

Sept. 13, 1932.

J. R. HOLMES

1,876,679

HOOD HANDLE AND CARBURETOR AIR INTAKE

Filed April 10, 1928

2 Sheets-Sheet 1

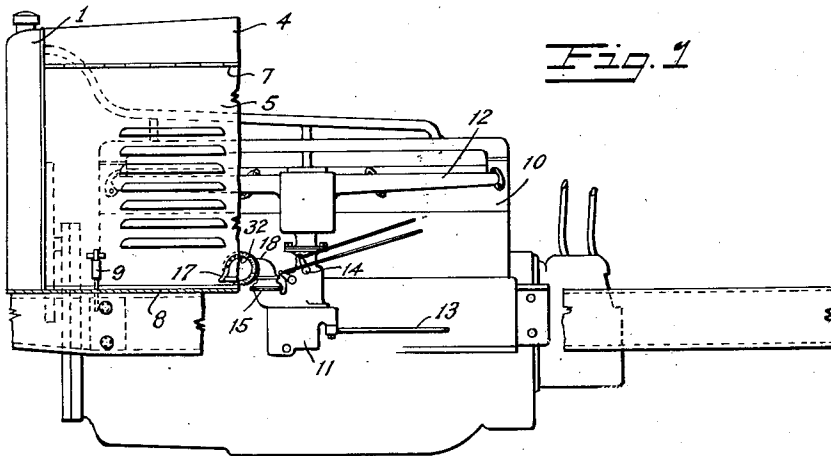


Fig. 1

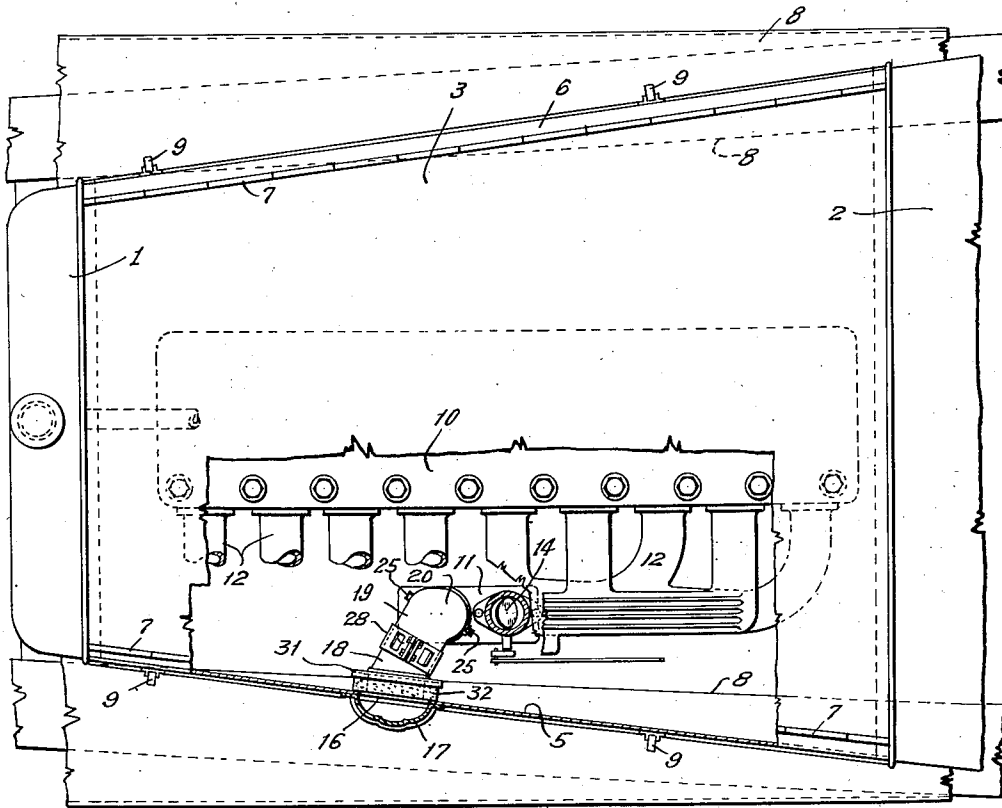


Fig. 2

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Fig. 3

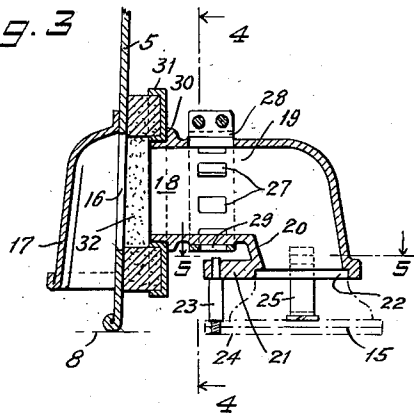


Fig. 4

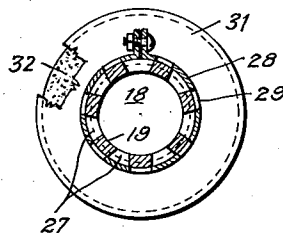


Fig. 5

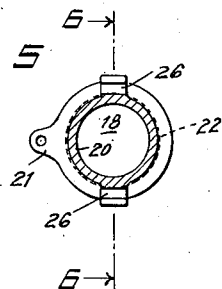
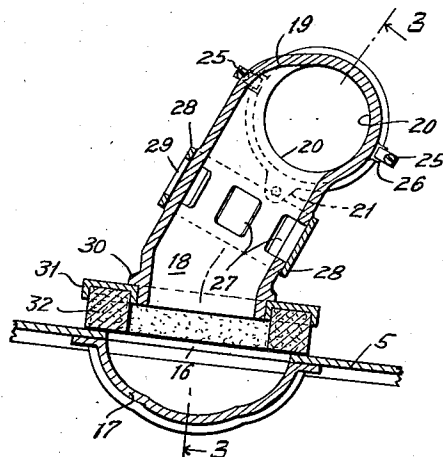


Fig. 7

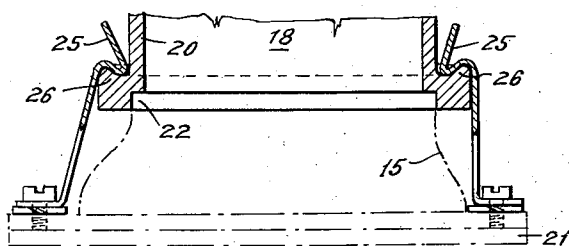


Fig. 6

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UNITED STATES PATENT OFFICE

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HOOD HANDLE AND CARBURETOR AIR INTAKE

Application filed April 10, 1928. Serial No. 268,841.

The invention relates in general to automobiles having internal combustion engines, and more particularly to a new system of carburetion therefor.

5 With internal combustion engines it is desirable to take the air which is supplied to the carburetor from a point which is reasonably cool and of substantially even temperature. In case the engine is placed under a
10 hood, as in the case of an automobile or in any other more or less closed chamber, it is desirable that the air for the carburetor be taken from a point outside the hood or chamber. Taking the air from outside the hood
15 results in increased volumetric efficiency, a cooler motor and more even running conditions.

According to the invention, the problem of taking the air from outside the hood is solved
20 in a simple and efficient manner. According to one way of practicing the invention a conduit is provided leading from the carburetor to an opening in the side of the hood. The opening in the hood is hidden and protected
