

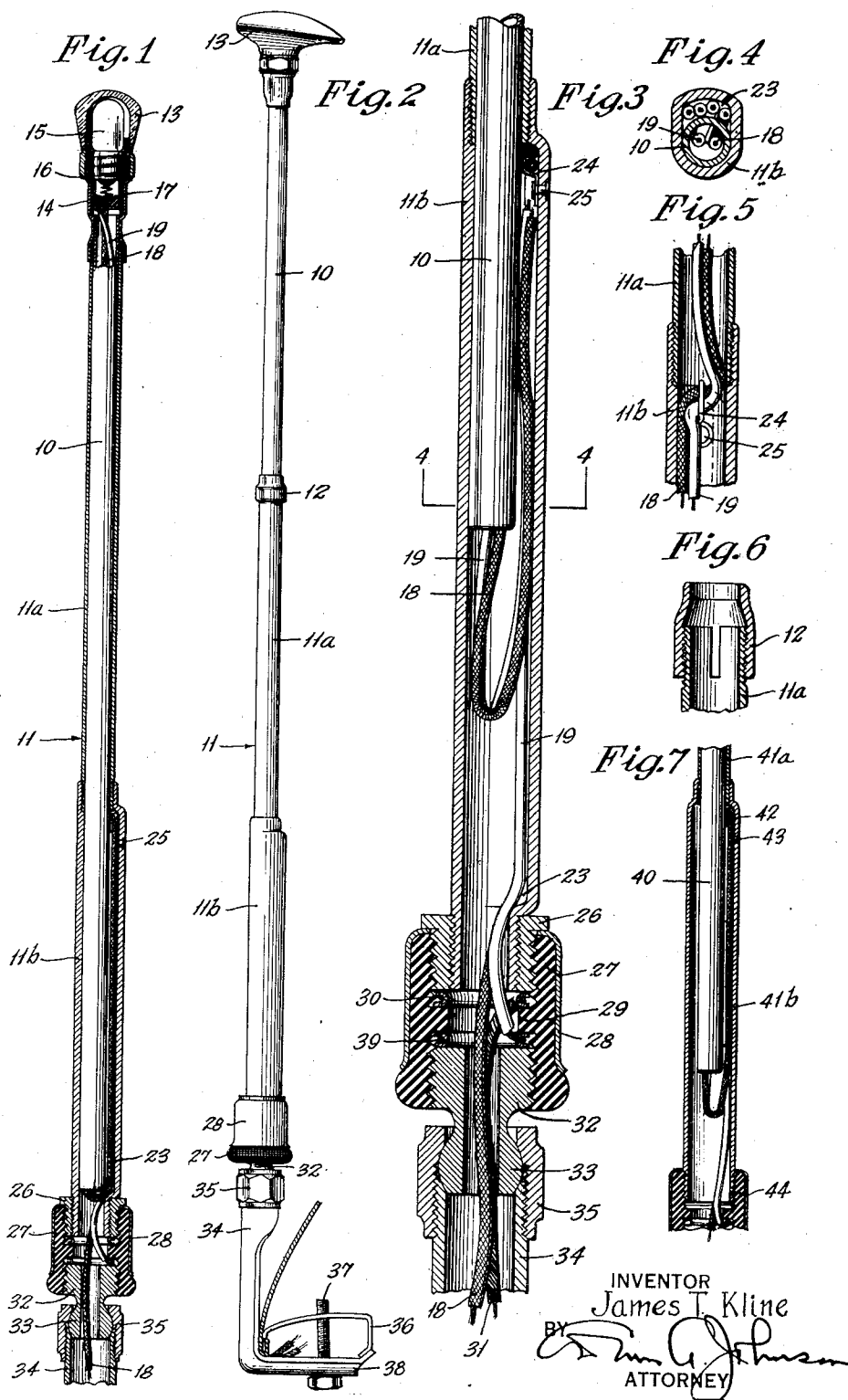
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FENDER GUIDE

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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.

Some of the current fender guides are made in such a manner that they may be extended so as to be adjustable for different heights while other fender guides are made with an illuminated head so that they may be readily seen at night. Difficulty has been encountered, however, in attempting to make an illuminated fender guide which is also extensible due to the fact that the length of wire necessary to permit extension of the guide is excessive and unhandy when the extensible guide is in unextended position.

The fender guide of the present invention, however, permits the target on the extensible fender guide to be illuminated and at the same time is constructed and arranged to prevent undue accumulation of wire in the bottom of the guide when the sections are in unextended position.

