March 26, 1929. F. A. GOODYKOONTZ 1,706,447

RADIATOR PROTECTOR

Filed Sept. 21, 1928

Fig. 1

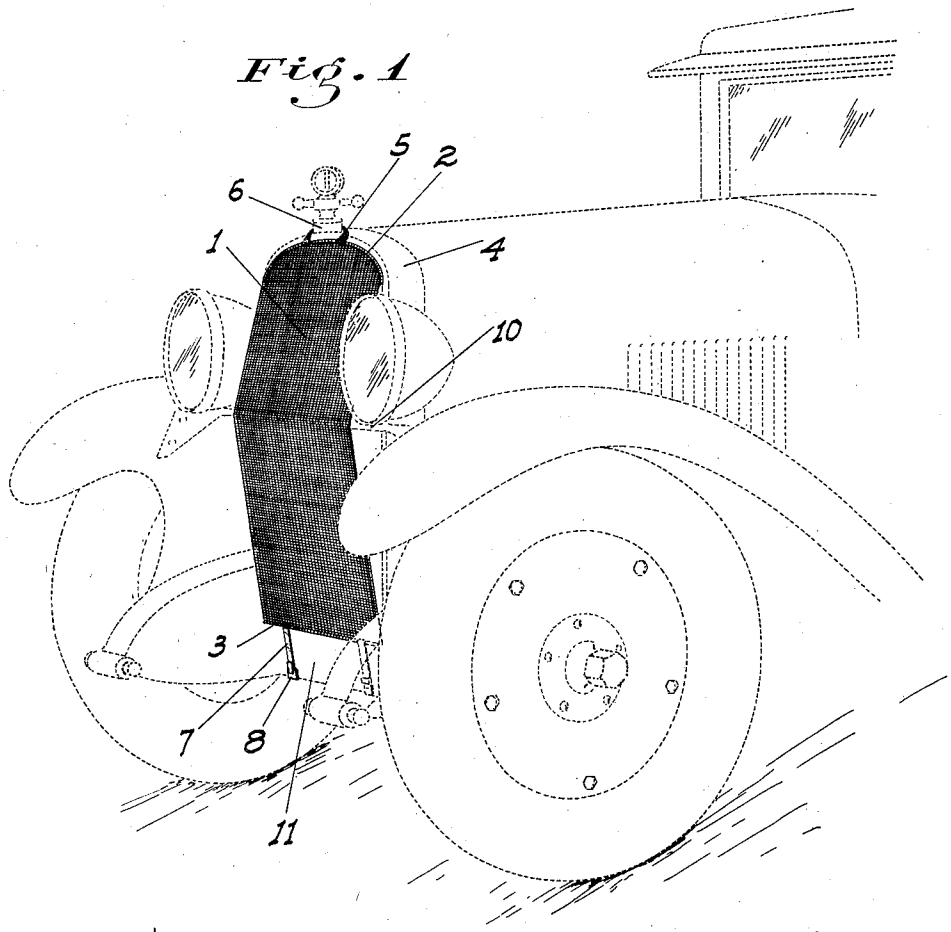


Fig. 2

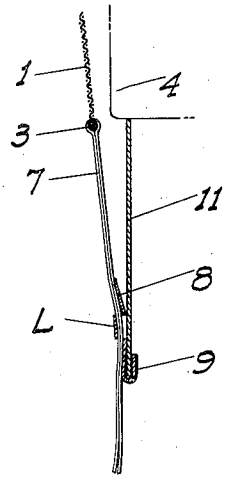
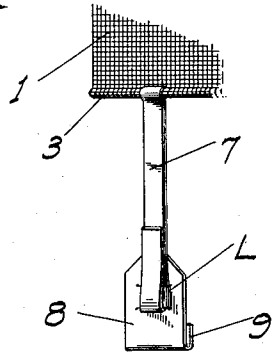


Fig. 3



INVENTOR

F. A. Goodykoontz

BY

ATTORNEY

Patented Mar. 26, 1929. 1,706,447

UNITED STATES PATENT OFFICE.

FRANK A. GOODYKOONTZ, OF TRACY, CALIFORNIA, ASSIGNOR OF ONE-HALF TO J. H. BATES, OF TRACY, CALIFORNIA.

RADIATOR PROTECTOR.

Application filed September 21, 1928. Serial No. 307,390.

