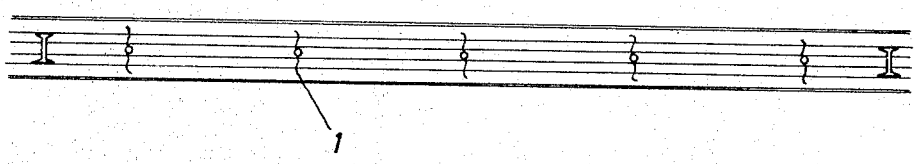
Oct. 31, 1967 W. HUTWELKER 3,349,674

HEADLIGHT SHIELDING DEVICES

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Fig. 1



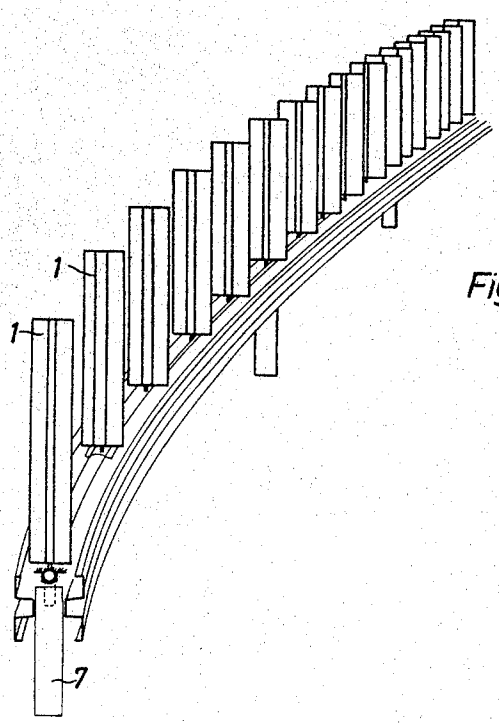


Fig. 2

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Oct. 31, 1967 W. HUTWELKER 3,349,674

HEADLIGHT SHIELDING DEVICES

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Fig. 4

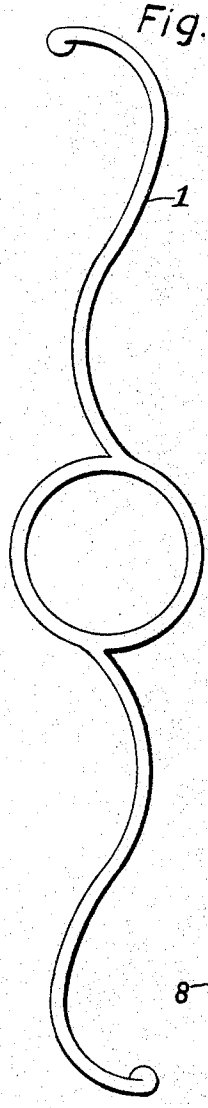
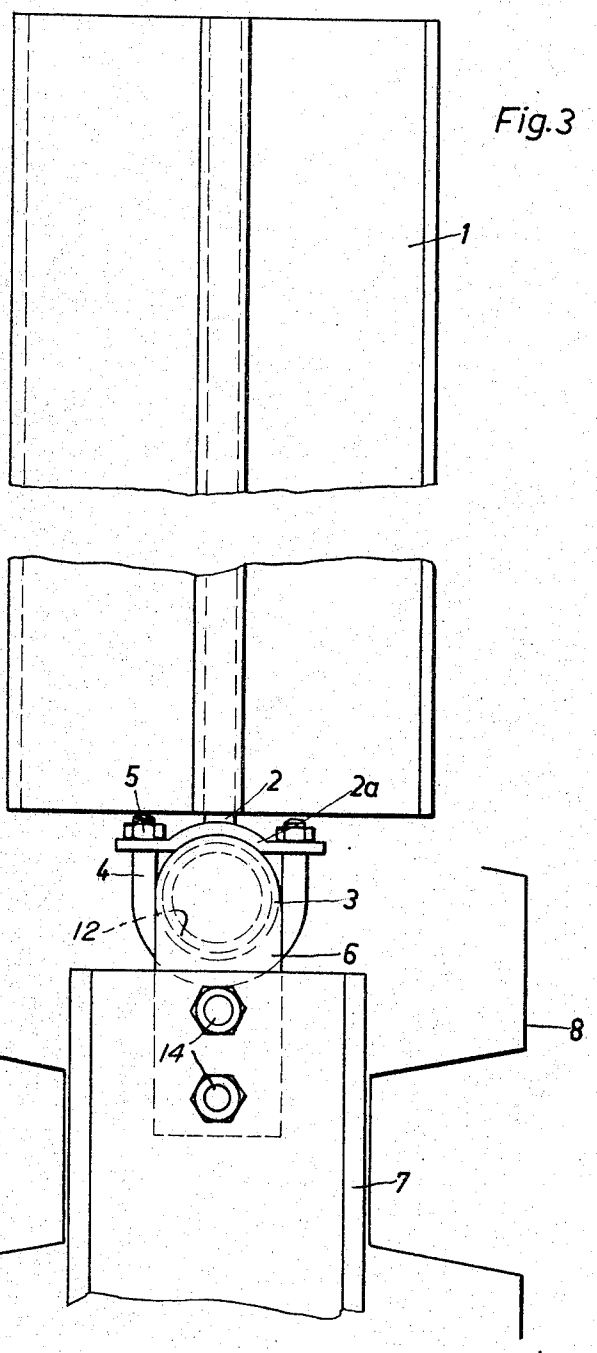