A fender guide of the present invention will serve another need of the motorist in forming an aerial to which the radio of the automobile can be connected. In order to carry out this function, the fender guide of the present invention is constructed of conducting material and is insulated from the fender and illuminating circuit for the target so that it can be effectively used as a radio antenna.

According to the present invention, in one form thereof, the guide is made up of two telescoping tubes, the lower tube being provided with means intermediate its ends whereby the wires are secured thereto. Provision is made in the lower or stationary tube, preferably, in the form of a recess extending from the securing means to the bottom thereof, for receiving the wires when the tubes are unextended. By locating the securing means for the wires at a distance from the base equal to approximately one-half of the desired extension, the entire loop of wire will be received in the recess and no wires will be positioned at the bottom of the stationary member when the two members are in unextended position.

When the tubular members are extended, the wires during the first half of the extension will form a short, freely hanging and fully housed loop and during the second half of the extension they will move into the upper part of the stationary member. With this arrangement, bunching of the wires in the bottom is effectively prevented.

In another form of the invention the lower or

stationary member is made with a diameter large enough to receive the wires between it and the movable member. In this case the wires are secured approximately midway between ends of the stationary member and hold the wires in such a position that they cannot bunch or tangle in the bottom of the stationary member when the two members are in unextended relation.

The relatively movable members of the extensible fender guide, according to the present invention, are formed of conducting material and are electrically interconnected. These members are electrically insulated from the clamp and therefore from the fender of the machine and also are electrically insulated from the illuminating means for the target and its source of energy so that they can be used very effectively as an antenna which can be connected to the radio set in the automobile. To facilitate this a contact is connected to the stationary or lower member to which is secured a lead-in wire for the radio set.

From what has been stated above, it will be understood that the device of the present invention provides an illuminated antenna-fender guide that can be extended either to bring the illuminated target to the desired height or to shorten or lengthen the effective length of the antenna.

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 guide in unextended relation, partly in longitudinal section.

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

Fig. 3 is a longitudinal sectional view of the lower stationary member showing the wires partially in position between the telescoping elements.

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

Fig. 5 is a portion of the stationary member showing the wires in extended relation when the guide is fully extended.

Fig. 6 is a sectional view showing the means for locking the elements in extended relation.

Fig. 7 is a sectional view of a modified form of the lower member showing the wires in position when the elements are in partially extended relation.

The device of the present invention relates to an extensible illuminated fender guide. It is obvious that this device can be made of any number of movable elements. However, for the

purpose of illustrating the invention only one movable element is used.

The fender guide of the present invention comprises a movable member 10 in the form of a tube sliding in a stationary member 11, preferably made of conducting material. The stationary member 11 is made up of two sections 11a and 11b which are threaded together as shown in Fig. 1. This member may be made in one piece, if desired, but for convenience in assembly, it is preferred to make it as disclosed in two pieces. The movable member fits closely within the bore of the upper part of the stationary member and slides therein with the upper part forming a bearing therefor. The upper part is made long enough to provide an adequate support for the movable member when the latter is fully extended. The movable member is locked in adjusted or extended position by means of a clamping collar 12 threaded to the split end of the upper part 11a of the stationary member as is clearly seen in Fig. 6. By this means the guide can be adjusted to the desired height above the fender and secured or locked in this adjusted position.

The movable member has secured at the top thereof an illuminated target 13 of the type described in copending application, Serial No. 132,991, filed March 25, 1937. The target is made of translucent material and is mounted on the upper member by means of a metal shell 14, secured to the top of the upper member and may be adjusted so as to face in the proper direction when used on either right or left hand fenders. The target is illuminated by means of a lamp 15 mounted in a lamp socket 16 and positioned within the target as shown in Fig. 1. When the lamp is lit, the target will glow and can be readily seen in the dark. The lamp socket is insulated from the metal shell by means of insulation 17. A pair of wires 18, 19 are positioned in the tubular members to form a circuit whereby current is carried to the illuminating means.

It is essential that the wires for the illuminating means be sufficiently long to enable the movable member to be extended to the limit. This requires that a large amount of wire be used which, when the members are not extended, will bunch or be crowded in the stationary member and cause tangling of the wire and other trouble. According to the present invention, however, the wire is so disposed that it will not bunch or crowd in the bottom of the stationary member when the two are in unextended relation.

