July 2, 1935. G. E. WHITLOCK 2,006,755

RADIATOR GUARD

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Fig. 1.

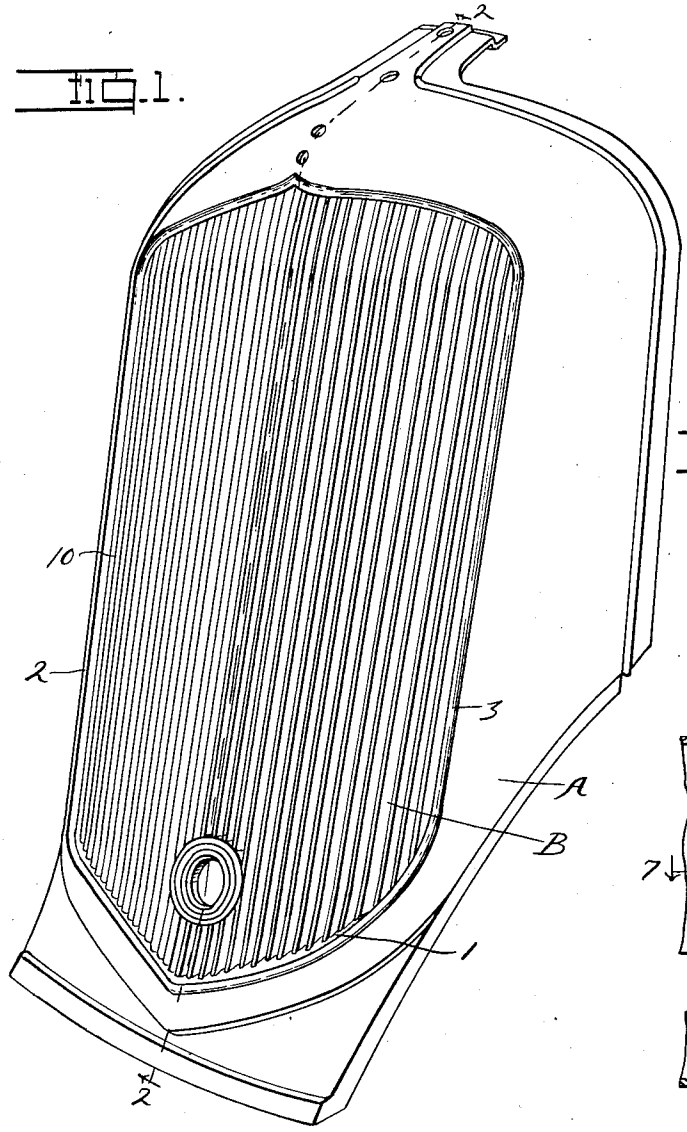


Fig. 3.

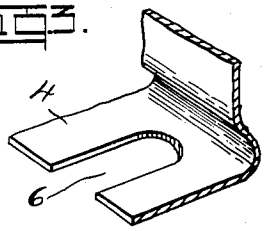


Fig. 4.

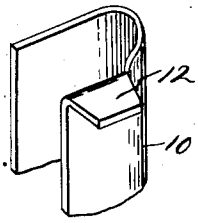


Fig. 6.

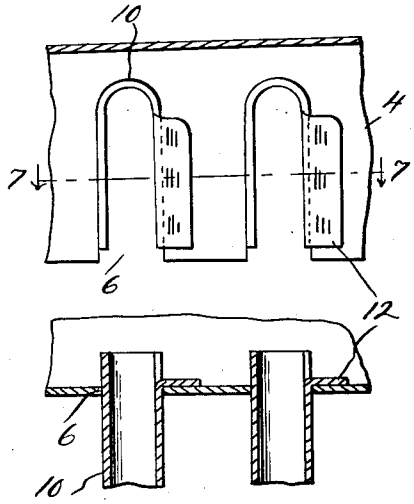


Fig. 10.

