Aug. 27, 1929. J. W. HIGGINS 1,726,267

GUIDE RAIL FOR HIGHWAYS

Filed June 30, 1928

Fig. 1.

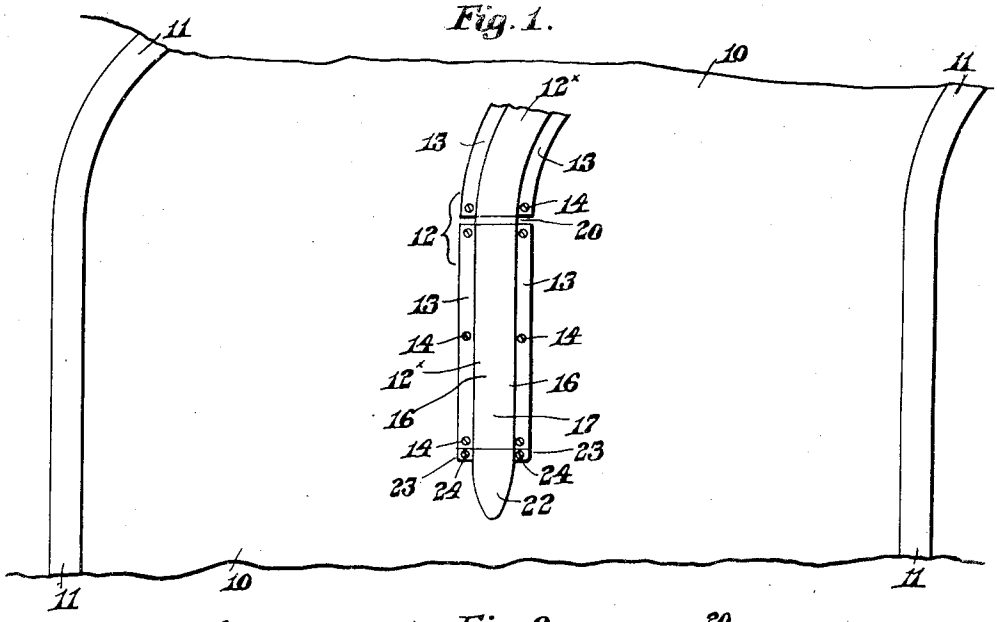


Fig. 2.

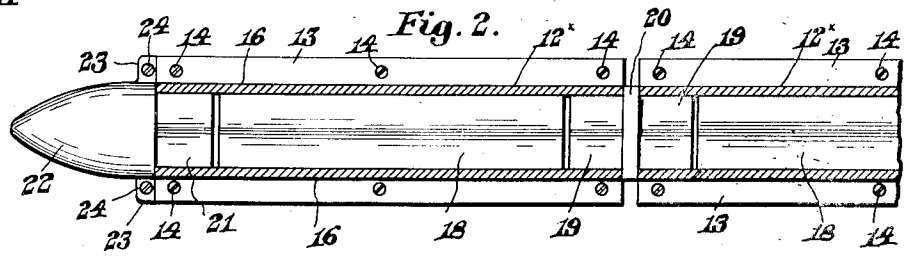


Fig. 5.

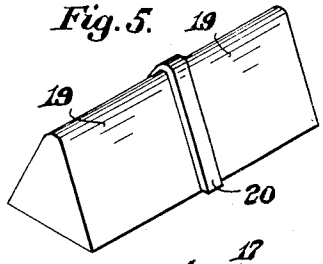


Fig. 6.

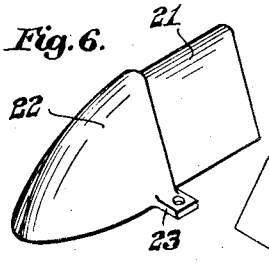


Fig. 4.

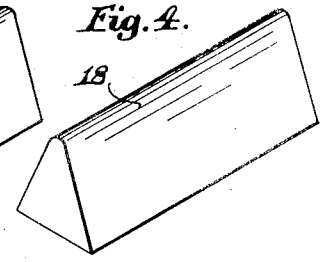
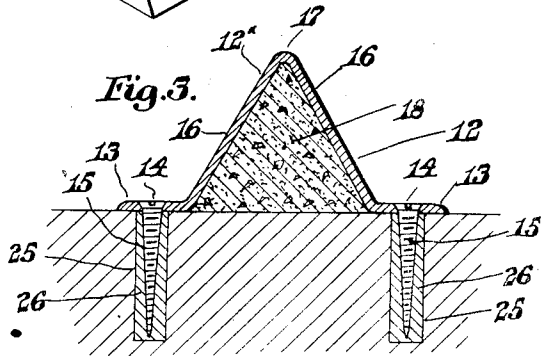


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOHN W. HIGGINS, OF MEDFORD, MASSACHUSETTS.

GUIDE RAIL FOR HIGHWAYS.

