Oct. 12, 1926. 1,602,801

W. D. WALKER

RADIATOR COVER

Filed Dec. 23, 1922

Fig 1

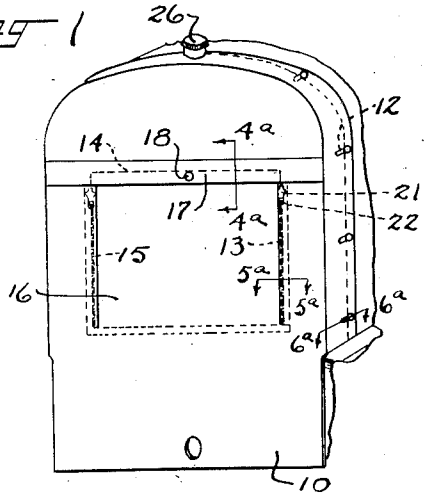


Fig 2

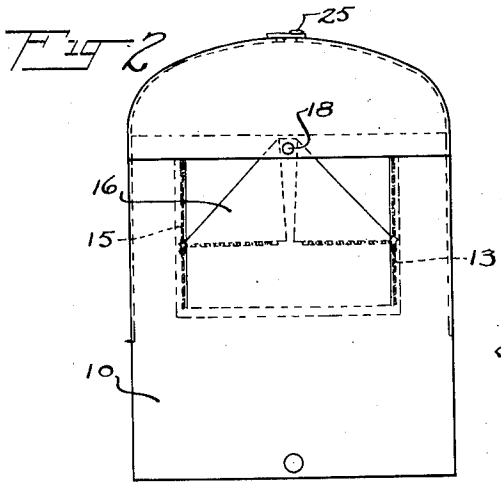


Fig 3

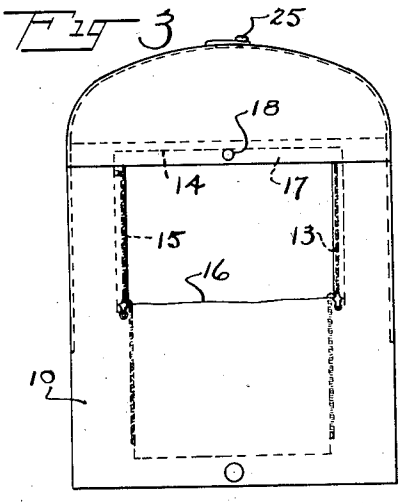


Fig 4

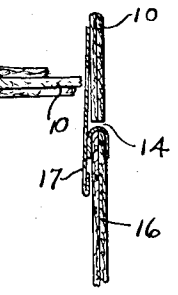


Fig 5

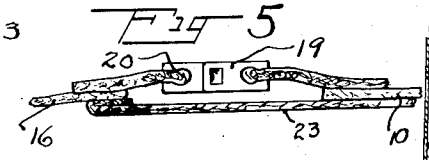


Fig 6

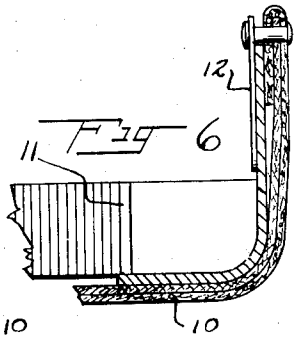


Fig 7

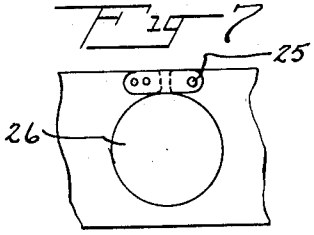
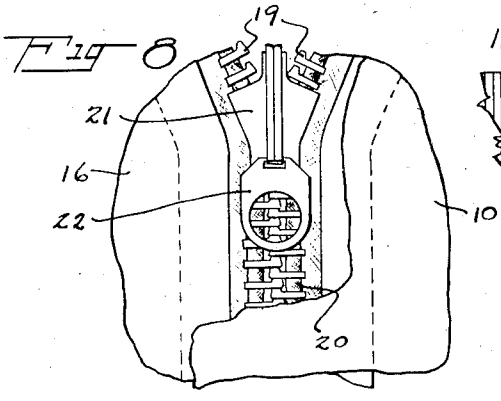


Fig 8



INVENTOR

Wallace D. Walker

BY

ATTORNEY

Patented Oct. 12, 1926. 1,602,801

UNITED STATES PATENT OFFICE.

