1
This invention relates to a new and useful improvement in screening for vehicle and other openings.

One object of the invention is to provide a light insect screening for cars on the inside or outside and magnetic means for holding it in place.

Another object is to provide a securing means which permits the screen to be either quickly and easily applied or removed.

A further object is to provide a screen which may be applied to an opening surrounded by a frame of either magnetic or non-magnetic material.

These and other objects are accomplished by the means shown in the accompanying drawings, fully set forth in the following description, and more particularly pointed out in the claims.

In the drawings:

Fig. 1 is a perspective view of one form of my screen.

Fig. 2 is a perspective view on a larger scale of one portion of the screen in the Fig. 1 form.

Fig. 3 is a section on line 1—3 of Fig. 1, looking in the direction of the arrows.

Fig. 4 is a perspective view of another form of my screen.

Fig. 5 is a section on line 4—5 of Fig. 4, looking in the direction of the arrows.

Fig. 6 is a section of my screen and of a window frame to which it is attached, the frame being of non-magnetic material.

Fig. 7 is a section on a larger scale of the upper portion of the screen and frame of Fig. 6.

Fig. 8 is a section of my screen and of a window frame to which it is attached, the frame being of non-magnetic material.

Fig. 9 is a perspective view of the interior of an automobile having a window provided with another form of my screen.

Fig. 10 is a section on line 10—10 of Fig. 9, looking in the direction of the arrows.

Fig. 11 is a perspective view, on a larger scale, partly in section, of a portion of the screen and window frame shown in Fig. 9.

In the first form of my device, as shown in Fig. 1 to 3, the body 1 of the screen is composed of wire or cloth mesh, having its edges doubled over to form a strengthened margin 2. At a distance from this margin is disposed a peripheral row of circular flat permanent magnets 3a. As seen in Figs. 2 and 3, each of these magnets is located in a pocket 4 of the mesh 1. If this mesh is of cloth, the attachment to 6 of the magnets may be by adhesive. If the usual wire mesh is used, the attachment is by means of solder.

In the form shown in Figs. 4 and 5, the margin of the mesh 1 is strengthened by doubling it over a wooden bar 5, the bar and mesh being connected by adhesive. While this bar is shown as being of wood, it may obviously be of metal of small cross section. In this form the permanent magnets 3b are placed directly upon the surface of the mesh, no pockets being employed.

Figs. 6 and 7 show the application of a screen of the first form, disclosed by Figs. 1 to 3, to a window opening having a frame 7 of magnetic material. The marginal magnets 3c secure the screen to the margin of the window opening.

Another second form, disclosed by Figs. 4 and 5, to a window having a frame 8 of non-magnetic material. In this case pieces of magnetic material 9 are secured by screws or tacks to the frame 8 at intervals corresponding to those of the magnets 3b. The screen is then kept in place by the attraction between the magnets 3b and the pieces of magnetic material 9. As is evident, one unitary marginal piece may be attached to the frame 8 instead of the separate pieces 9.

Figs. 9 to 11 show another form of my screen applied to the inside of an automobile window. Here a strip 10 of rubber or other flexible material has a series of openings each holding a permanent magnet 3c, the ends of which project from both faces of the strip as clearly shown by Fig. 10. This figure also best shows that the mesh 1 has on each of its upper and lower margins a strip of flexible magnetic material 11 or has disposed at intervals pieces of such material.

In use, as shown by Figs. 9 and 10, a strip 10 is applied at the top, the magnets 3c attaching on one face to the upper strip 11 on the mesh, and on the other face to the upper metal edge 12 of the window opening. In like manner at the bottom a strip 10 is employed, the magnets 3c on one face attaching to the strip 11 at the bottom of the mesh, and on the other face attaching to the metal 13 at the lower edge of the window opening. Due to the flexibility of the strips 10 and 11, they may be made to conform to curved surfaces.

Having thus described my invention, I claim:

An insect excluding screen for a window having a frame of magnetically attractive metal comprising a body of screen material, a strengthened margin for said body, said body having a plurality of pockets formed therein in spaced relation to each other and in inwardly spaced parallel relation to said margin, and a permanent magnet affixed in each of said pockets.

JOHN T. FLAHERTY.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,198,227</td>
<td>Hinchey</td>
<td>Sept. 12, 1916</td>
</tr>
<tr>
<td>1,744,177</td>
<td>Schuler</td>
<td>Jan. 21, 1930</td>
</tr>
<tr>
<td>2,217,514</td>
<td>Henry</td>
<td>Oct. 3, 1940</td>
</tr>
<tr>
<td>2,319,292</td>
<td>Boggs</td>
<td>May 18, 1943</td>
</tr>
</tbody>
</table>