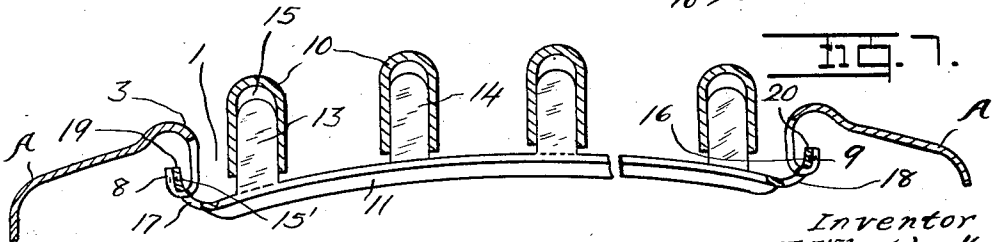


Fig. 7.

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FIG. 2.

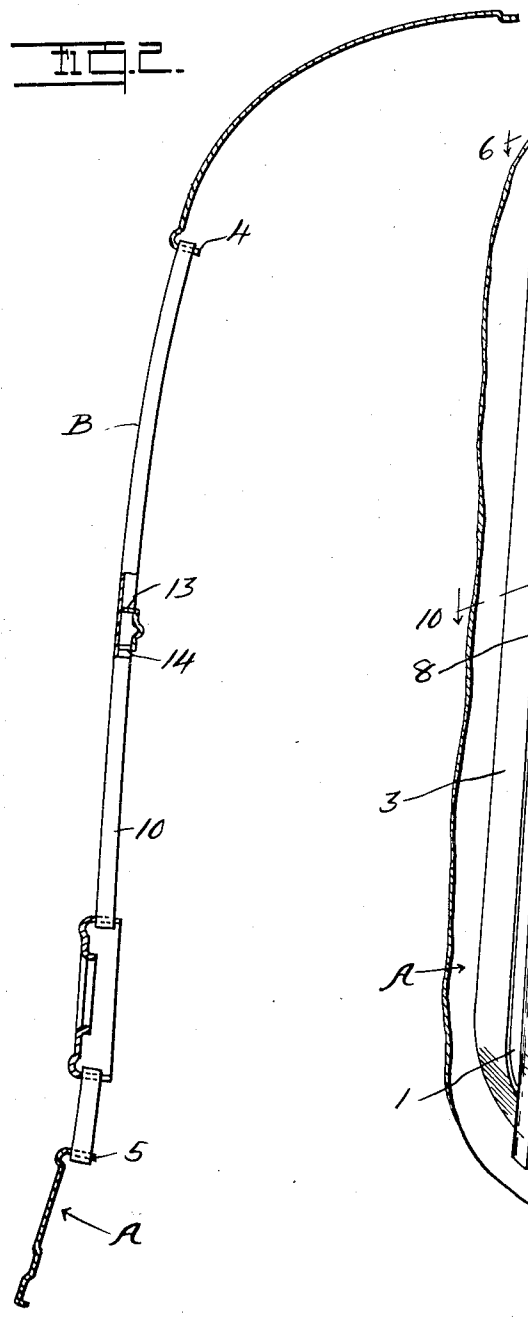


FIG. 5.

