

Oct. 4, 1966

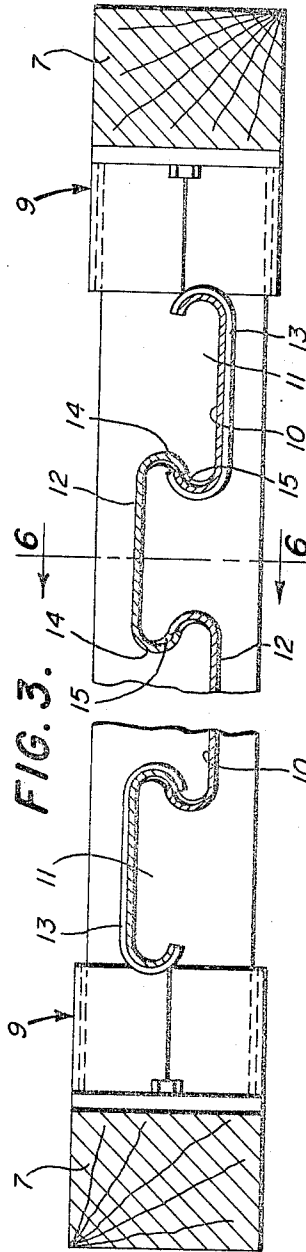
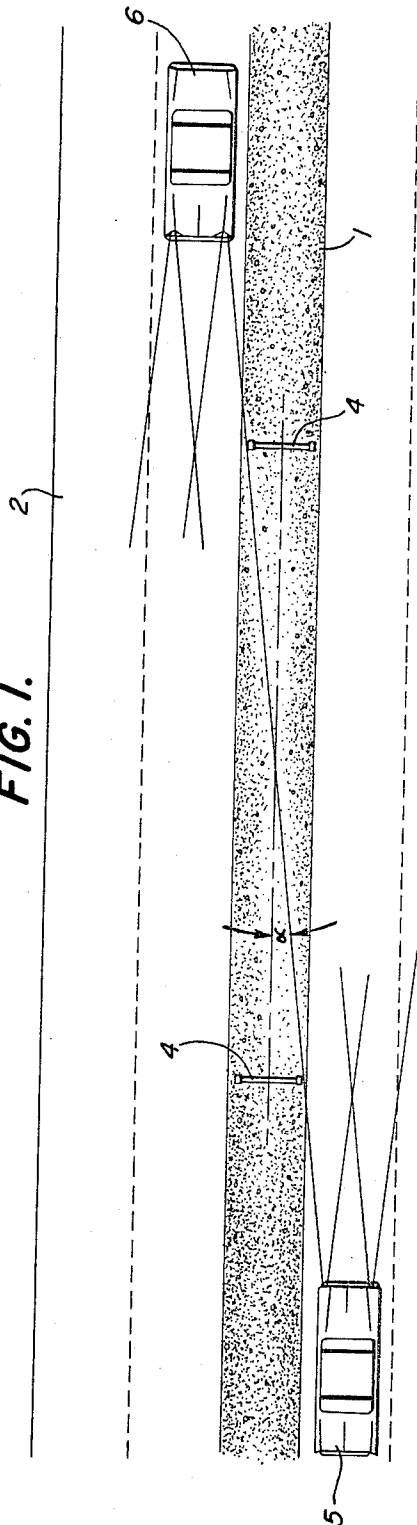
D. E. BLOK
ROAD SCREEN

3,276,333

Filed June 12, 1963

3 Sheets-Sheet 1

FIG. 1.



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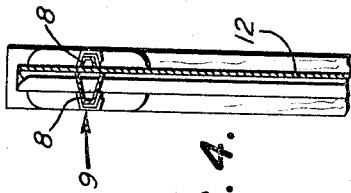


FIG. 4.

