

J. H. BLOODGOOD.
 DEVICE FOR PROTECTING THE IGNITION SYSTEM OF AUTOMOBILES.
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1,381,394.

Patented June 14, 1921.

Fig. 1.

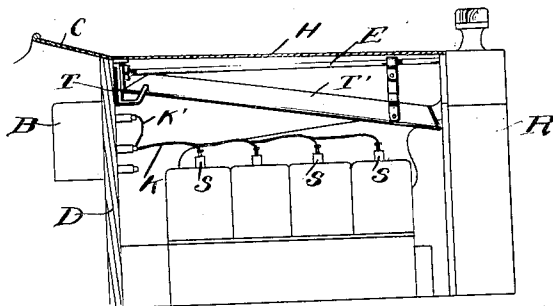


Fig. 3.

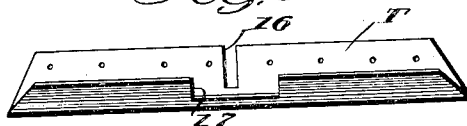


Fig. 2.

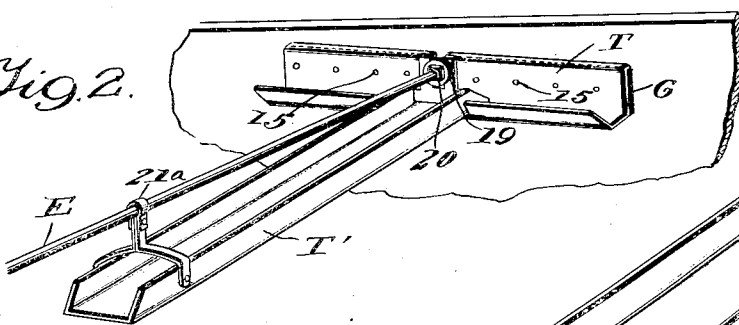
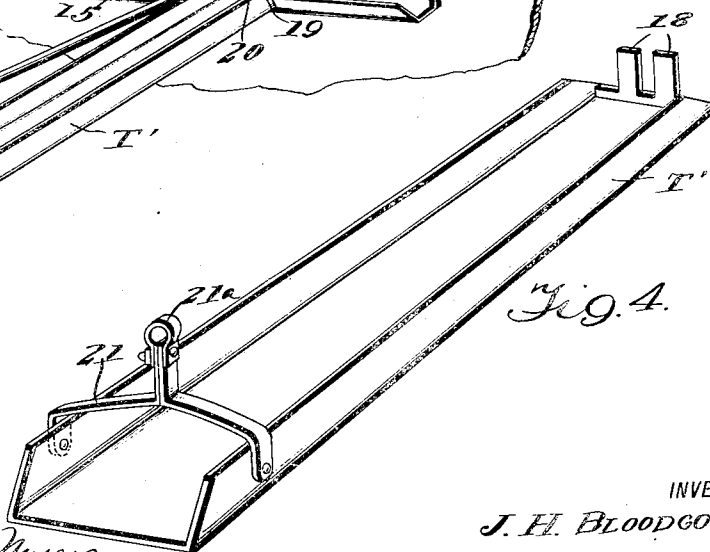


Fig. 4.



WITNESSES

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DEVICE FOR PROTECTING THE IGNITION SYSTEM OF AUTOMOBILES.

1,381,394.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JAMES HENRY BLOODGOOD, a citizen of the United States, and a resident of Portsmouth, in the county of Norfolk and State of Virginia, have invented certain new and useful Improvements in Devices for Protecting the Ignition System of Automobiles, of which the following is a specification.

My invention relates to a device for protecting the ignition system within the hood of an automobile from the destructive action of the elements.

Engine hoods for automobiles, and particularly those used in Ford cars, are formed of hinged sections. The point at which these sections are hinged is generally at the top of the hood so that during stormy weather the rain percolates through the openings at the hinged joint and thus drops on to the parts leading to the spark plugs. This obviously results in the permanent destruction of the insulation and short circuiting of the spark plugs. In many forms of automobiles and particularly in Ford cars, an opening is also provided at the juncture of the cowl and hood, through which the water invariably passes, falling on to the conducting wires extending from the coil box so that their insulation is also ultimately destroyed. It is a purpose of my invention to overcome those objections by providing a protecting device which, without modifying the construction of the hood and cowl, protects the water from contacting with the conducting wires and thus preserves their insulation and eliminates short circuiting.