WALLACE D. WALKER, OF MEADVILLE, PENNSYLVANIA, ASSIGNOR TO HOOKLESS FASTENER COMPANY, OF MEADVILLE, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

RADIATOR COVER.

Application filed December 23, 1922. Serial No. 608,612.

This invention relates to winter covers for automobile radiators and has for its object to provide a reliable cover which is better adapted to retain the heat, quicker and easier to operate, and capable of adjustment to form any desired size of opening.

A well-known type of radiator cover now used comprises an adjustable flap secured in place by means of two or three snap fasteners along its sides to enable the flap to be opened varying amounts according to the temperature. Such a cover is apt to blow open along its sides between the fasteners and let out the heat when there is a draft from one side. The sizes of openings permissible are few and dependent upon the number of snap fasteners on the sides, and while a larger number of these snap fasteners permits a greater field of adjustability it does so at the expense of trouble and inconvenience in control of these fasteners, which are particularly difficult to manipulate in cold weather with driving gloves on.

According to this invention a radiator cover is provided with slide fasteners of the type shown in the patent to Sundback, No. 1,243,458, October 16, 1917, along the opposite lateral edges of the adjustable flap. This enables the adjustable flap to be securely fastened throughout its entire length to the body portion of the cover and precludes the formation of any aperture through which heat may escape. A slider is provided so that the entire length of the flap along one edge may be opened or closed in a single movement and it is possible without removing the heavy driving gloves since the slider is usually provided with a pull lug. Less material is required in producing this cover.

Referring to the drawings:

Fig. 1 is a perspective view of my improved radiator cover in closed position.

Fig. 2 illustrates one form of opening.

Fig. 3 shows another form of opening.

Fig. 4 is an enlarged section on the line 4^a—4^a of Fig. 1.

Fig. 5 is an enlarged section on the line 5^a—5^a of Fig. 1.

Fig. 6 is an enlarged section on the line 6^a—6^a of Fig. 1.

Fig. 7 is a top detail of the cover around the cap.

Fig. 8 is an enlarged detail showing the fastener and slider.

The body portion 10 of the cover is secured to the radiator 11 by means of adjustable clips 12, or other commonly used securing means. The adjustable flap portion 16 is cut out from the body portion along the side slits 13 and 15 and top slit 14. A slide fastener such as that described in the patent to Sundback, No. 1,243,458, October 16, 1917, is used for securing the lateral edges 13 and 15 of the adjustable flap 16. No fastener is necessary along the top edge 14, but if desired an overlapping portion 17 may be provided with a snap fastener 18 in the center thereof as shown in Fig. 1. Slide fasteners arranged along the edges 13 and 15 comprise a number of interlocking connecting members 19 which are arranged along stringers 20 of braided or woven material and these stringers with the connecting members thereon may be sewed, or otherwise secured to each edge of the slits 13 and 15. The slidable operating device 21 controls the interlocking connecting members 19 and is provided with a pull lug 22, by means of which the slider may be moved without removing the gloves.

To cover and protect the connecting members one or more overlapping flaps of lighter material may be used as shown, for example, in Fig. 5, where the overlapping flap 23 covers the connecting members and slider yet is easily moved aside to render the fastener accessible.

In making this cover, the body portion is cut or provided with the three connecting slits therein, 13, 14 and 15. To the opposite edges of the lateral slits 13 and 15 are sewn the braided or woven stringers 20 carrying the connecting members 19, so that these slits may be closed without the waste of material incident to the overlapping of the body and adjustable portions such as occurs in the old form of covers using snap fasteners. In those forms of constructions in which snap fasteners were used, and in which the body portion overlapped the adjustable flap it was necessary to take one or more tucks in the body portion to shorten its width if the front portion of the cover were to be cut from a single piece of material. In the present construction no tucks are necessary to shorten the width of the body portion since there is no overlap between the adjustable flap part and the body portion.

The adjustable flap portion 16 may be opened any desired amount and is not de-

pendent upon the location of any snap fastener to govern the amount of this opening. Since the hottest portion of the radiator is at the top, one type of opening which may be used is that illustrated in Fig. 2 where the fastener 18 is left closed at the top of the flap portion 16, while the upper lateral edges are turned under as indicated by the dotted lines.

Fig. 3 shows another form of opening in which the adjustable part 16 is open substantially its entire length and turned under.

Fig. 7 shows how some common form of fastener 25 may be used in the customary manner around the water-filling cap 26 on the radiator.