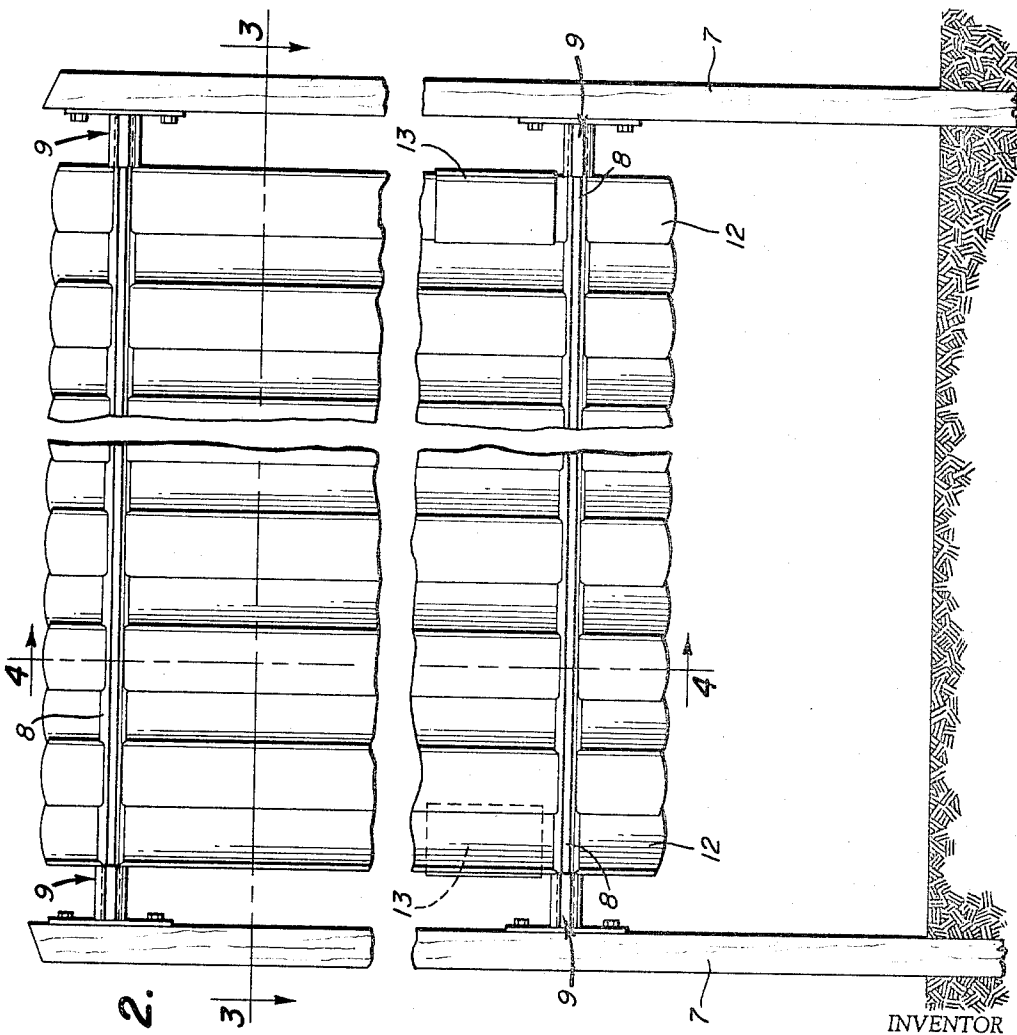
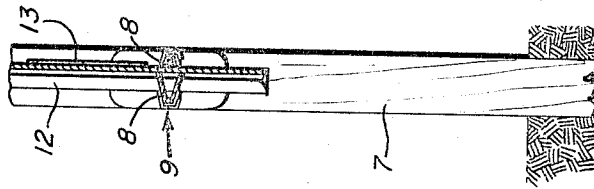


FIG. 2.

