

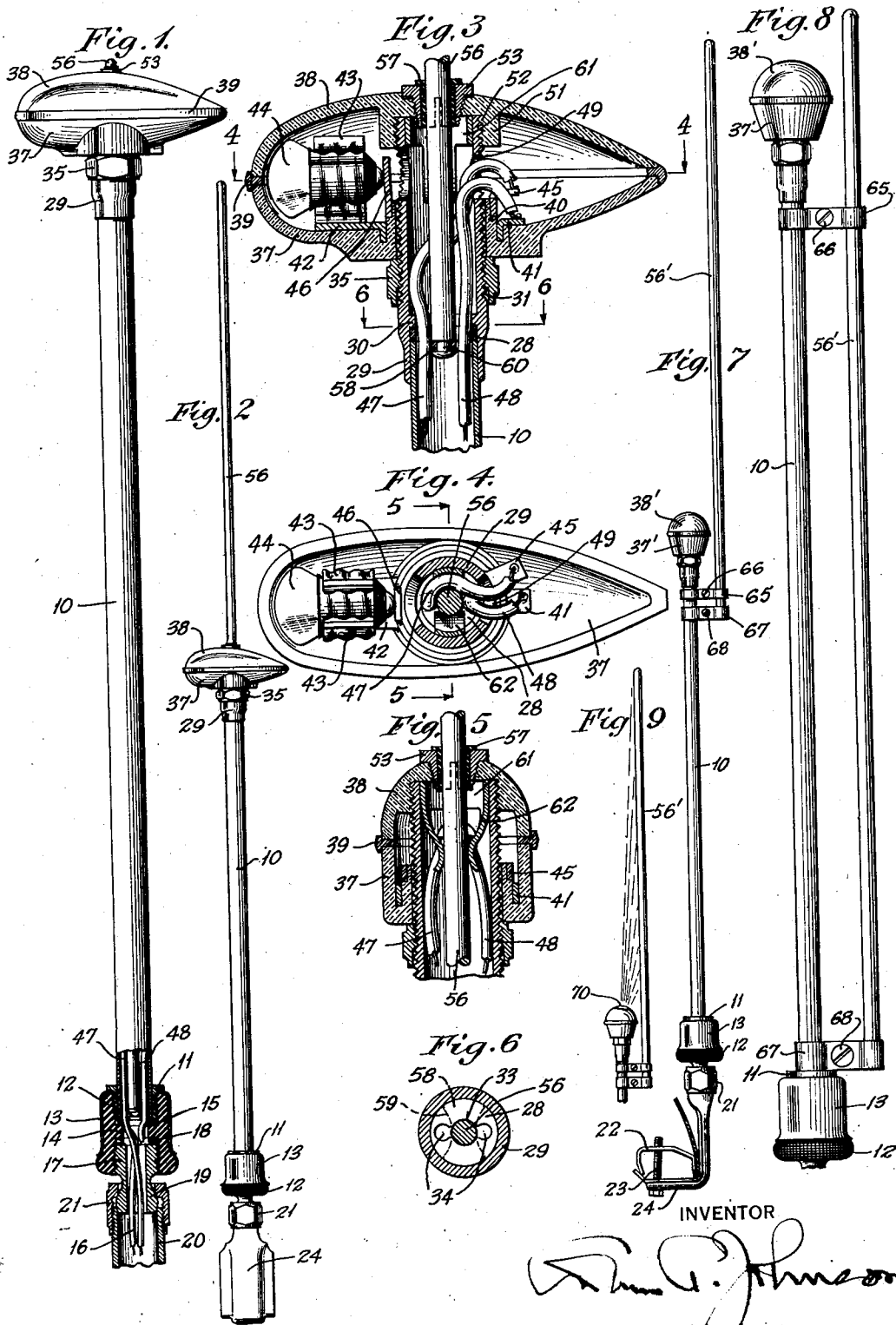
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FENDER GUIDE

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FENDER GUIDE

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This invention relates to an improved fender guide adapted to be mounted on the fenders of automobiles.