In obtaining this result, the lower part of the stationary member is provided with a recess 23 formed in one wall thereof which is wide enough to accommodate all of the wires carried by the extensible members and is long enough to extend beyond the end of the movable member when in unextended relation. This recess may be formed by providing the lower member with a channel in one wall thereof or by projecting a streamlined section from one side thereof, as shown in Fig. 2. The recess extends vertically along the inner surface of the lower part from a position adjacent the joint between the two parts 11a and 11b of the stationary member to a point adjacent the bottom of the lower stationary member. At the top of the recess a clamping means is provided whereby the wires are clamped in the recess at that point so that the free wire extending to the illuminating means moves about this point. This clamp in the form shown comprises a metal clip 24 secured to the lower member by a rivet 25.

With this arrangement, it will be seen that the only wire necessary to be moved by the extension of the guide is that which projects from the bottom of the movable member and extends to the clamp. The length of this part of the wire must be at least equal to one-half of the movement of the extensible member. Preferably, it should be equal to one-half of the movement of the extensible member. It will be seen that for an extension of eight inches, for example, the wire need be only four inches long since during the first four inches of movement it will be formed into a loop in the base and during the last four inches of movement it will travel into the upper part of the stationary member and be disposed about the clip in the manner shown in Fig. 5. When it is unextended, however, the wires will be entirely positioned, in an orderly manner, in the recess and so that they cannot tangle or bunch.

The lower part 11b of the stationary member is provided with an end portion adapted to be threaded into a metal bushing 26, screwed into an insulator 27 in a manner disclosed in said copending application above referred to. The insulator may be strengthened and the looks of the same improved by providing a metal shell 28 extending over the outer surface as shown in Fig. 3. The insulator is also provided with an internal circular rib 29 which will reinforce it and provide an abutment against which a contact 30 is clamped by the end of the metal bushing 26 in such a manner as to make an electrical connection with the tubular members. The contact is adapted to receive a wire 31 for purposes later to be described.

The other end of the insulator has a metal piece 32 threaded therein. The lower portion of this metal piece is provided with a ball-like projection 33 which is adapted to be positioned on the end of a fender clamp 34 and locked thereto by a nut 35. The inner surfaces of the nut and end of the clamp form a socket for receiving the ball-like member whereby the guide can be universally adjusted. The fender clamp 34 is provided with a fender clamp plate 36 adapted to engage the bead of the fender and be drawn into a clamping relation by a draft means 37. The fender clamp 34 is provided as shown at 38 with a channel through which the wires 31 and 18 may be carried from the fender guide.

Clamped between the insulating rib 29 and the end of the metal piece 32 is a contact 39 forming a ground contact to which wire 19 of the illuminating circuit is connected and grounded.

From the above description, it will be noted that the extensible members of the fender guide are completely insulated from the fender clamping means and are also completely insulated from the illuminating means and the circuit therefor.

As noted above the extensible members are preferably made of conducting material and the clamping element 12 locks the two in good electrical contact and forms an effective and efficient aerial which can be adjustable to the desired height for best reception and can be connected by means of the lead-in wire 31 to the automobile radio without marring the lines of the automobile by having an element projecting from the roof thereof. The device can be used as an antenna at the same time that it is in use as an illuminated fender guide. It therefore serves a dual purpose of providing an extensible illuminated fender guide and an antenna for the radio.

Another form of the invention is shown in Fig. 7 wherein the upper part 41a is threaded into the lower part 41b. The lower part of the stationary member is formed of a diameter larger than that of a movable tubular member 40 received thereby. Adjacent the upper end of the lower part, a clamp 42 is provided and is secured thereto by a rivet 43 to hold the wires securely at this point. As shown in Fig. 7, when the movable member is in unextended position the wires will lay between the two members and will not bunch up in the bottom of the stationary member. The upper section 41a will form an adequate bearing for the movable member. The lower part of the member 41b is threaded to an insulator 44 and mounted on the fender in the manner previously described.

The device of the present invention, therefore, will serve a dual function according to the desire of the operator of the automobile.

If it is essential that the target be positioned relatively low, it can be so adjusted as to height to meet this requirement. On the other hand, should it be desired to increase the length of the guide to raise the target it can be accomplished by a simple adjustment. When the operator desires to use the device as an antenna he can adjust it for proper height for the best reception. In this case the target will be automatically positioned at that height to which it is necessary to extend the antenna. The single device, therefore, can be arranged so as to serve the two needs of the operator at the same time or singly.

