H. A. LASKO & C. M. SNAVELY.
SLIP CASING FOR RADIATORS.
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1,113,790.

SLIP-CASING FOR RADIATORS.

To all whom it may concern:

Be it known that we, HENRY A. LASKO and CHRISTIAN M. SNAVELY, of Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Slip-Casings for Radiators; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to radiators such as are employed in connection with internal combustion engines on motor vehicles, the object of the invention being to provide a slip casing for the water member of a radiator, which may be readily removed in case of the necessity to repair or clean the radiator; which shall be neat and ornamental, and which shall have the appearance of constituting a part of the radiator structure.

With this and other objects in view, the invention consists in certain novel features of construction and combinations of parts as hereinafter set forth and pointed out in the claims.

In the accompanying drawings: Figure 1 is a rear view showing a radiator with our improved casing thereon; Fig. 2 is a sectional view of the same, and Fig. 3 is a perspective view of the casing.

1. represents the water circulating member of a radiator located over the sub-frame 2 of an automobile and provided on its bottom with lugs 3 seated upon said sub-frame. These lugs are made with threaded sockets which receive bolts 4 passing through the sub-frame, whereby the radiator is secured to the latter. The radiator is provided at its top with the usual neck 5, having a removable cap 6, and with inlet and return pipes 7, 8; an overflow pipe 9 and a drain cock 10.

Our improved casing 11 may be conveniently made of sheet metal and comprises end walls 12 and a top wall 13 to conform to the contour of the ends and top of the radiator. Flanges 14-15 depend from the front and rear edges of the top wall 13 and are made of such size and shape as to cover the front and rear faces of the upper chambered portion of the radiator, while the vertical end walls 12 are provided at their front and rear edges with inwardly projecting flanges 17 which are disposed in

front and in rear of the radiator at the ends of the latter. The lower ends of the vertical side walls 12 are connected at the front of the casing, by an integral cross bar 19 which lies in front of the radiator below the tubes thereof. The end walls 12 and the top wall 13 are provided with rearwardly projecting flanges 20-21, which overlie the forward edges of the hood 22, commonly employed on automobiles.

The top wall 15 of the casing is provided with an opening 23 for the passage of the neck 5 of the radiator and the upper rear flange 14 of the casing is provided with elongated openings 24 and 25 for the accommodation of the pipes 7 and 9. Two doors 26 are provided for the lower portions of each of the openings, said doors being hinged at the side edges of the openings and having a shape to closely embrace, the lower portions of the pipes. These doors may be provided with any suitable fastening means to keep them normally closed. Brackets 27 are secured to the vertical end walls of the casing and the horizontal member of each of these brackets is provided with a hole for the passage of a bolt 28, by means of which the casing may be secured to the sub-frame 2 of the vehicle.

It will be apparent that our improved casing may be caused to closely embrace the radiator and be rigidly secured to the vehicle frame; giving to the radiator a neat and finished appearance; and that by removing the bolts 28 and the cap 6 and opening the doors 26, the casing may be readily removed or slipped off of the radiator, exposing the latter in its entirety and rendering every part thereof easily accessible for repairing or cleaning, and without removing or loosening the mounting of the radiator.

Slight changes might be made in the details of construction of our improvements without departing from the spirit thereof or limiting its scope and hence we do not wish to restrict ourselves to the precise details herein set forth.

Having fully described our invention what we claim as new and desire to secure by Letters-Patent, is:-

1. A removable slip casing for water circulating radiators, comprising a unitary structure removable bodily from a radiator.

2. A removable slip casing for water circulating radiators, removable bodily from.
and entirely free of said water circulating radiators to expose all parts of the latter.

3. A slip casing for water circulating radiators, removable bodily from said water circulating radiators to expose all parts of the latter, and means for removably securing said casing normally in position on a radiator.

4. A removable slip casing for water circulating radiators, comprising end walls extending from said top wall to the bottom of the water circulating member, said top wall having flanges depending from its front and rear edges, and the end walls having inwardly projecting flanges at the front and rear edges and a cross bar connecting the end walls at their front edges.

5. A removable slip casing for water circulating radiators, comprising end walls having inwardly projecting flanges, a top wall connecting the end walls and having an opening for a radiator neck, said top wall having front and rear depending flanges, the rear depending flange having elongated openings for the passage of pipes, and doors for closing the lower portions of said openings.

In testimony whereof, we have signed this specification in the presence of two subscribing witnesses.

HENRY A. LASKO.
CHRISTIAN M. SNAVELY.

Witnesses:
PAUL G. FRODET,
P. OSTER HENRY.