In automobiles of the present design, the fenders are formed with different curvatures and extend over the wheels with their edges various heights from the ground level. In order to provide a guide which can be mounted on the beads or edges of these fenders and still properly indicate the edge of the fender, it has been proposed to make the guide adjustable to different heights. It is especially desirable to have the fender guide illuminated so that it can be seen at night very readily by the operator of the automobile. Difficulty, however, has been encountered in making an illuminated fender guide which can be extended to the desired height due to the fact that it is hard to handle the amount of wire necessary to permit extension of the illuminated guide to the desired height.

The fender guide of the present invention, however, provides an illuminated target on the fender guide staff and an extensible element mounted thereon to be positioned above the target to the desired height. In this manner, the problem of handling the wires forming the circuit for the lamp in the target is avoided. The target, which is usually translucent, may be provided with a transparent section which will throw a beam of light upon the extended rod so that it can be readily seen at night.

The fender guide staff and extensible rod may be made of conductive material and insulated from the fender. When so constructed it is capable of performing another function in addition to the indication of a position on the edge of a fender as it is capable of use as an antenna when connected to the radio in an automobile.

In one form of the invention, an extensible rod is mounted to slide within a hollow guide staff and is adapted to be projected from the target into extended relation above the same. Means is carried by the target for locking the rod in extended position.

In another form of the invention, the extensible rod comprises the usual fender guide mounted so as to be insulated from the fender as in the prior construction, and then an additional rod is mounted on the staff by means of brackets so as to extend upwardly therefrom above the target.

The rods in both forms of the invention are substantially in alignment with the staff of the guide and form a continuation thereof to enable the operator of an automobile, irrespective of the

position of the bead on the fender, to have a sufficient indication of the position on the edge of the fender when parking and driving in congested traffic.

Other features and advantages of the invention will be apparent from the specification taken in connection with the drawing, in which:

Figure 1 is a view of the fender guide in unextended relation, a portion of the clamp being shown in section.

Fig. 2 is a side view of the fender guide in extended position.

Fig. 3 is a longitudinal section of the target and the mounting means for the rod.

Fig. 4 is a section taken along line 4—4 of Fig. 3.

Fig. 5 is a section taken along lines 5—5 of Fig. 4.

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

Fig. 7 shows another form of the invention in extended position.

Fig. 8 shows a view of this form of the invention in unextended relation.

Fig. 9 shows the device in extended position with the light thrown on the extended staff.

According to the present invention, a hollow guide staff 10, formed of suitable conducting material, is secured in a metal bushing 11 threaded into an insulator 12. The insulator may be strengthened and the looks of the same improved by providing a metal shell 13 extending over the outer surface thereof as shown in Figs. 1 and 2. The insulator is provided with an internal circular rib 14 which will reinforce the insulator and also provide an abutment against which a contact 15 is clamped by the end of the metal bushing. The contact will, therefore, be in electrical connection with the hollow guide staff and is adapted to have connected thereto the lead-in wire 16 for the purpose to be later described.

A metal piece 17 is threaded into the bottom of the insulator and clamps a contact 18 against the annular rib. The metal piece is provided with a ball-like extension 19 which is adapted to rest on the end of the fender-engaging clamp 20 and be locked thereto by nut 21. The inner surfaces of the nut and the end of the clamp form a socket for receiving the ball-like member, whereby the guide can be universally adjusted with respect to the clamp.

The clamp is provided with a clamping plate 22 which is adapted to engage the bead of the fender and be drawn into tight engagement thereby by a draft means 23 carried by the clamp.

The clamp has a wire-receiving channel 24 formed therein whereby the wires, leading from the guide, are protected.

The upper end of the hollow guide rod has positioned thereon a bearing plate 28. The bearing plate 28 is held in rigid engagement with the end of the hollow guide staff by a sleeve 29 having an internal shoulder 30, which, when in position on the shaft, engages the outer surface of the bearing plate and locks it against the end of the guide staff.

The sleeve may be secured to the end of the guide staff in any suitable manner, as by spot welding or by a shrunk fit. The sleeve projects upwardly from the staff and is provided, at its upper end, with external threads 31. The bearing plate is formed with a central bearing opening 33 and a pair of wire-receiving holes 34 to be further described.

A nut 35 is threaded on the sleeve and serves as a lock nut and bearing for the target in a manner to be described.

