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SAFETY BAND GUARDRAIL FOR HIGHWAYS

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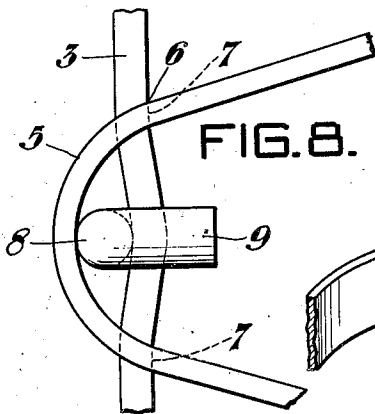
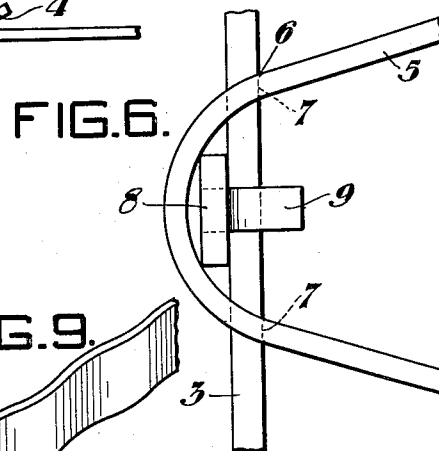
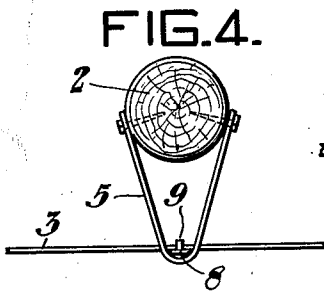
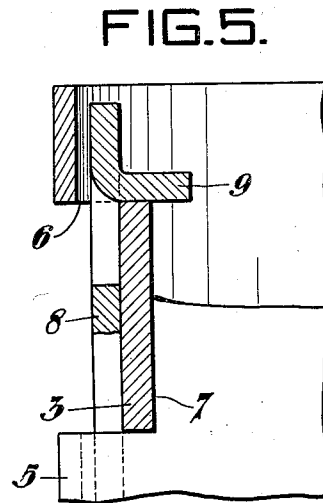
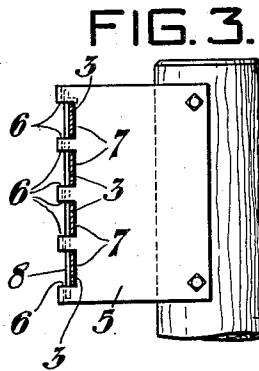
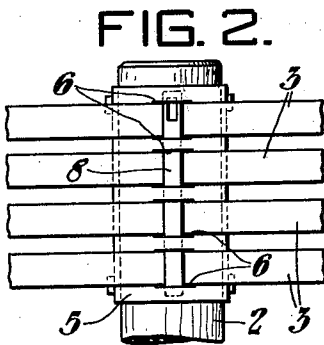
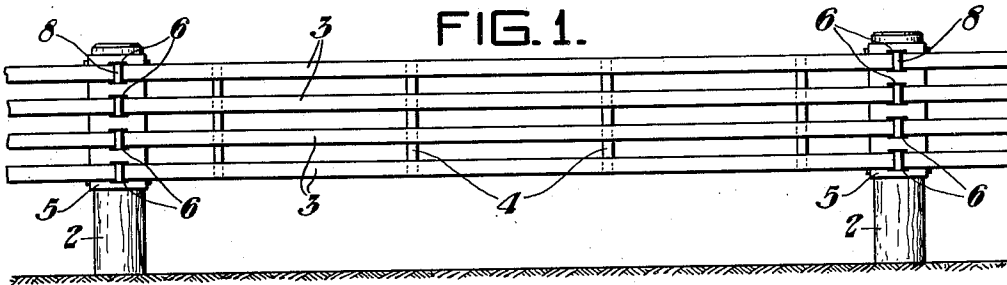
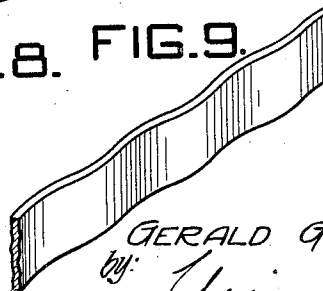


FIG. 8. FIG. 9.



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SAFETY BAND GUARDRAIL FOR HIGHWAYS

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2 Claims. (Cl. 256—13.1)

The present invention relates to highway guards and, particularly, to new and improved means for supporting the guardrail.

An object of this invention relates to a guard rail having a continuous belt provided with vertical stays welded to one or more bands of flat strip steel.

