

March 10, 1936.

E. J. HANSON ET AL

2,033,376

RADIATOR GRILLE

Filed Feb. 15, 1932

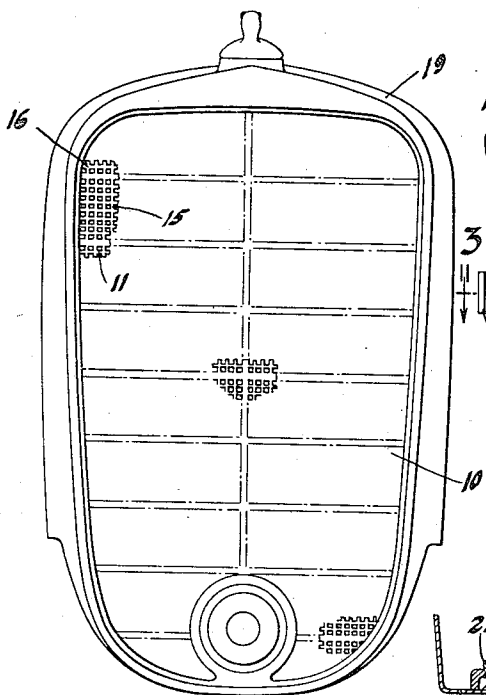


Fig. 1

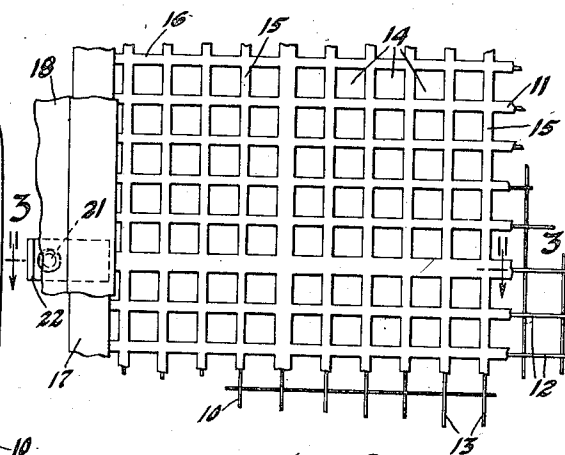


Fig. 2

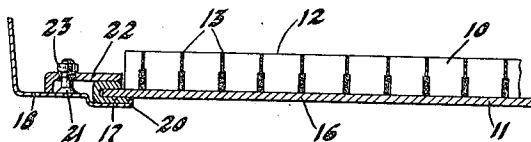


Fig. 3

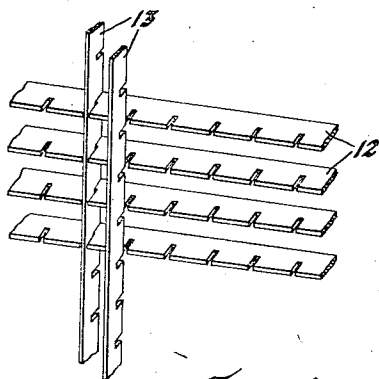


Fig. 4

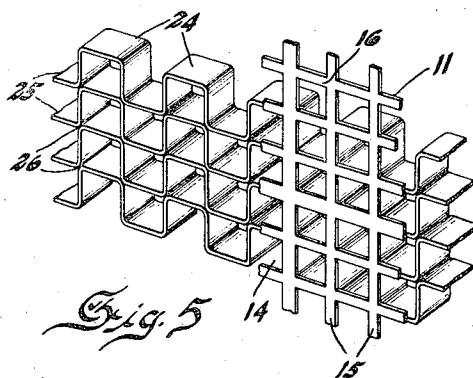


Fig. 5

Inventors
Elmer J. Hanson
& John T. Hickman
By Blackmore, Spencer & Hunt

Attorneys

UNITED STATES PATENT OFFICE

2,033,376

RADIATOR GRILLE

Elmer J. Hanson and John G. Hickman, Detroit, Mich., assignors to Ternstedt Manufacturing Company, Detroit, Mich., a corporation of Michigan

Application February 15, 1932, Serial No. 592,961

8 Claims. (Cl. 293—54)

This invention relates to a grille which is adapted to be positioned in advance of the core of the radiator, and if they are provided, the radiator shutters of an automotive vehicle to conceal the core and/or the shutters and generally to improve the appearance of the front end of the vehicle. Our invention resides particularly in providing a radiator grille of pleasing appearance which is so constructed and arranged that it will not unduly obstruct the passage of air to the core of the radiator in front of which it is installed and yet will be sufficiently strong and rigid that it will not vibrate or rattle and will afford a measure of protection to the radiator core and/or the radiator shutters.

For a better understanding of the nature and objects of our invention, reference is made to the following specification, in which are described the preferred embodiments of our invention which are illustrated in the accompanying drawing:

In the accompanying drawing:

Figure 1 is a front elevation of our grille installed on the radiator of an automotive vehicle.