In carrying out my invention I provide two troughs, one of which is secured to the inner side of the dash board at a point above the conducting wires so as to catch the water from the openings between the cowl and hood and to direct the same to one side of the wires; the other trough is arranged above the spark plugs of the engine so as to catch the water which seeps through the joint between the hood sections and to deflect the same out of the path of the conducting wires. The second trough can be made integral or separate with the first trough, in either case, however, the outer end of the second trough is supported in proper position by a suitable bracket which is connected to the rest rod of the radiator.

I will describe one form of protecting device embodying my invention and will then

point out the novel features thereof in claims.

In the accompanying drawings:

Figure 1 is a view showing in side elevation and partly in section a portion of an automobile having applied thereto one form of protecting device embodying my invention;

Fig. 2 is a perspective view of the device shown in Fig. 1;

Fig. 3 is a detail view of one of the troughs; and

Fig. 4 is an enlarged detail perspective view of the other trough.

Similar reference characters refer to similar parts in each of the several views.

Referring specifically to the drawings and particularly to Fig. 1, I have here shown a conventional form of automobile hood and the adjacent parts which are necessary to a clear understanding of the invention. H designates the hood which is supported between the radiator R and the dash board D. C designates the cowl which at its juncture with the hood H provides the opening hereinbefore referred to. The dash board D carries the usual coil box B, and such dash board forms a rigid support for the radiator R through the medium of the rest rod E. The spark plugs are designated at S, and current is supplied to the same from the coil box B through conducting wires K. The conducting wires K are connected to the terminals of the coil within the box B for a purpose which will be understood.

T designates the trough which is adapted to be secured to the inner side of the dash board D and above the terminals of the coil box B. In the present instance I provide a rubber backing G, which, as shown in Fig. 2, is arranged upon the rear side of the trough and is secured to the dash board by means of suitable members 15 such as nails or the like, which are driven through the rear wall of the trough and through the backing G, thus securely retaining the elements upon the dash board. In the applied position of the trough T, it is preferably inclined in one direction or the other, as shown in Fig. 2, to effect the proper drainage, as will be understood. As shown in Fig. 3 the inner side of the trough T is formed centrally thereof with a vertically extending slot 16, which is provided to accommodate the rear end of the rest rod E. The forward side of the trough T is flared

outwardly, as shown in Figs. 1 and 2 and is recessed medially thereof as at 17 to accommodate the rear end of the trough T'. The rear end of the trough T' is provided with a pair of upstanding lugs 18 which are spaced to receive the rear end of the rest rod E, and against which the usual washer 19 and nut 20 bear for locking the troughs T and T' together. The forward end of the trough T' is provided with a bracket 21 which spans the trough and has its upper end formed with a sleeve 21^a to receive the rest rod E. This bracket 21 supports the forward end of the trough T in elevated position above the conductors K, and because of its length and width, it effectively prevents water from dropping on the conductors K. The sleeve 21^a is preferably detachably associated with the bracket 21 so as to permit the ready application of the same to the rest rod. As shown to advantage in Fig. 1, the trough T' is inclined downwardly from its rear end to its forward end so that the water will be fed to and dispensed from the forward end of the trough.

It will be manifest from the arrangement of the troughs shown in Fig. 1 that the trough T protects the conductors K' and those portions of the conductor K adjacent the coil box B, while the trough T' protects the conductors K and particularly at the points at which they are connected to the spark plugs S so that corrosion at the spark plug terminals is prevented.

Although I have herein shown and described only one form of protecting device embodying my invention it will be understood that various changes and modifica-

tions may be made without departing from the spirit of the invention and spirit and scope of the appended claims.

I claim:

1. A device of the character described comprising, a trough having its vertical walls formed with recesses, a second trough arranged at right angles with respect to the first trough with one end resting on the first trough and extending through one of the recesses, lugs formed on the trough engaging end of the second trough at opposite sides of the other of said recesses, and a bracket secured to the second trough and adapted to be connected to a rest rod which extends between the lugs and through the corresponding recess.

2. In combination, a dash board, a rest rod including a washer and a nut, a trough secured to the inner side of the dash board and arranged on an incline, said trough having its vertical walls formed with recesses at corresponding points one of which receives the rest rod, a second trough extending longitudinally below the rest rod and arranged at an incline with respect thereto, the rear end of the second trough resting on the first trough and extending through one of the recesses, lugs formed on the rear end of the second trough and receiving the rest rod therebetween and engageable by the washer and nut for securing the second trough to the first trough, and a bracket detachably secured to the rest rod and connected to the second trough at its forward end.

JAMES HENRY BLOODGOOD.