Fig. 3



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Fig.5

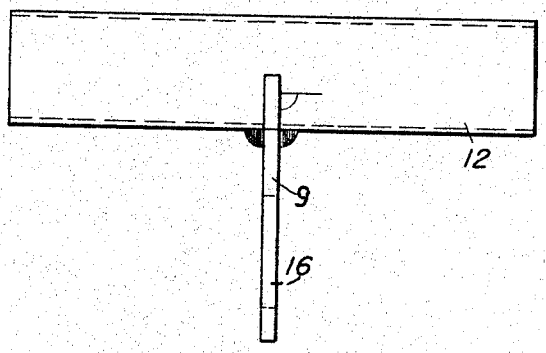


Fig.6

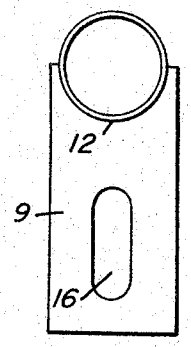


Fig.7

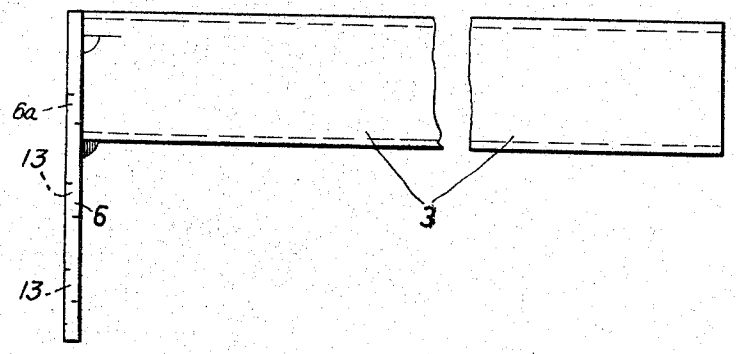
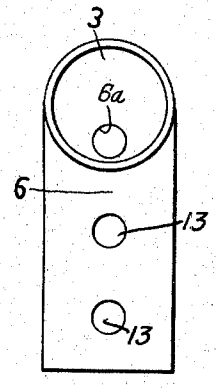