Other objects and advantages will become apparent as the description proceeds, in which:

Figure 1 is an elevational view of a portion of the guardrail as positioned along a highway;

Figure 2 is an enlarged detailed elevation showing the bands attached to the spring mounting members;

Figure 3 is a side view showing the position of the guard upon the post;

Figure 4 is a plan showing the manner of attaching the guard to the post;

Figure 5 is a detailed sectional view showing the locking bar in position between the inside face of the spring mounting member and the bands;

Figure 6 is a detailed plan of Figure 5;

Figure 7 is a detailed plan showing the bands secured to the vertical stays;

Figure 8 is a detailed plan of another form of locking bar and the manner of securing the bands in position; and,

Figure 9 is a perspective view of another form of band construction.

In the drawing, the numeral 2 represents a plurality of supporting posts positioned along a highway. The safety band guardrail includes one or more bands 3 of flat steel strips extending past said posts 2 on the highway side thereof.

The individual bands are connected together in end-to-end relation to provide a continuous strip. These continuous steel strips are welded, or otherwise secured in any conventional manner, to vertical stays 4 of substantially crescent-shape to thereby produce an integral belt or rail including one or more bands positioned in superimposed spaced relation to each other.

Secured to said posts and extending therefrom toward the highway are V-shaped metal spring mounting members 5 provided with cut-out portions 6 at the apex thereof. The flat steel strip bands 3 are positioned within these cut-out portions 6 and held firmly against the shoulders 7 of said V-shaped mounting members 5 by means of the locking bar 8. This locking bar which extends vertically throughout the length of said mounting members 5 is provided with an outstruck flange or tongue 9 to engage the top strip of the band 3 and prevent said locking bar from dropping down through the inside face of

the spring mounting members and the bands 3. The locking bar is tapered at its bottom end to facilitate insertion through the cut-out portions.

If desired, the locking bar may be round, as shown in Figure 8, in order to produce a slight kink or offset portion in the bands 3.

The guardrail of the present invention can be made by passing a series of bands or strips 3 through a welding machine to weld the vertical stays 4 to the back faces of said bands at regular intervals and can be furnished in lengths of several hundred feet. The band can go directly to a galvanizing or paint tank in a continuous motion from the welder and, after galvanizing or painting, can be rolled on reels of suitable diameter for shipment. In installing the guardrail, the bands 3 are unrolled from the reel along the front of the posts and then lifted into position. When in position, with the bands 3 arranged in said cut-out portions 6, the locking bar 8 is dropped down behind the front face of the apex of said mounting member 5 and in front of said bands 3. The ends of the continuous belt can be attached, in any conventional manner, to a terminal plate and stretched and pulled tight.

By providing the vertical stays 4 of a crescent-shape with the bands 3 welded thereto, the convex face of said stays lies in such a position that an object sliding along the outer face of the guardrail would ride by said stays rather than engage the same. The guardrail provides an inexpensive construction for holding the rail at a distance from the face of the post so that the hubs or projecting parts of vehicles would not touch the post if they should come in contact with the face of said rail.

In the form shown in Figure 9, the bands 3 may be, if desired, provided with a crimp or wave. These bands are usually formed from relatively high carbon steel, and by crimping or waving the individual bands forming the guardrail, considerable spring effect is obtained when said bands are under tension and, due to such resiliency, the bands would be easier to stretch and there would be no tendency for any one band to sag. Under such a construction, the spring-like action of the bands forming the guardrail would not need maintenance attention after slight impact from vehicles along the highway.

While I have shown and described a specific embodiment of the present invention, it will be seen that I do not wish to be limited exactly thereto, since various modifications may be made without departing from the scope of the invention, as defined by the following claims.

I claim:

1. A road guard including a plurality of vertically spaced bands of strip steel, the ends of each individual band being secured together in
5 end-to-end relation to form, with the other bands, a continuous unitary rail, crescent-shaped vertical stays positioned at points along said rail between said posts and welded to each of said
10 bands forming the continuous rail, a V-shaped member supporting said unitary rail in spaced relation to each post, the outstanding legs of each of said V-shaped members being secured to opposite sides of said posts, said V-shaped member
15 apex thereof to receive the spaced bands and means for locking said bands within said cut-out portions, said locking means including an outstruck tongue adapted to engage the top band of said unitary rail for supporting said locking
20 means within said cut-out portions of said V-shaped member and retaining said bands within said cut-out portions of said V-shaped member.

2. A road guard including a plurality of ver-

tically spaced bands of strip steel, said bands being crimped transversely so as to provide a spring effect when the bands are under tension, the ends of each individual band being secured together in end-to-end relation to form, with
5 the other bands, a continuous unitary rail, crescent-shaped vertical stays positioned at points along said rail between said posts and welded to each of said bands forming the continuous rail, a V-shaped member supporting said unitary rail
10 in spaced relation to each post, the outstanding legs of each of said V-shaped members being secured to opposite sides of said posts, said V-shaped member provided with spaced cut-out portions at the apex thereof to receive the spaced
15 bands and means for locking said bands within said cut-out portions, said locking means including an outstruck tongue adapted to engage the top band of said unitary rail for supporting said locking means within said cut-out portions of
20 said V-shaped member and retaining said bands within said cut-out portions of said V-shaped member.

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