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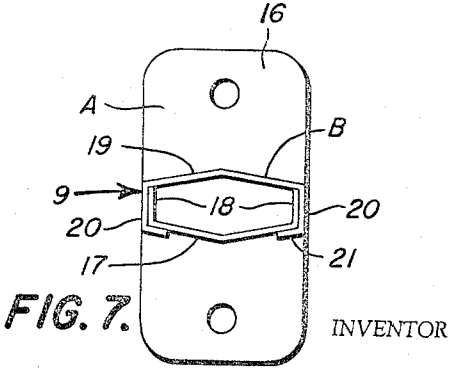
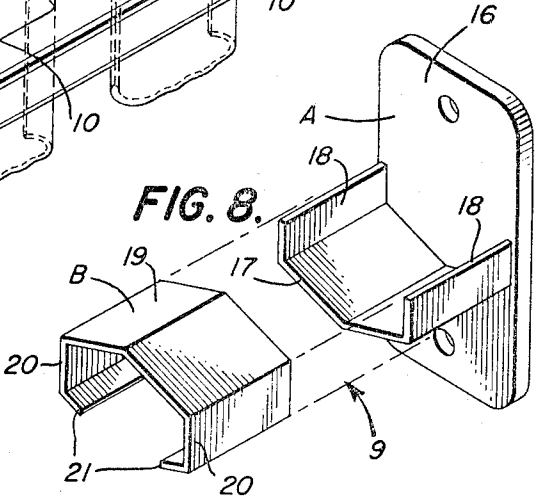
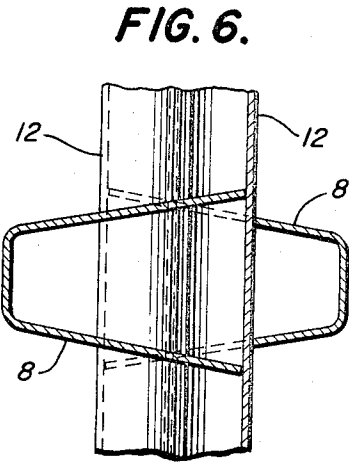
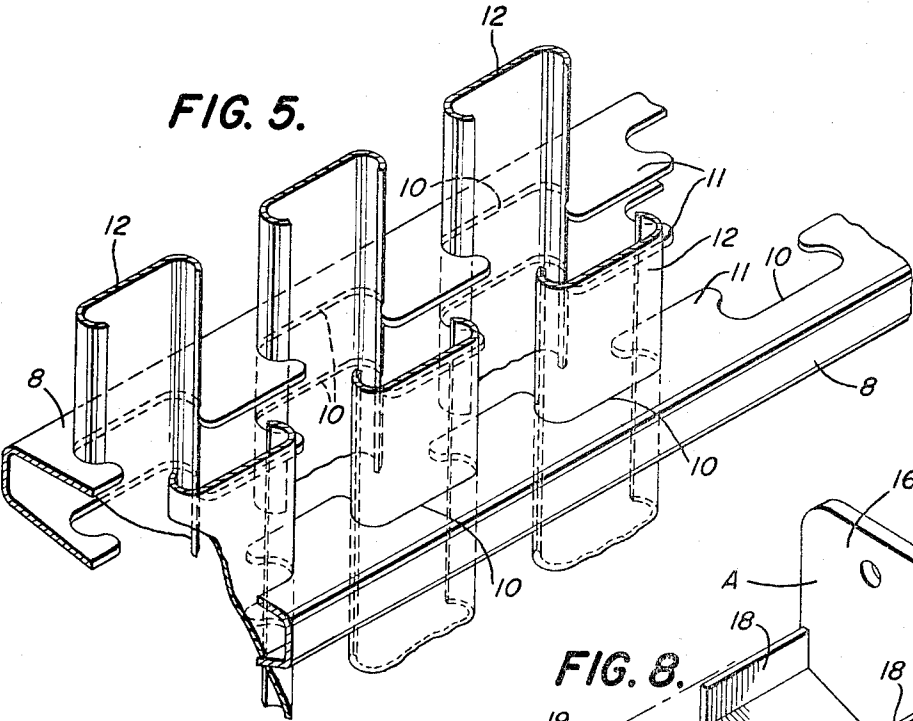
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ROAD SCREEN

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279,614

6 Claims. (Cl. 94—1)

This invention relates to a road screen for blocking light beams of oncoming cars in divided roads and provides a road screen which is of inexpensive construction, has a long life, and which, if damaged, may be easily and rapidly repaired and which, on the other hand, is easily deformable so that in the event of collisions only a small resistance is offered.