Fig.8



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HEADLIGHT SHIELDING DEVICES

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Fig. 9

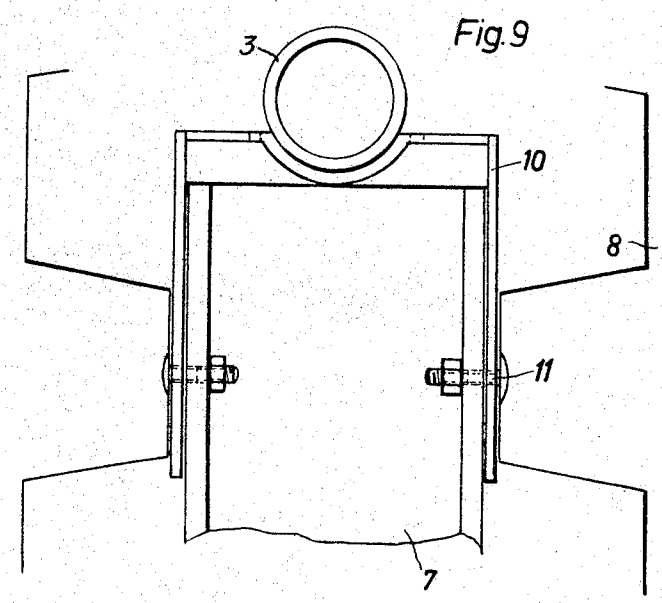
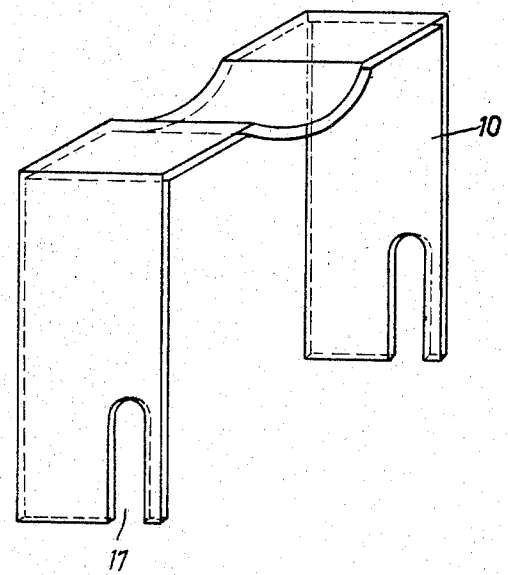


Fig. 10



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HEADLIGHT SHIELDING DEVICES

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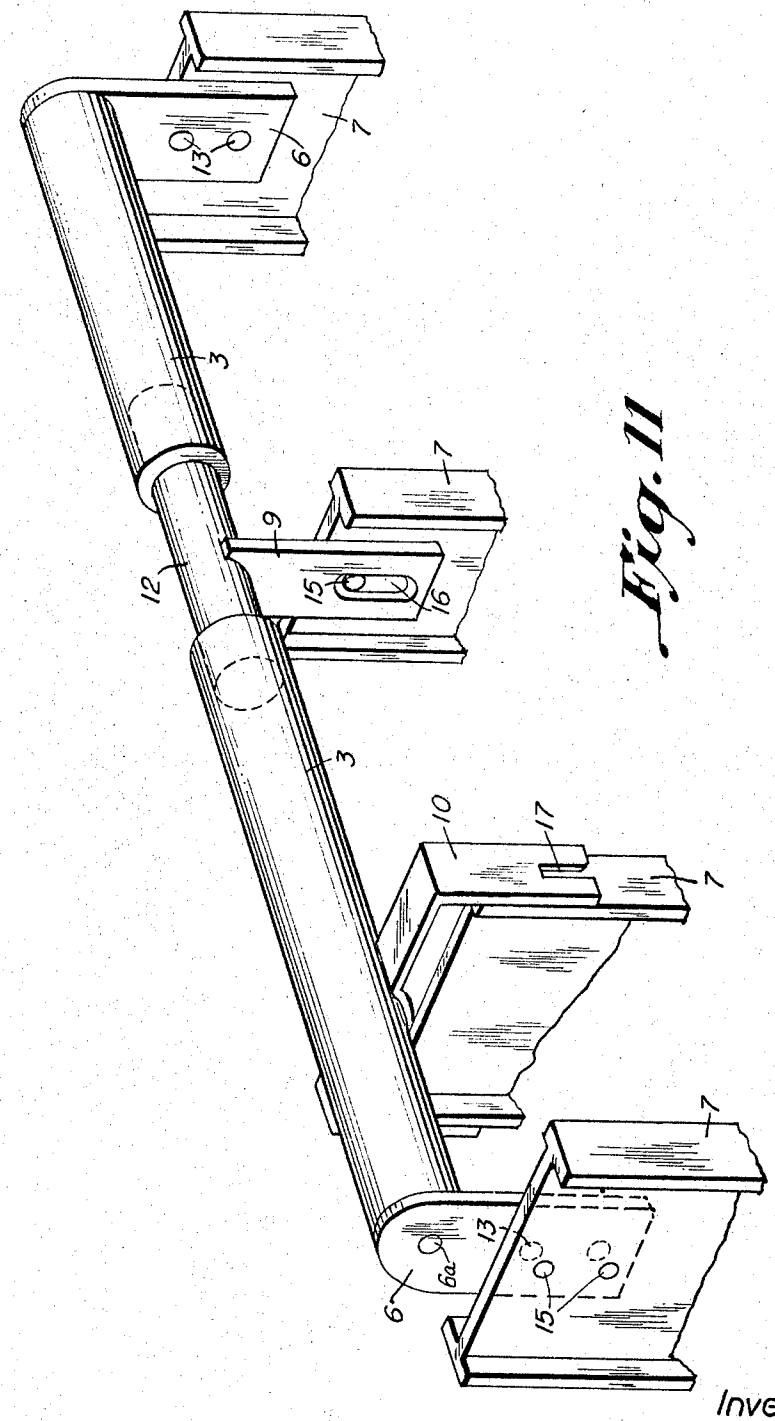