25 by a canopy which may also serve as a hood handle for raising and lowering the hood. The construction is such that it does not detract from the appearance of the car, nor does it interfere with the ease of raising and lowering the hood.
30

The invention also consists in certain new and original features of construction and combinations of parts hereinafter set forth and claimed.

35 Although the novel features which are believed to be characteristic of this invention will be particularly pointed out in the claims appended hereto, the invention itself, as to its objects and advantages, the mode of its operation and the manner of its organization may be better understood by referring to the following description taken in connection with the accompanying drawings forming a part thereof, in which
40

45 Fig. 1 is a side elevation of a portion of an automobile with parts broken away to illustrate the invention;

Fig. 2 is a top plan view of an automobile with parts broken away;

50 Fig. 3 is a detail of the air intake for the

carburetor taken on the line 3—3 of Fig. 7;

Fig. 4 is a section on the line 4—4 of Fig. 3;

Fig. 5 is a section on the line 5—5 of Fig. 3;

Fig. 6 is a section on the line 6—6 of Fig. 5;

and

Fig. 7 is a horizontal section through the air intake conduit and hood handle.

In the following description and in the claims parts will be identified by specific names for convenience, but they are intended to be as generic in their application to similar parts as the art will permit.

Like reference characters denote like parts in the several figures of the drawings.