Application filed June 30, 1928. Serial No. 289,568.

This invention relates to guide rails for highways and has for its object the production of an inexpensive but effective means for dividing the highway into two roadways on which vehicles may move in both directions, said rail being so constructed as to prevent cars moving in one direction from encroaching on the roadway on which cars are moving in the opposite direction but permitting a car to move over the same at substantial right angles thereto.

The object is attained by the mechanism shown in the accompanying drawing.

For the purpose of illustrating the invention, one preferred form thereof is illustrated in the drawings, this form having been found to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which the invention consists can be variously arranged and organized, and the invention is not limited to the precise arrangement and organization of these instrumentalities as herein shown and described except as required by the scope of the appended claims.

Of the drawings:

Figure 1 represents a section of a highway showing secured thereto a guide rail embodying the principles of the present invention.

Figure 2 represents an enlarged horizontal section of a portion of said rail.

Figure 3 represents a transverse section of the same showing how the rail is secured to the roadway.

Figure 4 represents a perspective of one of the concrete filling blocks.

Figure 5 represents a perspective of one of the metal connectors adapted to be inserted between the two adjacent sections of said rail, and

Figure 6 represents a perspective of one of the metal end plugs.

Similar characters indicate like parts throughout the several figures of the drawing.

In the drawings, 10 is a highway having on opposite sides thereof curbings 11.

Centrally disposed between the curbings 11 is a guide rail 12 consisting of a plurality of elongated sections 12^x placed end to end as indicated in Figs. 1 and 2.

Each section 12^x is provided with outwardly extending flanges 13 having perforations therein to receive the heads 14 of screws 15 by which the sections 12^x may be securely fastened to the upper surface of the roadway.

Each section 12^x is made from a metal plate with the flanges 13 integral therewith, this metal plate being bent to form an inverted V with its sides 16 inclined upwardly toward each other and connected at the upper end by a curved surface 17.

The sections 12^x are reinforced by having concrete blocks 18 confined between the sides 16 thereof.

These sections 12^x may be made in any length and have one or more of these blocks 18 confined therein and resting on the surface of the roadway.

Inserted in the adjacent ends of every two sections 12^x is an alining block 19 preferably of metal and having a flange 20 forming oppositely disposed shoulders against which the ends of said sections abut.

By means of this flange 20 the alining block is prevented from moving endwise of said sections.

Each end section 12^x of the rail 12 has inserted in its outer end the reduced portion 21 of a block 22 which is inclined downwardly from the outer faces of the rail 12 to the surface of the roadway.

This block 22 has ears 23 formed thereon with openings therein to receive screws 24 by which said block may be positioned securely on the roadway.

In order to secure the rail sections 12^x to the roadway holes 25 are drilled in said roadway at proper positions and these holes are then filled with liquid cement 26.

While the cement 26 is in liquid state the screws 15 are inserted through the perforations in flanges 13 and into the liquid cement.

When the cement 26 has set the sections 12^x will be securely fastened to the roadway.

The rail 12 is preferably about five inches in height and owing to the inclinations of its sides 16 it is difficult for a car moving in one direction on one side of the highway to cut out of line and run over the rail in front of cars moving in the opposite direction on the other side of the highway.

As a consequence, many accidents may be avoided where the rail 12 is used which might occur if there were no guide rail 12 in use.

At the same time when it is absolutely necessary for a car to cross to another side of the highway it may be done by directing

the car towards the rail 12 at almost right angles thereto.

The rail 12 is designed particularly for use at danger points as on hills, curves, and narrow stretches of road where accidents are most likely to occur by the reckless operation of motor cars.

The reinforcing of the guide rail 12 in the manner described makes it possible for the rail to sustain extreme weights without injury to the rail.

It is believed that the operation and many advantages of the invention will be understood without further description.

Having thus described my invention, I claim

1. A highway guide rail consisting of an elongated metal strip in a plurality of sections, V-shaped in cross section, with oppositely disposed flanges by which it may be secured to the roadbed and having alining blocks inserted in the adjacent ends of said sections.

2. A highway guide rail consisting of an elongated metal strip in a plurality of sections, V-shaped in cross section, with oppositely disposed flanges by which it may be secured to the roadbed and having alining blocks inserted in the adjacent ends of said sections with a flange abutting said ends.

3. A highway guide rail consisting of an elongated metal strip, V-shaped in cross section, with oppositely disposed flanges by which it may be secured to the roadbed and having at one end thereof an inclined block provided with a reduced portion adapted to be inserted into an end of said strip.

4. A highway guide rail consisting of a plurality of sections, each having a broad base resting upon a roadway and secured thereto, said rail having its opposite sides inclined upwardly toward each other and the various adjacent ends of its sections alined by solid blocks inserted into said ends.

Signed by me at 294 Washington St., Boston, Massachusetts, this 22nd day of June, 1928.

JOHN W. HIGGINS.