Fig. 11

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United States Patent Office 3,349,674 Patented Oct. 31, 1967

3,349,674

HEADLIGHT SHIELDING DEVICES

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Filed Sept. 27, 1965, Ser. No. 490,217
3 Claims. (Cl. 94—1)

ABSTRACT OF THE DISCLOSURE

A headlight shielding device for a road includes a series of shielding elements, and means for mounting the shielding elements uprightly and rotatably along the road.

The invention relates to a headlight shielding device, and relates more particularly to devices of this type which are used in connection with a road that carries oppositely moving automotive traffic.

Headlight shielding devices are known which are put between the two opposite traffic lanes. These have taken the form of continuous fences, or plane single elements with or without frames which are mounted at certain intervals either on the ground or on stanchion guiding planks. These elements, which are often known as lamellae, may be so shaped that each shielding element is thin as compared to its length and is either curved including in some cases wave-shaped, or otherwise shaped, and is tiltable about a fixed upright shaft so that it may be turned substantially perpendicularly to the direction of impact of the headlights of the automobiles that travel on the road.

It is among the principal objects of the instant invention to provide a headlight shielding device which, as compared to the prior art, has advantages in point of form, ease of manufacture, simplicity of mounting, and ease of adjustment.

It is another object of the invention to provide shielding elements for such devices which are formed of hollow extruded aluminum shapes.

Generally speaking, the invention provides such a shielding element which has a central tubular section with a hollow circular recess about the longitudinal axis of the elongated lamella element, and has two opposite arcuate sections that are integrally connected to the central section; each of the arcuate sections approximate a sine curve, and the curvature of the arcuate sections of each pair are oppositely oriented to face in opposite directions.

Further objects and advantages of the invention will be set forth in part in the following specification and in part will be obvious therefrom without being specifically referred to, the same being realized and attained as pointed out in the claims hereof.

In the accompanying drawings,

FIG. 1 is a fragmentary plan view of a headlight shielding device in accordance with my invention;

FIG. 2 is a fragmentary perspective view of the headlight shielding device;

FIG. 3 is a fragmentary elevational view of a shielding element, the support means thereof, and the mode of interconnection;

FIG. 4 is an end elevational view of a shielding element lamella;

FIG. 5 is a side elevational view of a spar connecting piece;

FIG. 6 is an end elevational view of the spar connecting piece of FIG. 5;

FIG. 7 is a fragmentary side elevational view of a hollow tubular spar;

FIG. 8 is an end elevational view of the spar of FIG. 7;

FIG. 9 is a fragmentary elevational view of a post and an additional support for the tubular spar;

FIG. 10 is a perspective view of the support of FIG. 9; and

FIG. 11 is a fragmentary perspective view of several posts and parts assembled thereon, though various parts including the shielding elements and their shafts and the planks have, for the sake of clarity and simplicity, been omitted.

As shown in FIGS. 1 and 2, each shielding element **1** is supported uprightly above support means which extend substantially parallel along the road surface (not shown). Each element **1** is composed of a hollow extruded shape composed of aluminum. The surface of the aluminum may be anodized, electro-oxidized, sprayed, brushed or treated in any other suitable manner, to reduce the reflection characteristics of the surface. For marking purposes, however, reflectors may by mounted on the individual lamellae.

Each element **1**, as best shown in FIGS. 3 and 4, comprises a central section that defines a hollow circular recess about the longitudinal axis of the element **1**. With this recess, the element **1** is mounted uprightly on an upright shaft **2**. During mounting, the elements **1** may be adjusted vertically on the shafts **2**, as well as being angularly positioned for proper headlight shielding. Each element **1** is fit to its shaft **2** at a frictional telescopic relationship so as to permit lowering, raising and turning of each element **1** on its shaft **2**.