The target in this form of the invention comprises a lower section 37 and an upper section 38 made of translucent material such as "Tenite," or the like, and is provided with a sealing band 39, which also adds to the ornamentation of the fender guide.

The lower section of the target is provided with a central sleeve 40 adapted to be slipped over the sleeve 29. Surrounding the central sleeve is a contact ring 41, having a projecting part 42 upon which is mounted a pair of spring clips 43. The spring clips have threads rolled therein and are positioned to form a socket for receiving a lamp 44 for illuminating the target. The spring clips engage the shell of the lamp so as to form one contact for the lamp. A second contact ring 45 is positioned on the central sleeve in spaced relation to the first-mentioned contact ring and electrically insulated therefrom. This ring is provided with a projecting element 46 which is extended into engagement with the other contact of the lamp to complete the circuit therefor.

A pair of wires 47 and 48 are adapted to supply the operating circuit for the lamp. The pair of wires are disposed within the hollow staff and pass through the wire-receiving openings 34 in the bearing plate 28 which holds them in relatively fixed position. The wires are then lead through an opening 49 in the central tube and are secured to the rings 41 and 45, respectively, by soldering or otherwise.

The upper section of the target is formed with a depending central sleeve 51 which has internal threads 52, adapted to be threaded on the threads 31 of the sleeve 29 to lock the upper end of the target thereto. The upper section has a split bushing 53 positioned to be in alignment with the bearing opening 33 in the bearing plate. The bushing is tapered and is threaded in a tapered hole in the upper section for a purpose to be described.

An auxiliary rod or extension 56 is mounted to slide in the bushing and the bearing opening 33 in the bearing plate. A resilient bushing 57 is interposed between the rod and the split bushing 53 in order to provide a watertight joint between the two. The rod may be extended above the target to any desired position, and the split bushing then threaded into the upper section. The tapered hole will cause the split end of the bushing to move into clamping relation with the

rod and securely hold the rod in adjusted position.

In order to prevent the rod from being entirely withdrawn from the device, a stop 58 is mounted on the reduced end portion 60 of the rod which is then headed-over to lock it securely thereto. This stop, which is shaped in the manner shown in dotted lines in Fig. 6, serves an additional function in that it provides a bearing surface within the hollow staff for the end of the rod, so that the latter will be substantially rigid and will not vibrate or rattle when in unextended position.

As shown in Fig. 6, the stop is cut out at 59 so that it will not interfere with the wires in the hollow staff when the rod is moved to unextended position.

Positioned at the upper end of the sleeve 29 is a collar 61. The collar may be secured to the sleeve by welding or forced fit, and is provided with a pair of spring elements 62, which form an additional support for the rod to prevent it from unintentionally vibrating in the staff and target. The elements also form an electrical connection between the hollow staff and the rod in the event that the guide is used as an antenna.

In assembling the device, the staff is mounted in the clamping element and the wire 48 is secured to the contact 18 which is in connection with the metal piece 17 which is in electrical connection with the fender through the clamp so as to provide a ground for the circuit. If the device is to serve the purpose of an antenna for the radio, the lead-in wire 16 is secured to the contact 15. After this has been assembled, the extension rod 56 is passed through the bearing plate and the bearing plate is positioned on the end of the staff and the sleeve is positioned thereover and secured to the staff to hold the bearing plate in place. The locking nut 35 is then threaded onto the sleeve to its lowest position. The wires are threaded through the openings in the bearing plate. The lower section of the target, with the lamp in place thereon, is then slipped over the sleeve and the connection made between the contact rings and the wires. The beading or band 39 is then put in place on the lower section and the upper section is then threaded on the sleeve into tight engagement therewith. The lower section is then lifted until the beading 39 seats on the upper section and the nut 35 is screwed up into tight engagement with the lower section to hold the two sections in assembled relation. The nut, therefore, serves both as a bearing for the lower section and a locking means for holding the target in assembled relation.

When the rod 56 is to be adjusted, the split bushing 53 is unscrewed and the rod is manually moved to the desired position. The split bushing is then tightened, and, because of its construction, will grip the rod and hold it in place. While in this form of the invention a split bushing has been used as a locking means, it is to be understood that any form of locking means can be used to hold the rod in extended relation.