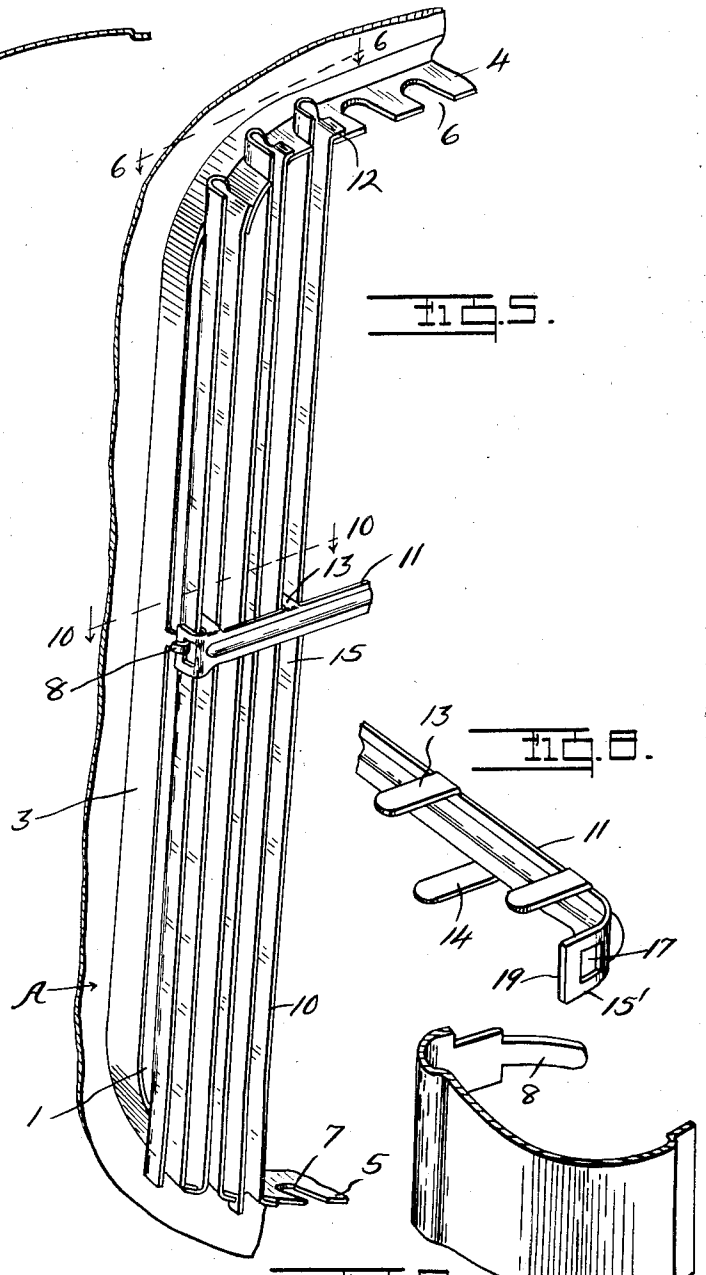


FIG. 8.

FIG. 7.

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2,006,755

RADIATOR GUARD

George E. Whitlock, Toledo, Ohio, assignor to The City Auto Stamping Company, Toledo, Ohio, a corporation of Ohio

Application February 13, 1933, Serial No. 656,633

16 Claims. (Cl. 293—54)

This invention relates generally to guards or shields for automobile radiators and refers more particularly to those having ornamental grilles and constituting auxiliary fronts for the radiator units or cores.

Heretofore the grilles have been formed integral with or independently of and secured as units to the enclosing shells of the shields. When integral, material is wasted as a result of the stamping or forming operations and when formed independently the grilles are bulky and cumbersome to handle and are easily damaged before being assembled with the shells. Consequently such procedure is objectionable. In the present instance, however, the difficulties just mentioned and experienced in the past have been overcome entirely. Here the shell is merely flanged inwardly at the top and bottom and the individual bars of the grille are successively applied and secured thereto. Thus the grille is built up within the shell without first being formed as a unit.

In the accompanying drawings:

Figure 1 is a perspective view of a shield embodying my invention;

Figure 2 is a vertical sectional view taken on the line 2—2 of Figure 1;

Figure 3 is a fragmentary perspective view of the upper flange of the shell;

Figure 4 is a fragmentary perspective view of one of the bars of the grille;

Figure 5 is a fragmentary perspective view of the inner side of the shield;

Figure 6 is a sectional view taken on the line 6—6 of Figure 5;

Figure 7 is a sectional view taken on the line 7—7 of Figure 6;

Figure 8 is a fragmentary perspective view of the crossbar;

Figure 9 is a fragmentary perspective view of the shell;

Figure 10 is a sectional view taken on the line 10—10 of Figure 5, but showing a portion of the other side.

Referring now to the drawings, A is the shell and B is the grille of a radiator guard or shield embodying my invention. As shown, the shell A is formed of sheet metal and is fashioned to extend over the front, top and sides of a suitable radiator unit or core of an automobile. Preferably the front face of the shell is provided with an opening 1 of the configuration illustrated in Figure 1 and is provided at the edges of said opening with open return bent flanges 2, 3, 4 and 5, respectively, which cooperate with one another to form a marginal beading for the opening. Referring to Figures 2 and 5 of the drawings, it will be observed that the flanges 4 and 5, respectively, at the upper and lower edges of the opening extend rearwardly beyond the side flanges 2 and 3 and are provided with vertically aligned laterally spaced rearwardly opening slots 6 and 7, while the side flanges 2 and 3 are provided at points substantially midway of their ends with rearwardly extending hook-shaped tongues 8 and 9, respectively. The grille B comprises a series of laterally spaced vertically extending bars 10 of U cross section and a crossbar 11 of the configuration illustrated in Figure 8. Preferably the bars 10 are received in the rearwardly opening slots 6 and 7 and have portions 12 at opposite ends thereof bent laterally and welded to the flanges 4 and 5. The crossbar 11 extends between the tongues 8 and 9 and serves to reinforce the vertical bars 10 intermediate their ends. As shown, this crossbar 11 is provided at its upper and lower edges with staggeredly arranged fingers 13 and 14, respectively, that extend forwardly into the rearwardly opening channels 15 of the vertical bars 10 to maintain the bars in proper spaced relation, and is provided with curved end portions 15' and 16, respectively, that have slots 17 and 18, respectively, therein receiving the tongues 8 and 9. When assembled the tongues 8 and 9 are return bent over and may be welded to the extreme end portions 19 and 20, respectively, of said crossbar.