The shafts **2** form part of the support means for the elements **1**. The support means furthermore comprise ground-engaging posts **7** which suspend one or more tubular spars **3** that extend substantially parallel to the road surface. The tubular spar **3** is composed of a smooth tube at the end of which, as best shown in FIGS. 7 and 8 and 11, there is welded a mounting plate **6** that is provided with holes **13**. The mounting plate **6** is connected by bolts **14** to a post **7**, as shown in FIG. 3. The customary stanchion guiding planks **8** may be mounted on the posts **7**. As the distance between the posts **7** through the holes **15** thereof along the road is not uniform, the other end of the spar **3** which does not carry any mounting plate **6**, remains open.

The holes **13** serve to receive the bolts **14**; the mounting plate **6** furthermore has an aperture **6***a* that connects the interior of the tubular spar **3** with the exterior and serves to discharge excess zinc from the hot galvanizing of the spar **3**.

The individual shafts **2** for the lamellae **1** are removably mounted on the spar **3**, with the aid of clamping means. These clamping means comprise an upper clip **2***a* and a U-shaped bolt **4** that carries a thread on each end, and protrudes with these threaded ends through holes in the clip **2***a*, where the threads engage nuts **5**. The bolts **4** surround the lower portion of the spar **3**, and each clip **2***a* carries an upright shaft **2**. To position each shaft **2**, the operator will adjust it to the proper position, and then tighten the nuts **5**. Each shaft **2** is integrally connected to its clip **2***a*.

Each element **1**, as stated, is formed of a hollow extruded aluminum shape. The length of the succeeding shapes may be changed by cutting, to conform the height to which the upper ends of the elements **1** extend to the available overhead space, or to a desired design.

A spar connecting piece or splice element **12** (see FIGS. 5, 6 and 11) is provided which, as shown in FIGS. 5 and 6, carries about midway a plate **9** which is welded thereto. The plate **9** has an elongated aperture **16** to be fastened at adjustable height to a post **7**. The spar connecting piece **12** has an internal diameter which is so dimensioned that it will fit properly, in telescoping fashion, into the

open end of the tubular spar 3. The connecting piece 12 serves to support the open ends of aligned though non-abutting tubular spars 3, as best shown in FIG. 11.

Where a tubular spar 3 extends along two or more posts 7, it may be supported, in accordance with the illustration of FIGS. 9 and 10 and 11, by means of support saddles 10. Each saddle 10 is mounted on a post 7, by means of screws 11, and the height to which the saddle 10 may be mounted is adjustable, owing to elongated recesses 17 formed in the legs of the saddle 10 through which the screws 11 project.

The guiding planks 8 which are carried by the posts 7, may extend along an entire series of posts 7.

The instant invention has the advantage of simplified assembly, low maintenance costs, and easy adaptability to local conditions, such as rising or curving road surfaces. Another advantage is the high scrap value of the instant lamellae elements 1, which helps reduce the overall costs where it is necessary to exchange damaged lamellae.

I wish it to be understood that I do not desire to be limited to the exact details of construction shown and described, for obvious modifications will occur to a person skilled in the art.

Having thus described the invention, what I claim as new and desire to be secured by Letters Patent is as follows:

1. In a headlight shielding device, for use in connection with a road carrying automotive traffic moving in opposite directions, a series of aligned shielding elements, the alignment being parallel to a road reference line along the longitudinal dimension of the road, support means extending at a level above the road surface and including a series of upright shafts, one for each shielding element, each shielding element comprising a thin elongated curved

lamella formed of a hollow extruded shape of aluminum, comprising a central section defining a hollow circular recess about said longitudinal axis, said central section being mounted telescopically on a shaft rotatably about its longitudinal upright axis, whereby each lamella may be turned substantially perpendicularly to the direction of impact of the rays of the automotive headlights, and each lamella further comprising two opposite arcuate sections integrally connected to said central section.

2. In a headlight shielding device, as claimed in claim 1, said support means comprising a tubular spar disposed substantially parallel to the road surface, and means supporting said shafts upright on said spar comprising a series of clamping means each connected to a shaft and each removably positioned on said spar.

3. In a headlight shielding device, as claimed in claim 1, said support means comprising a tubular spar disposed substantially parallel to the road surface, a series of upright ground-engaging posts, stanchion guiding planks supported by said posts, and means operable for vertically adjustably connecting said spar to said posts comprising a series of connecting plates, one for each post, at least some of said connecting plates having elongated apertures, and fastening means including members operative to project through said apertures operable for connecting each connecting plate to a post.

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JACOB L. NACKENOFF, *Primary Examiner.*