In the form of the invention shown in Figs. 7 and 8, the extension rod can be in the form of an addition or auxiliary rod which is adapted to be mounted on existing fender guides. If the device is to be used as an antenna, the connection between the staff and the clamp must necessarily be of the type described in connection with the other form of the invention.

In Fig. 7 is shown a fender guide of the usual construction having an illuminated target thereon comprising a lower section 37' and an upper section 38'. An extensible rod 56', in this form of the invention, is adapted to be mounted in a pair of brackets secured to the staff so as to project therefrom as shown in Fig. 7. The upper bracket 65 is of the split type and the parts are clamped together by a screw 66. The bracket has an opening therein to form a bearing for slidably supporting the rod. The lower bracket 67 is formed as a split clamp secured together by a screw 68, but is adapted to have the lower end of the rod 56' secured thereto. The brackets 65 and 67 are of electrical-conducting material so that the guide may be used as an antenna if desired.

While the brackets have been shown in this form of the invention as being removable brackets or split clamps, it is to be understood that the upper bracket 65 can be made integral with the staff and providing a fixed bearing for slidably receiving the extensible staff while the lower bracket 67 is fixed to the rod and adjustably secured to the staff.

In both forms of the invention, the upper section of the target can be provided with a transparent section 70 which will throw the beam of light upon the extended rod to enable the operator of the automobile to clearly see the part of the rod above the target when the device is used in the dark.

Variations and modifications may be made within the scope of this invention and portions of the improvements may be used without others.

I claim:

1. In an extensible fender guide, a guide staff of conducting material; means for insulatedly clamping one end of the guide staff to a fender edge so as to extend vertically upward therefrom; a target fixed to the other end of the staff; means within the target for the illumination thereof; an auxiliary rod of conducting material; and means for slidably connecting said rod to the staff whereby the rod may be extended above the target, and for retaining the rod in a selected extended position, said means forming an electrical connection between said staff and rod in all positions of extension of the rod, whereby the staff and rod can be also used as an antenna for a radio receiving set and said target-illuminating means also illuminating said auxiliary rod when the latter is in extended position.

2. In an extensible fender guide, a hollow guide staff having a fender-engaging clamp at one end; a target fixed at the other end; means within the target for the illumination thereof; an auxiliary rod mounted to slide in the hollow staff and project through the target for extension above the same; and means carried by the target for locking the rod in a selected adjusted position, said illuminating means also illuminating said auxiliary rod when the latter is in extended position.

3. In an extensible fender guide, a hollow staff having a fender-engaging clamp at one end; a target at the other end and an auxiliary guide rod; means within the target for the illumination thereof; means for slidably mounting the auxiliary guide rod in the hollow staff including a bearing plate mounted adjacent the target in the upper end of the staff; means secured to the end of the rod and adapted to engage the bearing plate upon the rod being fully extended to prevent the rod from being withdrawn from the staff; and

for engaging the walls of the hollow staff for supporting the end of the rod in the staff, said target-illuminating means also illuminating said auxiliary rod when the latter is in extended position.

4. In an extensible fender guide also serving as a radio antenna, a hollow guide staff of conducting material having a fender-engaging clamp at one end, said clamp securing said staff to a fender so as to extend vertically upward and so as to be electrically insulated therefrom; a target at the other end of the staff; means within the target for the illumination thereof; an auxiliary rod slidably mounted in the staff to project above the target; and contact means positioned in the target for completing an electrical circuit between the hollow staff and the rod in all positions of extension of the rod, said target-illuminating means also illuminating said auxiliary rod when the latter is in extended position.

5. In an extensible fender guide, a hollow guide staff having a fender-engaging clamp at one end, said hollow staff being mounted on the clamp so as to be electrically insulated therefrom; a target at the other end of the staff; means for illuminating the target; an auxiliary rod slidably mounted in the staff to project above the target; a pair of spring contacts secured to the hollow guide staff and positioned in the target for completing an electrical circuit between the hollow staff and the rod in all positions of extension of the rod; and a contact on the staff adapted to receive a lead-in wire from a radio whereby the staff and rod can be also used as an antenna, said target-illuminating means also illuminating the auxiliary rod when the latter is in extended position.