The invention is characterized in that it comprises at least two stringers provided with recesses and/or raised portions which are engageable with each other and supporting a plurality of profiled strips, said stringers being connected to vertical posts, preferably in separate positions. The stringers may thereby have a V-shaped or substantially V-shaped, a U-shaped or substantially U-shaped or any other channel-like cross-section, the legs of these stringers being provided with recesses and/or projections in which and on which profiled strips of aluminum, synthetic material or similar material are clamped. These strips may be manufactured from strip-like material of which the edges are bent.

The road screens are erected in spaced relation on a highway reserve or central strip. The spaces between screens are so selected that the rays of light originating from motor vehicles are entirely or substantially entirely blocked so that there is no blinding the oncoming traffic. The distance between two successive screens depends on the width of the screens. If the screens have a width of 2 m. and the distance between the screens is 20 m., the light rays projected at an angle of 15° by the head lights are intercepted and blinding is prevented.

A preferred embodiment of the anti-dazzle screen according to the invention is described as follows:

(1) An anti-dazzle screen for roads comprising profiled strips and stringers arranged at at least one side of said screen, said stringers being provided with projections and recesses, said profiled strips having bent longitudinal rims and being clampingly arranged on said projections and in said recesses, the ends of the stringers being connected to posts.

(2) An anti-dazzle screen for roads comprising profiled strips and stringers arranged at at least one side of said screen, said stringers being provided with projections and recesses, said profiled strips having bent longitudinal rims and being clampingly arranged on said projections and in said recesses, the ends of the stringers being connected to posts, the profiled strips facing opposite directions and being arranged in two parallel planes lying at a distance from one another, gaps being provided between the longitudinal rims of said profiled strips.

(3) An anti-dazzle screen for roads comprising profiled strips and stringers arranged at at least one side of said screen, said stringers being provided with projections and recesses, said profiled strips having bent longitudinal rims and being clampingly arranged on said projections and in said recesses, the ends of the stringers being connected to posts, stringers being arranged at either side of the screen, the profiled strips being secured against displacement in their longitudinal direction alternately in the stringers located at one of the screen and in the stringers located at the other side of the screen.

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(4) An anti-dazzle screen for roads comprising profiled strips and stringers arranged at at least one side of said screen, said stringers being provided with projections and recesses, said profiled strips having bent longitudinal rims and being clampingly arranged on said projections and in said recesses, the ends of the stringers being connected to posts, at least one of the corners of the screen being provided with strip portions clampingly arranged on the profiled strips, said strip portions serving as road markers.

(5) An anti-dazzle screen for roads comprising profiled strips and stringers arranged at at least one side of said screen, said stringers being provided with projections and recesses, said profiled strips having bent longitudinal rims and being clampingly arranged on said projections and in said recesses, the ends of the stringers being connected to posts, said stringers being arranged in pairs, the stringers of each pair lying at either side of the screen and facing one another, the profiled strips arranged in the recesses of one stringer of each pair being also arranged on a projection of the other stringer of said pair.

(6) An anti-dazzle screen for roads comprising profiled strips and stringers arranged at at least one side of said screen, said stringers being provided with projections and recesses, said profiled strips having bent longitudinal rims and being clampingly arranged on said projections and in said recesses, the ends of the stringers being connected to posts, said stringers being arranged in pairs, the stringers of each pair lying at either side of the screen and facing one another, the profiled strips arranged in the recesses of one stringer of each pair being also arranged on a projection of the other stringer of said pair, gaps being provided between the longitudinal rims of the profiled strips.