Among the advantages of this invention may be enumerated its ease of adjustment and facility of control without removal of the gloves. Each edge of the adjustable flap portion is closed throughout its entire length and prevents the formation of any bowed openings through which heat may escape. The flap portion is also adapted to be opened any desired amount to give a fine adjustment. If desired, the opening in the body portion of the cover may be increased or closed so small an amount as a quarter of an inch, for example, or the full length, and any amount of such adjustment is made with facility in a single movement. The cover of this invention is less wasteful of material in its manufacture through elimination of overlapping flaps, or the customary tucks necessary to shorten the body portion of the cover. While Figs. 4 and 5 show the use of overlapping flaps, since these flaps are of relatively light and inexpensive material they should not be confused with the overlapping of the heavier material of which the adjustable flap 16 and body portion 10 are made. The adjustable part 16 may be folded either inside or out with equal facility which would not have been possible with snap fasteners. This cover is well adapted for fire engines, emergency wagons, or ambulances where speed in opening the radiator cover is an essential. One slider may be grasped in each hand and both of them simultaneously moved by simply moving both arms together. In order to insure that the slider remains in its adjusted position it is preferable to use the narrow angled slider described in the patent to Sundback, No. 1,302,606, May 6, 1919 when there will be no danger of the fastener moving out of its adjusted position. A further advantage resides in the facility with which the present radiator cover may be opened or closed in case the body portion of the cover is stretched or tightly fits over the radiator when, obviously, the old type of snap fastener would be difficult and inconvenient to handle.

The overlapping flaps 23 on the sides of the adjustable part 16 may be omitted if desired and the connecting members left exposed; so also the top flap 17 may be omitted. While it is preferable to use a slider having its channels arranged at a small angle to one another, the slider having its channels arranged at a wide angle may also be used for especially quick opening, and when it is not desired to arrange the adjustable part in any intermediate position. With such a wide angled slider the top edge of the adjustable flap may be pulled out and down, in which case both sliders will be automatically moved to unfasten both edges of the flap portion 16.

I claim:

1. A radiator cover including a body having slits forming a flap portion adjustable from its free edge, and body portions having edges laterally spaced from the side edges of the flap portion, fastening means secured to the adjacent edges of the flap and body portions, and a slidable device cooperating with said fastening means.

2. A radiator cover including a body portion having slits to provide adjustable flap and side portions, fastening members along the adjacent edges of said portions, said members being of relatively narrow depth and disposed substantially contiguous to one another when closed whereby said adjacent edges are adapted to be secured throughout all portions of their length, and slidable means adapted to control the fastening members.

3. A radiator cover having a body member provided with a central opening, an adjustable flap having its bottom edge secured to the body member and its side edges laterally spaced from the side edges of said body member, fastening means along the side edges of the body member and flap, and a slidable operating device for controlling each of said fastening means whereby to adjustably secure said flap over said central opening.

4. A cover having a body portion provided with an opening, an adjustable flap portion permanently secured to the body portion adjacent said opening, the side edges of said adjustable flap portion being laterally spaced from the adjacent edges of the body portion, interlocking connecting members along the adjacent edges of both of said portions, sliders for controlling the connecting members on each side of the flap portion, said sliders being upwardly movable to close said adjustable portion, said adjustable portion being smoothly foldable downwardly upon itself as said sliders are moved downwardly to unlock said connecting members.

5. A radiator cover comprising an adjustable flap portion, the lateral edges of said flap portion being provided with closely

spaced fastening members on the edges of said flap and on adjacent edges of the body portion of the cover, the lateral edges of said flap being laterally spaced from the adjacent edges of the cover body portion, whereby the flap may be folded either inside or out with substantially equal facility.

6. A radiator cover having a flap for covering an opening therein, edgewise interlocking fastening means secured to the cover and flap for adjustably securing the flap over the opening, and slidable means controlling said fastening means.

7. A radiator cover having a flap for covering an opening therein, a plurality of edgewise fasteners secured to the cover and flap for adjustably securing the flap over the opening, and means operable to lock and unlock said fasteners.

8. A radiator cover having a flap for covering an opening therein, edgewise interlocking fasteners secured to the cover and flap for adjustably securing the flap over the opening, and slidable means movable in directions to lock and unlock said fasteners, said slidable means being movable in a direction to unlock the fasteners by a pull exerted upon the flap.

Signed at New York, in the county of New York and State of New York, this 20th day of December, A. D. 1922.

WALLACE D. WALKER.