Figure 2 is an enlarged fragmentary front elevation of the installation shown in Figure 1.

Figure 3 is a section taken on the line 3—3 of Figure 2.

Figure 4 is a fragmentary perspective view of elements from which the body of our grille is formed.

Figure 5 is a fragmentary perspective view of a modified form of grille.

The grille illustrated in Figures 1 to 4 consists of a body 10 and a face 11. The body 10 is of what may be termed "egg-crate separator" construction, i. e., it consists of two angularly disposed sets 12 and 13 of relatively thin notched metal strips which are interfitted as illustrated in Figure 4 to form a multi-cellular element. The face 11 of the grille consists of a lattice-like element formed from a single sheet of relatively heavy metal by punching openings 14 therein so as to provide two angularly disposed sets 15 and 16 of separating bars whose center-to-center spacing is equal to that of the corresponding strips 12 and 13 of the body 10 so that when the face is superposed upon the body the bars of the former will register with and conceal the strips of the latter. As illustrated in the drawing, some of the bars 15 and 16 may be made wider than others to strengthen the face and to improve the appearance of the grille.

After the body and face are formed, the grille is completed by superposing the latter upon the

former so that the bars of the latter register with and conceal the strips of the former and soldering the strips to the bars with which they register so as to form a rigid unitary structure. If desired, the structure may be reinforced and rigidified by providing a channel-shaped border strip 17 which embraces and is suitably joined to the edges of the face.

The hereinbefore described grille will, of course, be given the same general contour as the shell of the radiator in connection with which it is to be used and may be mounted in front of the shell, or as shown in the drawing, within the shell in front of the core and radiator shutters. To insure proper positioning of the grille with respect to the shell during assembly and use, there is formed on the inner face of the front flange 18 of the shell 19, a channel 20 in which the border strip 17 of the grille is adapted to be seated. To secure the grille to the shell, there are provided a number of screws 21, whose heads are soldered to the inner face of the flange 18 and which in conjunction with clips 22 through which the screws extend and nuts 23 firmly and securely clamp the grille to the shell.

The modified form of grille which is illustrated in Figure 5 differs from that illustrated in Figures 1 to 4 only in the construction of the body 24 which in this form consists of a number of thin metal strips 25 of zig-zag form which are assembled as illustrated in Figure 5 and united by solder at their points of contact 26 to form a multi-cellular structure.

In both of the constructions described above, the outer surface of the face of the grille is preferably given a bright, shiny finish and the body of the grille is preferably finished in dull black. The depth of the body of itself, makes it impossible for anyone not standing substantially directly in front of the vehicle on which the grille is installed to see the core and/or shutters there-through and since reflection of light from the face of the grille and the light absorbing characteristics of the black, relatively deep body render it practically impossible for anyone standing directly in front of the vehicle to see the core and/or shutters, these parts are effectually concealed by the grille.

It will, of course, be understood that, while, as illustrated in the drawing, our radiator grilles are preferably provided with flat front faces when designed for installation on radiators which are provided with flat front faces, radiator grilles in which our invention is embodied may, when designed for installation on radiators provided with

angular or curved front faces, be provided with corresponding or appropriately shaped front faces.

We claim:

- 5 1. A radiator grille which consists of a lattice-like body and a lattice-like face whose elements register with and conceal the elements of the body.
- 10 2. In a radiator screen, a grille-like face, strips which are located behind and register with and are secured to longitudinal bars of the face, and strips which are located behind and register with and are secured to transverse bars of the face.
- 15 3. The radiator screen claimed in claim 2 in which the longitudinal and transverse strips are notched and interfit and are arranged with their greatest transverse dimensions at an angle to the plane of the face.
- 20 4. In a radiator screen, a grille-like face, and zigzag strips which are located behind and register with and are secured to longitudinal and transverse bars of the face.
5. The radiator screen claimed in claim 4 in which the strips are arranged with their greatest

transverse dimensions at an angle to the plane of the face.

6. In a radiator screen, a face which consists of bars arranged with their greatest transverse dimensions approximately parallel to the plane of the face, and bars arranged with their greatest transverse dimensions at an angle to the plane of the face located behind and in registration with bars of the face and secured thereto. 5

7. In a radiator screen, a face which consists of approximately flat bars arranged with their greatest transverse dimensions approximately parallel to the plane of the face and relatively thin strips arranged with their greatest transverse dimensions at an angle to the plane of the face and located behind and in registration with the bars of the face and secured thereto. 15

8. The combination, with the radiator of an automotive vehicle, of a screen which consists of two members, one of which is a light-absorbing body and the other of which is a light-reflecting body which is disposed in advance of and substantially conceals the light-absorbing body. 20

ELMER J. HANSON.
JOHN G. HICKMAN.