(7) An anti-dazzle screen for roads comprising profiled strips and stringers arranged at at least one side of said screen, said stringers being provided with projections and recesses, said profiled strips having bent longitudinal rims and being clampingly arranged on said projections and in said recesses, the ends of the stringers being connected to posts, the profiled strips facing opposite directions and being arranged in two parallel planes lying at a distance from one another, gaps being provided between the longitudinal rims of said profiled strips, the stringers provided at either side of the screen being arranged staggered relative one another.

A preferred embodiment of the road screen according to the invention provides gaps between the rims or edges of two successive profiled strips. These gaps are narrow enough to block passage of the blinding rays of light. In order to make the gaps still sufficiently wide, the lamellae arranged in different planes.

According to the invention at least one profiled stringer may be provided at each side of the screen. If desired the profiled strips may be supported and secured against displacement alternately in the stringer(s) located at one side of the screen and in the stringer(s) located at the other side of the screen.

The road screen according to the invention may also serve as a road marker to indicate the substantial outer limit of the screen or central strip. For this purpose there may be provided at one or both bottom corners of the screen one or a number of preferably white parts, for example lamellae. The screen may also be provided with other signs.

Since the screens are erected at a relatively large intermediate distance they do not obstruct the motorist's vision regarding the scenery.

The invention will be explained below with reference to the accompanying drawings showing by way of ex-

ample an embodiment of a road screen according to the invention.

FIG. 1 shows diagrammatically part of a super-highway provided with anti-dazzle screens for roads according to the invention.

FIG. 2 is a front view of a road screen.

FIG. 3 shows diagrammatically a top plan view thereof.

FIG. 4 is a section according to the line IV—IV of FIG. 2.

FIG. 5 is an exploded perspective view of a road screen.

FIG. 6 is a section taken along line 6—6 of FIG. 3.

FIG. 7 is an end view of an assembled clamp.

FIG. 8 is an exploded perspective view of the clamp of FIG. 7.

As is apparent from FIG. 1 there are erected anti-dazzle screens for roads, spaced apart on a central reserve or central strip 1 of a super-highway which central reserve separates two opposite vehicle ways 2 and 3. In FIG. 1 this interspace may be, for example 20 m., the length of the screens being 2 m. so that tangent $\alpha=1/10$. As is apparent from this figure the inconvenient light rays of the head lights of two oncoming cars 5 and 6 will be intercepted.

FIGS. 2-4 show on an enlarged scale a road screen according to the invention. This screen comprises two vertical posts 7 to which two sets of stringers 8 are connected by means of clamps 9 which are shown in FIGS. 7 and 8. These clamps are preferably bipartite. One portion (A) of the clamp forms a fastening flange 16, which is secured to the posts, with flange 17 extending therefrom perpendicular to the post. Each flange 17 has upstanding edge 18 portions over which a resilient second portion (B) may be clamped. The second portion is generally channel shaped with a base 19, upstanding edges 20 with inwardly directed flanges 21.

The stringers 8 have a U-shaped or substantially U-shaped cross-section. The legs thereof are provided with recesses 10 and raised portions 11 on which and in which lamellae, panels or similar strip-like elements 12 are arranged as shown in FIGS. 5 and 6. These lamellae or similar elements have bent rims which clampingly engage with the recesses 10 and the raised portions 11. At the bottom corners a lamella strip 13 is clampingly mounted around the outermost lamella 12. This lamella strip 13 serves as a road marker.

It is obvious that the invention is not restricted to the embodiment described above and shown in the drawings but that it may be modified in many ways without departing from the scope of the invention. Instead of two sets of two channel-like stringers facing each other one may also utilize more than two sets. The screen may also be constructed with stringers located only at one side or with stringers located in spaced relation and pointing in opposite sense. Furthermore, also other traffic signs or other marks may be provided on the screens.

