

Aug. 10, 1937.

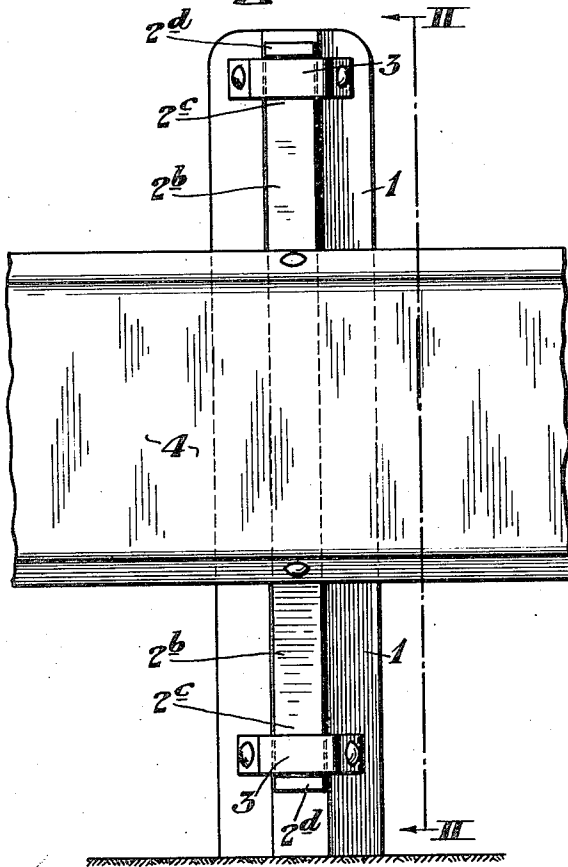
A. E. BRICKMAN ET AL

2,089,929

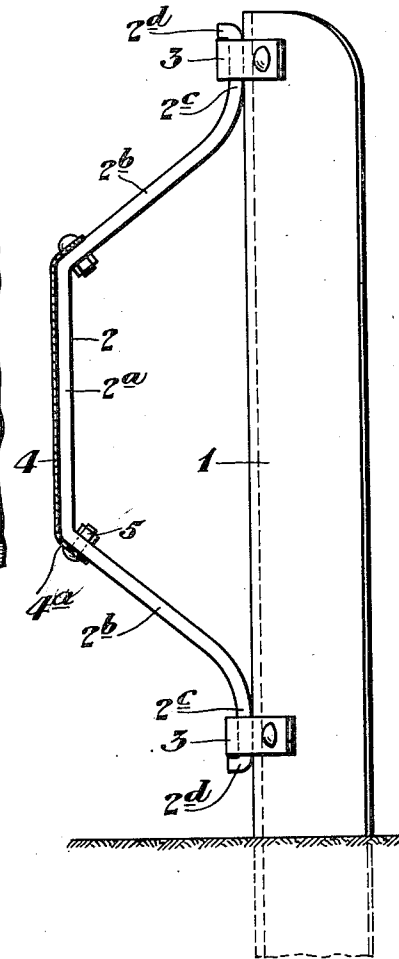
GUARDRAIL

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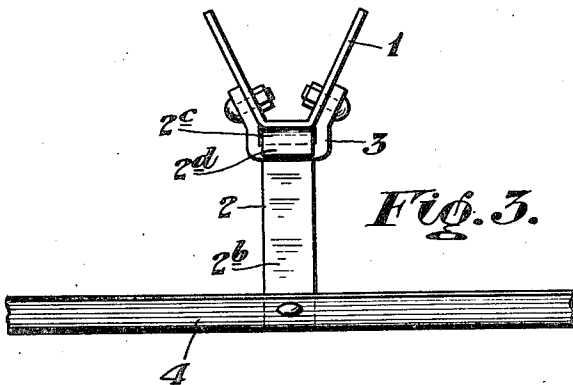
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



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## UNITED STATES PATENT OFFICE

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## GUARDRAIL

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3 Claims. (Cl. 256—13.1)

This invention relates to guard rails of the type using flat metal strips. In this type the strips are generally mounted in offset relationship from the posts by means of elastic members and sometimes cause trouble in that a colliding vehicle is thrown into the path of oncoming traffic by the rebound caused by the elasticity of these members. One of the objects of the present inventors is to diminish or eliminate this rebounding action. 5  
10 Other objects may be inferred.

Referring to the accompanying drawing:

Figure 1 is an elevation of an example of the invention.

Figure 2 is a cross-section from the line II—II 15 in Figure 1.

Figure 3 is a plan.

More specifically, the guard rail illustrated by this drawing includes the combination of a post 1, a bracket 2 consisting of a soft steel bar formed to provide a central straight upright portion 2<sup>a</sup>, and portions 2<sup>b</sup> that are offset from this upright portion and have ends 2<sup>c</sup> that parallel the post 1. Members 3 clamp the ends 2<sup>c</sup> to the post 1, and the straight portion 2<sup>a</sup> mounts a flat steel strip 4. 20  
25 The members 3 consist of short lengths of flat steel bar which are bolted to the post 1, and the ends 2<sup>c</sup> have their extremities hooked, as at 2<sup>d</sup>, to prevent their withdrawal.

It is to be understood that the combination disclosed is but one of many which will together constitute a guard rail. This is to say, there will be a series of the posts 1 and brackets 2 mounting a series of the steel strips which are interconnected end-to-end.

When a colliding vehicle strikes the straight strip 4 the soft steel from which the bracket 2 is made will tend to distort without spring-back, whereby the shock will be gradually absorbed. Also, the ends 2<sup>c</sup> will slide through the members 3 which clamp them to the posts 1, this further absorbing the shock. It is obvious that there will be no rebounding such as is caused by elastic brackets. 35  
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To further guard against damage to a colliding

vehicle, the strip 4 has backwardly angling edge portions 4<sup>a</sup> and is fixed to the bracket 2 by bolts 5 which pass through these portions and are therefore out of the plane of the face of the strip. It follows that a vehicle sliding along the strip will not be torn by these bolts. 5

We claim:

1. A guard rail including the combination of a post, a metal strip extending transversely past said post, and an offset bracket mounted by said post and mounting said strip, said bracket being constructed to distort when a colliding vehicle strikes said strip and being made of metal that is sufficiently soft to prevent said bracket from springing back when once distorted. 10  
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2. A guard rail including the combination of a post, a bracket consisting of a bar formed to provide a central straight upright portion and portions that are offset therefrom and which have ends that parallel said post, means for frictionally clamping said ends of said bracket against said post and a steel strip extending transversely past said post and which is mounted against said upright portion of said bracket, said bracket being made of metal that is sufficiently soft to distort without springing back to its original shape when said strip is struck by a colliding vehicle. 20  
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3. A guard rail including the combination of a post, a bracket consisting of a bar formed to provide a central straight upright portion and portions that are offset therefrom and which have ends that parallel said post, means for frictionally clamping said ends of said bracket against said post and a steel strip extending transversely past said post and which is mounted against said upright portion of said bracket, said bracket being made of metal that is sufficiently soft to distort without springing back to its original shape when said strip is struck by a colliding vehicle and said strip having backwardly angling edge portions that are fastened against said offset portions of said bracket. 30  
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