Referring now to the drawings, so much of an automobile is shown as is necessary for an understanding of the invention. Although a particular type of automobile is shown, it will be understood that the invention may be used on any type of automobile, or in fact in any place where an internal combustion engine is located within a compartment or chamber.

The automobile comprises the usual radiator 1 and cowl 2 between which extends the hood 3. The hood comprises a top section 4 and side sections 5 and 6 hingedly connected to the top section by hinges 7. Suitable sills 8 extend between the lower portion of the radiator and cowl and suitable hood latches 9 are provided for holding the hood in closed position, as is well understood. The internal combustion engine 10 is equipped with a carburetor 11 and suitable intake and exhaust manifolds denoted generally by 12.

The carburetor may be of any construction, and in the form shown has a gasoline inlet 13, a throttle 14 for controlling the admission of the mixed air and vaporized gasoline, and an air intake 15 opening upwardly.

The side section 5 of the hood is provided with an opening 16 near the lower edge thereof over which is provided a hood handle 17 in the form of a canopy, hiding the opening, the hood handle being for the purpose of raising the hood. A suitable conduit 18 is provided connecting the opening with the carburetor.

The conduit 18 comprises a pipe in the form of an elbow having a transverse portion 19

and a vertical portion 20. The vertical portion has a lug 21 provided with a hole and a recess 22 fitting over the air intake 15 to the carburetor. A stud 23 is threaded into the flange 24 of the carburetor 11 and extends into the opening in the lug 21. The flange of the carburetor is provided with a pair of spring clips 25 which detachably engage over a pair of lips 26 on the conduit. Thus it will be seen that by means of the spring clips 25 and the stud 23, the conduit is held securely to the carburetor but easily detachable therefrom, when desired.

The transverse portion 19 of the conduit is provided with a plurality of openings 27 over which is disposed a valve band 28 having openings 29 which may be rotated on the conduit to place the openings 29 in the band in register or out of register with the openings in the conduit. This band is for the purpose of optionally entirely closing the conduit so that all the air must be taken from outside the hood, or of allowing part of the air to be taken from within the hood.

The outer end of the transverse position 19 is provided with a flange 30 forming a seat, on which is located a channeled ring 31. The channeled ring 31 holds a relatively large and soft washer 32 of felt, cork or other soft material which is glued or otherwise secured thereto. The washer 32 is adapted to fit tightly against the hood section 5 around the opening 16 when the section is latched down in position.

Thus it will be seen that an air inlet construction for the carburetor is provided which takes air from outside the hood. The point from which the air is taken is protected from road dirt and rain and the arrangement does not detract from the appearance of the automobile in any way. In fact the shape of the hood handle is such that it may be made to enhance the beauty of the hood. Furthermore, the arrangement is such that it does not interfere with the freedom of raising or lowering the hood section to make inspections or repairs. It increases the volumetric efficiency of the motor and keeps it cooler. It furthermore causes better and more uniform carburetion since the temperature from summer to winter at the position outside the hood does not vary as greatly as under the hood. Furthermore, in very hot weather the air outside the hood is much cooler than that under the hood and consequently the performance of the engine is improved very materially.

While certain novel features of the invention have been shown and described and are pointed out in the annexed claims, it will be understood that various omissions, substitutions and changes in the forms and details of the device illustrated and in its operation may be made by those skilled in the art with-

out departing from the spirit of the invention.

What is claimed is:

1. A vehicle having in combination, an internal combustion engine provided with fuel feeding mechanism including an air intake member, means for inclosing said engine and intake member including a hood having a movable section provided with an opening therein, means for collecting air flowing through said opening and conducting the same to said intake member, and a member carried by the hood for concealing said opening and forming a handle for manipulating said movable section.

2. A vehicle having in combination, an internal combustion engine provided with fuel feeding mechanism including an air intake member, means inclosing said engine and intake member including a hood having a movable section provided with an opening therein, means for collecting air flowing through said opening and conducting the same to said intake member, said means including a conduit having one end communicating with the air intake member and the opposite end communicating with said opening for receiving the air passing therethrough, means forming a seal between the last mentioned end of the conduit and opening, said sealing means being free from connection with the movable section of the hood so as not to interfere with moving the latter, and means projecting outwardly from the movable section adapted to conceal said opening and form a handle for said movable section.

In testimony whereof I have hereunto set my hand.

JOHN RALPH HOLMES.