In the process of construction the bars 10 are individually secured to the flanges 4 and 5 and the crossbar 11 is subsequently secured to the tongues 8 and 9, hence the grille B is built in the shell A instead of being built elsewhere as a unit and then secured to the shell as heretofore. As a result no ties or connections between the bars 10 are necessary to hold the same as an assembled unit prior to assembly with the shell. In the present instance they are individually secured directly to the shell which forms the supporting means and framing therefor. As a result a simpler and less expensive construction is provided.

What I claim as my invention is:

1. A radiator shield comprising a shell having an opening therein and provided at the upper, lower and side edges of the opening with rearwardly extending flanges, and a grille for the opening comprising a series of laterally spaced upright bars individually applied and secured to the flanges at the upper and lower edges of the opening, tongues projecting from the flanges

at the sides of the opening, and means for reinforcing said upright bars including a crossbar connected to the upright bars and having openings at opposite ends thereof receiving and secured to said tongues.

2. A radiator shield comprising a shell having an opening therein and provided at the upper, lower and side edges of the opening with rearwardly extending flanges, and a grille for the opening comprising a series of laterally spaced upright bars individually applied and secured to the flanges at the upper and lower edges of the opening, said bars being channel-shaped and opening rearwardly, and means for reinforcing said upright bars including a crossbar terminally secured to the flanges at opposite sides of the opening and having staggeredly arranged fingers projecting forwardly into the channels of the upright bars.

3. A radiator shield comprising a shell having an opening therein and provided at the upper and lower edges of said opening with rearwardly extending flanges, said flanges being provided with vertically aligned laterally spaced rearwardly opening slots, and a grille for the opening in the shell comprising bars individually applied to said aligned slots and having portions bent laterally and secured to said flanges.

4. A radiator shield comprising a shell, and a grille, the shell having an opening in its front face and provided at the upper, lower and side edges of said opening with rearwardly extending flanges, the flanges at the side edges of the opening being provided intermediate their ends with rearwardly extending tongues, the flanges at the upper and lower edges of said opening having laterally spaced vertically aligned rearwardly opening slots therein, and a grille comprising a plurality of channel-shaped bars secured in said vertically aligned slots and opening rearwardly, and means for reinforcing said channel-shaped bars including a crossbar terminally secured to said tongues and having fingers projecting forwardly into the rearwardly opening channels of the bars aforesaid.

5. A radiator shield comprising a shell having an opening therein and provided at the upper, lower and side edges of the opening with rearwardly extending flanges, the flanges at the upper and lower edges of said opening having laterally spaced vertically aligned rearwardly opening slots therein, separate upright bars individually applied to said aligned slots and having portions overlapping and rigidly secured to the flanges at the upper and lower edges of said opening, and means for reinforcing said upright bars intermediate their ends including a crossbar terminally secured to the flanges at the side edges of said opening and having portions at spaced points thereof intermediate its ends projecting forwardly into engagement with said upright bars.

6. In a radiator shield, a shell formed from sheet metal and fashioned to extend over the front, top and sides of a radiator, said shell having an opening in its front face and provided at the upper, lower and side edges of said opening with rearwardly extending flanges, the flanges at the upper and lower edges of said opening having aligned means for receiving individually applied bars of a grille, and the flanges at the side edges of said opening being provided with means for anchoring a reinforcing crossbar for the bars just mentioned of the grille.