As is apparent from FIG. 3 the inwardly turned longitudinal edges 14 of the lamellae 12 are arranged one around the other. Between these rims there remain gaps 15. These gaps may, if desired, be chosen wider, since the screen is of a certain thickness which prevents inconvenient light rays from penetrating through the screen. If road screens are applied of which the stringers exclusively have raised portions or recesses, the screen thickness becomes smaller so that consequently, if the front surfaces of the lamellae are located in one plane, the gaps cannot be so wide. However, it is possible to provide the stringers with such recesses and/or raised portions that the lamellae extend at an angle with the longitudinal direction of the stringers.

FIG. 5 shows an exploded view of the part of the anti-dazzle screen according to the invention having two stringers 8 provided with recesses 10 and raised portions 11.

FIG. 6 is a cross section along the line II—II of FIG. 5 and illustrates the U-shaped section of the stringers 8.

As may be seen from FIGS. 5 and 6, the lamellae or striplike elements are clampingly arranged in the recesses of the stringers 8. When both stringers provided with lamellae are moved towards each other, the lamellae arranged in the recesses of one stringer will be pressed on the raised portions 11 of the other stringer and vice versa.

FIGS. 7 and 8 show a bipartite clamp structure adapted to secure the stringers 8 to posts 7. One of the parts of said clamp is provided with a flange or plate A by means of which said part may be fixed to the post. Part B has a substantially U-shaped cross section and is clampingly arranged on the first part. Said two parts grip around the ends of the stringers 8.

It is observed that according to the present invention the profiled strips need not be "interlocking" profiled strips.

According to an embodiment of the present invention, a strip portion 13 may be clampingly mounted on to a profiled strip which is clampingly held by the stringers.

According to the present invention the anti-dazzle screen for roads comprises stringers provided with projections and recesses and profiled strips have bent longitudinal rims, said strips being clampingly held on said projections and in said recesses.

The combination of the interlocking longitudinal flanges and the stringers which are arranged on either side of said strips will distinguish between the present invention and the prior art.

I claim:

1. An anti-dazzle screen for roads comprising profiled strips and stringers arranged on at least one side of said profiled strips, said stringers being provided alternately with projections and recesses, said projections and recesses having a configuration corresponding with the cross section of the profiled strips, said profiled strips having bent longitudinal rims and being alternately clampingly held against longitudinal displacement on said projections and in said recesses, the ends of each projection projecting over the adjoining recesses, the profiled strips facing opposite directions and being arranged in two parallel planes, adjoining rims of each of two adjoining strips overlapping one another, and the ends of the stringers being connected to posts.

2. An anti-dazzle screen for roads according to claim 1 in which at least one of the corners of the screen is provided with profiled strip portions having a profile corresponding with that of the profiled strips, said strip portions being clampingly arranged on the profiled strips, said strip portions serving as road markers.

3. An anti-dazzle screen for roads comprising profiled strips and stringers arranged at either side of said profiled strips, said stringers being provided alternately with the projections and recesses, said projection and recesses having a configuration corresponding with the cross section of the profiled strips, said profiled strips having bent longitudinal rims and being alternately clampingly held against longitudinal displacement on said projections and in said recesses, the ends of each projection projecting over the adjacent recesses, the profiled strips facing opposite directions and being arranged in two parallel planes, the adjoining rims of each two adjoining profiled strips overlapping one another, the ends of the stringers being connected to posts.

4. An anti-dazzle screen for roads according to claim 3 in which at least one of the corners of the screen is provided with profiled strip portions having a profile corresponding with that of the profiled strips, said strip portions being clampingly arranged on the profile strips, said strip portions serving as road markers.

5. An anti-dazzle screen for roads according to claim 3 in which the two parallel planes of the profile strips are spaced apart a distance so that gaps are provided between the adjoining longitudinal rims of each two profiled strips facing in opposite directions.

6. An anti-dazzle screen for roads according to claim 3 in which the stringers at one side of the profiled strips

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are located at different distances from the ends of each stringer at the other side of the profiled strips.

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