This invention relates to accessories and attachments for motor vehicles. My principal object is to provide a device for catching insects of all kinds which are approaching the radiator with the forward movement of the vehicle and which would otherwise be caught by the radiator, so that the latter will be protected and kept in a clean and open condition.

At certain seasons of the year all manner of insects are flying in the air and the rapid forward movement of the motor vehicle causes large numbers of such insects to be caught by the radiator. Not only in an accumulation of such insects on a radiator unsightly and hard to remove, but they seriously choke up the air openings and of course retard the free passage of air to the radiator. This of course interferes with the cooling efficiency of the radiator, and the circulating water becomes overheated and this in turn sets up a train of evils in the engine destroying the proper efficiency thereof and possibly causing severe damage.

A further object is to provide a device for the purpose which is adapted to be put out as an attachment which is easily and quickly applied to a motor vehicle and if made in a few different stock sizes will be readily adaptable to fit practically all cars.

A further object of the invention is to produce a simple and inexpensive device and yet one which will be exceedingly effective for the purpose for which it is designed.

These objects I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claims.

In the drawings similar characters of reference indicate corresponding parts in the several views.

Fig. 1 is a perspective outline of the front portion of an automobile showing my improved radiator proctector as applied thereto.

Fig. 2 is a fragmentary side view of the lower end of the attachment, showing one of the lower catches engaged with the mud apron.

Fig. 3 is a fragmentary perspective view of the lower end of the attachment showing the catch or fastening means before being applied.

Referring now more particularly to the characters of reference on the drawings, the radiator protector attachment comprises a substantially rectangular screen 1 of suitable mesh and substantially the size of the radiator to be protected. This screen is reinforced at the top and bottom against deflection by stiff rods 2 and 3 respectively, the former being preferably shaped to conform substantially to the curvature of the radiator shell 4 at the top. A loop 5 is connected to the rod 2 centrally thereof, being adapted to detachably embrace the upper end of the filler tube 6 of the radiator.

At its lower end flexible but preferably non-resilient straps 7 depend from the rod 3 at transversely spaced points. These straps are slidable through loops L formed in rigid plates 8 whose lower ends are bent inwardly and forwardly to form transverse narrow channels or flat hooks 9.

When applying and adjusting the device to any motor vehicle, the loop 5 is first engaged with the filler tube 6, the screen extending in front of the usual cross bar 10 disposed intermediate the top and bottom of the radiator a short distance ahead of the same, and which braces the fenders and headlights. The plates 8 are then engaged with the cross member 11 of the front mud guard or apron below the radiator. The straps 7 are then drawn as taut as possible by pulling up on the lower portions below the loops L.

The channels are then pinched together by pliers or the like to frictionally clamp them to the apron and the bend of the straps if necessary is flattened out to prevent any tendency for the straps to pull through the loops L; any excessive length of the straps then extending above the bend being cut off.

The screen is thus in position to catch all insects and bugs which would otherwise be caught by the radiator. At the same time the screen is held in sufficiently spaced relation with the radiator so as not to interfere with the proper passage of air thereto from the sides, even if a considerable portion of the area of the screen should be choked up with the insects.

The adjustable mounting of the apron engaging plates 8 enables a single size of the device to be mounted on various makes of cars in which the height from the top of the radiator to the bottom of the apron differs somewhat.

From the foregoing description it will be readily seen that I have produced such a device as substantially fulfills the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claims.

Having thus described my invention what I claim as new and useful and desire to secure by Letters Patent is:

1. A radiator protector comprising a screen sheet to be placed in front of the radiator, a loop projecting from the top of the sheet to engage the top of the filler tube of the radiator, and means depending from the lower end of the sheet for engagement with the mud apron of the vehicle below the radiator.

2. A radiator protector comprising a screen sheet to be placed in front of the radiator, means for supporting the top of the sheet from the top of the filler tube of the radiator, straps depending from the bottom of the sheet, and hook members for engagement with the lower edge of the mud apron of the vehicle below the radiator, supported by the straps.

3. A structure as in claim 2, in which said members are adjustably slidable on the straps, whereby to enable the distance from the bottom of the sheet to the members to be altered at will.

4. A radiator protector comprising a screen sheet to be placed in front of the radiator, means for supporting the top of the sheet from the top of the filler tube of the radiator, flexible straps depending from the bottom of the sheet, channel plates for engagement with the lower edge of the mud apron of the vehicle below the radiator, and loops formed with the plates and through which the straps are slidable.

In testimony whereof I affix my signature.

FRANK A. GOODYKOONTZ.