6. In an extensible fender guide, a guide staff having a fender-engaging clamp at one end; an illuminated target secured to the other end of the staff; means within the target for the illumination thereof; and an auxiliary rod slidably mounted on the staff for extension above the target, said target being provided with a light-transmitting portion adapted to throw a beam of light on the auxiliary rod to illuminate the same when in extended position.

7. In an extensible fender guide, a hollow guide staff of conducting material having a fender-engaging clamp at one end, said hollow staff being mounted in insulation on the clamp so as to be electrically insulated therefrom; a target at the other end of the staff; an auxiliary rod slidably mounted in the staff to project above the target; contact means positioned in the target for completing an electrical circuit between the hollow staff and the rod in all positions of extension of the rod; and a contact mounted in the insulation in the clamp in electrical contact with the hollow guide staff whereby the staff and rod can be also used as an antenna.

8. In an extensible fender guide, a hollow guide staff having a fender-engaging clamp at one end; a bearing plate positioned at the other end and held in place by a sleeve having an internal shoulder and provided with external threads; a target provided with a central aperture having threads therein to be threaded on the sleeve, said target having a bearing means positioned therein in alignment with the bearing in the bearing plate; an auxiliary rod mounted for sliding movement in the bearing plate to be extended above the target; and means for locking the rod in extended position.

9. In an extensible fender guide, a hollow guide staff having a fender-engaging clamp at one end;

a bearing plate positioned at the other end of the staff and held in place by a sleeve having an internal shoulder and provided with external threads; a locking nut adapted to be threaded on the sleeve; a target comprising two separable members of translucent material, one slidably mounted on the sleeve and the other threaded on the sleeve, the slidable member being provided with electrical contacts, a lamp socket and a lamp, said target having a split bushing threaded therein in alignment with the bearing in the bearing plate; and an auxiliary rod mounted for sliding movement in the bearing plate and split bushing to be extended above the target and locked in place by the split bushing.

10. In an extensible fender guide, a hollow guide staff of conducting material having a fender-engaging clamp mounted at one end thereof and insulated therefrom; a bearing plate positioned at the other end of the staff and held in place by a sleeve having an internal shoulder and provided with external threads; a target adapted to be threaded on the sleeve and provided with a split bushing positioned therein in alignment with the bearing in the plate; an auxiliary rod mounted for sliding movement in the bearing plate and split bushing to be extended above the target and locked in place by the split bushing; and resilient means secured to the sleeve and contacting the auxiliary rod to form an additional bearing surface for the rod and an electrical connection between the rod and the staff.

11. In an extensible fender guide adapted for use as a radio antenna, a guide staff of conducting material having a fender-engaging clamp at one end, said clamp including means for insulating said guide staff from a fender to which it is secured; a target at the other end of the staff; means within the target for the illumination thereof, a bracket secured to the staff and provided with a bearing at its opposite end; a second bracket adjustably mounted on the staff; and a

rod of conducting material secured to the latter bracket and adapted to slide through the bearing in the first-named bracket whereby the rod can be extended above the target and locked in adjusted position, said brackets forming an electrical connection between the rod and the staff, and said target-illuminating means also illuminating the rod when the latter is in extended position.

12. In an extensible fender guide adapted for use as a radio antenna, a guide staff of conducting material having a fender-engaging clamp at one end, said clamp including means for insulating said guide staff from a fender to which it is secured; a target at the other end of the staff; means within the target for the illumination thereof; an auxiliary rod of conducting material; and brackets mounted on the staff for connecting the rod thereto and supporting it in a plurality of adjusted positions so that it extends above the target and also forms an electrical connection between the rod and the staff, said target-illuminating means also illuminating the rod when the latter is in extended position.

13. In an extensible fender guide adapted for use as a radio antenna, a guide staff of conducting material having a fender-engaging clamp at one end, said clamp including means for insulating said guide staff from a fender; a target at the other end of the staff; means within the target for the illumination thereof; an auxiliary rod of conducting material; brackets mounted on the staff for connecting the rod thereto and supporting it in a plurality of adjusted positions so that it extends above the target and also forming an electrical connection between the rod and the staff; and a contact on the staff adapted to be connected to a lead-in wire from a radio so that the staff and rod can form an antenna therefor, said target-illuminating means also illuminating said rod when the latter is in extended position.

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