7. A radiator shield comprising a shell and a grille, the shell being fashioned to extend over the front, top and sides of a radiator and having an opening in its front face, flanges projecting rearwardly from the upper, lower and side edges of said opening, the flanges at the side edges of the opening being provided intermediate their ends with tongues, the flanges at the upper and lower edges of said opening having vertically aligned laterally spaced rearwardly opening slots therein, and the grille comprising a plurality of laterally spaced vertically extending channel shaped bars, and a crossbar, the vertical bars being received in the vertically aligned slots aforesaid and having portions bent laterally and welded to the flanges containing said opening, and the crossbar extending between and terminally secured to said tongues and provided at its upper and lower edges with staggeredly arranged fingers that extend forwardly into the channels of the vertical bars and maintain the latter in proper spaced relation.

8. A radiator shield comprising a shell provided in its front face with an opening and provided at certain edges of said opening with rearwardly extending flanges having aligned laterally spaced slots therein, and individual grille bars received within the aligned slots and having lateral flanges rigidly secured to the flanges aforesaid.

9. A radiator shield comprising a shell provided in its front face with an opening and provided at the top, bottom and side edges of said opening with rearwardly extending flanges, the top and bottom flanges having vertically aligned laterally spaced rearwardly opening slots therein, the side flanges being provided intermediate their ends with rearwardly extending tongues, grille bars received within the vertically aligned slots and having lateral flanges secured to the upper and lower flanges aforesaid, said bars being channel-shaped and opening rearwardly, and a crossbar terminally secured to the tongues and provided intermediate its ends with fingers that project forwardly into the channels of the grille bars.

10. A radiator shield comprising a shell having an opening therein and provided at opposed edges of the opening with rearwardly extending flanges, and a grille for the opening comprising a series of laterally spaced bars secured to said flanges, said bars being channel-shaped and opening rearwardly, and means for reinforcing said bars including a cross bar terminally secured to the shell at opposed edges of the opening and having staggeredly arranged fingers projecting forwardly into the channels of said bars.

11. A radiator shield comprising a shell provided in its front face with an opening and provided at the upper and lower edges of said opening with substantially vertically aligned laterally spaced slots, and individual grille bars received within said aligned slots and having lateral flanges rigidly secured to the shell beside said slots.

12. A radiator shield comprising a shell having an opening therein and provided at the upper and lower edges of said opening with substantially vertically aligned laterally spaced slots, and a grille for the opening comprising laterally spaced upright bars received within said slots and having lateral extensions rigidly secured to said shell beside said slots, tongues projecting from the shell at opposite sides of the opening, and means for reinforcing said upright bars including a cross bar terminally connected to said tongues and having laterally spaced projections intermediate of its ends connected to said upright bars, one projection to each bar.

13. A radiator shield comprising a shell having an opening therein and provided at opposed edges of said opening with substantially aligned spaced slots, and a grille for the opening comprising laterally spaced bars received within said slots and having lateral extensions rigidly secured to said shell beside said slot, tongues projecting from the shell at opposite edges of the opening, and means for reinforcing said bars including a cross bar terminally connected to said tongues and having longitudinally spaced projections connected to said upright bars, one projection to each bar.

14. A radiator shield comprising a shell having an opening therein and provided at the upper and lower edges of said opening with substantially vertically aligned laterally spaced slots, and a grille for said opening comprising laterally spaced upright bars received within said slots, said bars being channel-shaped and opening rearwardly, and means for reinforcing said upright bars including a cross bar terminally secured to the shell at opposite sides of said opening and having fingers projecting forwardly into the channels of said upright bars.

15. A radiator shield comprising a shell having an opening therein and provided at opposed edges of said opening with substantially aligned spaced slots, and a grille for said opening comprising spaced bars received within said slots, portions of said bars being bent over and secured to said shell beside said slots, said bars being channel-shaped and opening rearwardly, and means for reinforcing said bars including a cross bar terminally secured to the shell at opposed edges of said opening and having fingers projecting forwardly into the channels of said bars.

16. A radiator shield comprising a shell having an opening therein and provided at opposed edges of said opening with substantially aligned spaced slots, and a grille for said opening comprising a plurality of individual bars received in said slots and having portions bent laterally and secured to said shell beside said slots.

GEO. E. WHITLOCK.