While the preferred forms of the invention have been described as being applied to extensible fender guides formed by tubular members, it is to be understood the invention is not limited to fender guides but is applicable to any form of extensible illuminated means and that the extensible members can be of any shape so long as a recess is provided in one of them to receive the wire, which is held intermediate the ends of said member.

Further, if it is not desired to use the device as an antenna, the insulator and the structure included therein can be dispensed with so that the whole conducting tubular member is grounded to the fender. In this case the grounding connection for the lamp circuit can be made at the clamp in the lower member.

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. An extensible illuminated fender guide, comprising a plurality of telescoping elements; illuminated signal means mounted on one of said elements; means for securing another of the elements to a fender; wires mounted in the telescoping elements for conducting current to the illuminated signal means; and means mounted intermediate the ends of one of said elements for securing the wires thereto, said element being formed with a diameter such that the wires are positioned between the telescoping elements when said elements are in telescoping relation.

2. An extensible illuminated fender guide, comprising a plurality of telescoping elements of conducting material; illuminated signal means mounted on one of said elements and electrically insulated therefrom; means for securing another of the elements to a fender, said means including an insulating means whereby said element is insulated from the fender; wires mounted

in and insulated from the telescoping elements for conducting current to the illuminated signal means; means mounted intermediate the ends of one of said elements for securing the wires thereto, but insulated therefrom, said element being constructed and arranged so that the wires are positioned between the telescoping elements when said elements are in telescoping relation; and means secured to one of said telescoping elements whereby said elements can be connected to a radio to serve as an antenna for the same.

3. In an extensible illuminated fender guide, a plurality of telescoping elements; illuminated signal means mounted on one of said elements; means for securing another of the elements to a fender; wires mounted in the telescoping elements for conducting current to the illuminated signal means; and means mounted intermediate the ends of one of said elements for securing the wires thereto, the loop of wire extending between said securing means, and the base of the adjacent telescoping element being of a length not less than one-half of the movement of the telescoping elements, said element being constructed and arranged so that the wires are positioned between the telescoping elements when said elements are in telescoping relation.

4. An extensible illuminated fender guide, comprising a plurality of telescoping elements of conducting material; illuminated signal means mounted on one of said elements and electrically insulated therefrom; means for securing another of the elements to a fender, said means including an insulating means whereby said element is insulated from the fender; wires mounted in and insulated from the telescoping elements for conducting current to the illuminated signal means; means mounted intermediate the ends of one of said elements for securing the wires thereto, but insulated therefrom, said element being constructed and arranged so that the wires are positioned between the telescoping elements when said elements are in telescoping relation; and means secured to one of said telescoping elements whereby said elements can be connected to a radio to serve as an antenna for the same, the securing means being provided with a channel whereby the wires can be carried from the guide.

5. An extensible illuminated fender guide, comprising a plurality of extensible elements snugly fitting one within the other; illuminated signal means mounted on one of said elements; means for securing another of the elements to a fender; flexible conducting means mounted in the extensible elements for conducting current to the illuminated signal means; and means mounted intermediate the ends of one of said elements for securing the conducting means thereto, said element having a hollow projection on one side thereof to receive the conducting means when the extensible elements are in unextended relation.

6. An extensible illuminated fender guide, comprising a plurality of extensible elements; illuminated signal means mounted on one of said elements; means for securing another of the elements to a fender; wires mounted in said extensible elements for conducting current to the illuminated signal means; and means mounted intermediate the ends of one of said elements for securing the wires thereto, said element having a recess formed along one wall thereof, extending from the securing means to the end of the element for receiving the wires when said elements are in unextended relation.

7. An extensible illuminated fender guide, comprising a plurality of telescoping elements; illuminated signal means mounted on one of said elements; means for securing another of the elements to a fender; flexible conducting means mounted in the extensible elements for conducting current to the illuminated signal means; means for anchoring the flexible conducting means to the element secured to the fender at a point remote from the securing means, with the element being formed with a diameter such that the flexible conducting means are positioned between the telescoping elements when said elements are in telescoping relation.
8. An extensible illuminated device, comprising a plurality of telescoping extensible elements; illuminated means mounted on one of said elements; means for supporting another of the elements; flexible conducting means mounted in the extensible elements for conducting current to the illuminated means; and means mounted intermediate the ends of one of said elements for fixing the flexible conducting means thereto, said elements positioning the flexible conducting means therebetween when said elements are in unextended relation, and said fixing means holding at least a portion of said conducting means against movement when the extensible elements are moved to said unextended position.

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