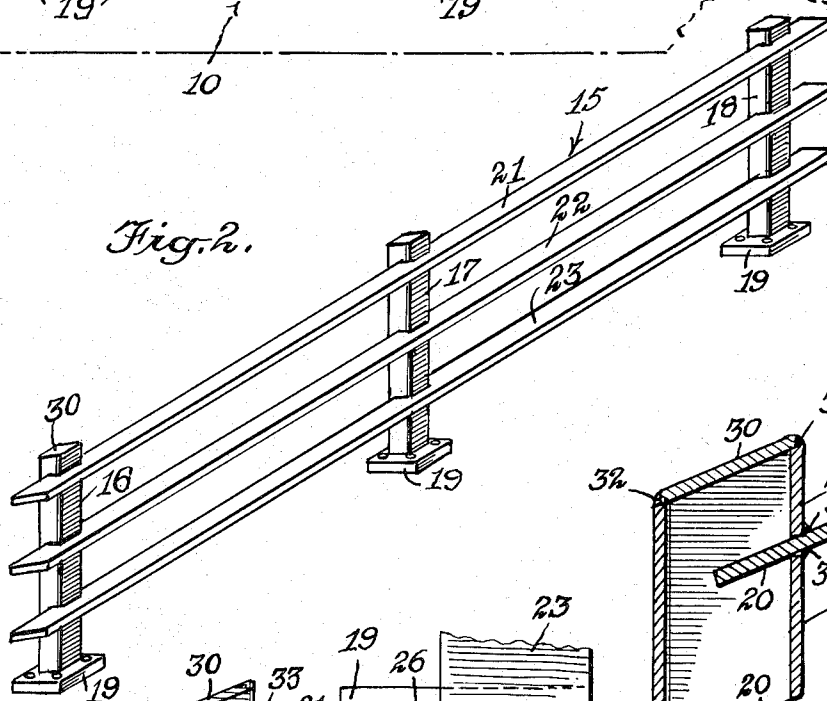
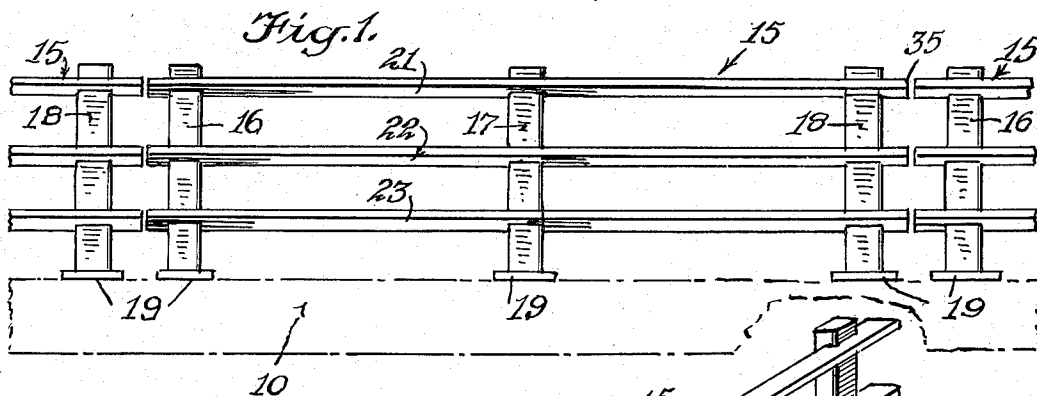
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GUARD RAIL

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GUARD RAIL

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This invention relates to guard rails and more particularly to guard rails used on highways and parkways to prevent motorists from skidding into ditches, gullies and other hazards.

An object of the invention is to provide a guard rail structure which may be stamped out of sheet metal and assembled economically and which will have sufficient strength to withstand the impact of a skidding vehicle or one out of control.

A further object is to provide a guard rail which will provide a surface which is relatively uninterrupted so that a vehicle colliding with it at an angle will slide along the rail without hitting any obstruction which would cause a sudden stop and increase damage.

A further object is to provide a rail in which the posts supporting the rails are covered so that any impact is borne by the rails themselves and not by the posts.

A still further object is to provide a guard rail construction in which the rails themselves are not weakened by cutout portions, both holes or other perforations.

Briefly, I provide a structure wherein the posts are made of sheet metal which may be cut out in the flat and stamped to provide rail recessing slots and thereafter formed on a forming brake into the desired rectangular shape and welded to an anchor plate and provided with a top. The slots are so formed that after the post has been shaped the rails may be inserted and welded into place.

Other objects and advantages of my construction will be apparent from the accompanying drawing and following description, in which—

Fig. 1 is a side elevation showing my guard rail in place.

Fig. 2 is a perspective view thereof.

Fig. 3 is an end view of one of the sections slightly enlarged.

Fig. 4 is a cross-sectional view in elevation showing the interior of the posts taken through one of the posts.

Fig. 5 is a cross-sectional view taken on the line 5—5 of Fig. 4 but showing such view through a complete post.

Referring more particularly to the drawings, the roadway or parkway is provided with a curb 10 in which is set anchor bolts 11 which are threaded at the top and provided with a nut 12. My improved guard rail is made in sections 15 and preferably consists of three post members

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16, 17 and 18 each of which is provided with a base plate 19 through which the anchor bolts extend to fasten the section in place. Each of the posts is provided with a series of slots 20 in which a flat plate rail 21 is inserted. Normally, three rails 21, 22 and 23 are used, but it is obvious that the number of rails is optional and may vary as desired. The rails 20 are disposed at an angle to the perpendicular axis of the post so that the flexibility thereof may be brought into play should a vehicle collide with the guard rail.

In manufacture the posts 17 are cut out of sheet metal in the flat with the slots 20 being cut on the face 25 and the sides 26 and 27. The cut out blank is then formed on a forming brake into a rectangular shape and welded at 28. The post itself is welded to the base plate 19 as shown at 29 and a top or cap 30 is then welded at 31 and 32 to the sides of the post. The rails are then put into position in the slots 20 and welded as shown at 33 and 34 so as to firmly position them in the slots. The entire unit 15 is then in condition to be anchored to the curb 10 by means of the anchor bolts 11 and the nuts 12. Each unit 15 is so constructed that the ends 35 of the rails are spaced a short distance apart to allow for contraction and expansion and to allow insufficient space for a vehicle to be caught therebetween.

While I have shown in Fig. 1 three sections in place in a straight line, it will be appreciated that they may be placed at a slight angle to take care of curves in the road.

I claim:

1. A guard rail comprising a plurality of rectangular posts having front, side and back faces, a plurality of slots in each of said posts extending through the front and partially through the side faces, said slots being at an angle to the base of said posts, a plurality of flat rails positioned in said slots, a portion of said rails extending beyond the front face of said posts.

2. A guard rail section including a plurality of hollow rectangular posts each of said posts having a plurality of angular slots therein and a plurality of flat rails positioned in said slots positioned with the edges of said rails extending beyond the face of said posts.

3. A guard rail section including a plurality of hollow rectangular posts, a base plate on each post, each of said posts having a plurality of angular slots therein and a plurality of flat rails positioned in said slots at an angle to the horizontal with a substantial portion of said rails extending beyond the face of said posts.

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