Mar. 13, 1923. 1,448,102.

G. F. WILSON.

ANTIFREEZE ATTACHMENT FOR RADIATORS.

FILED JUNE 13, 1922.

Fig. 1.

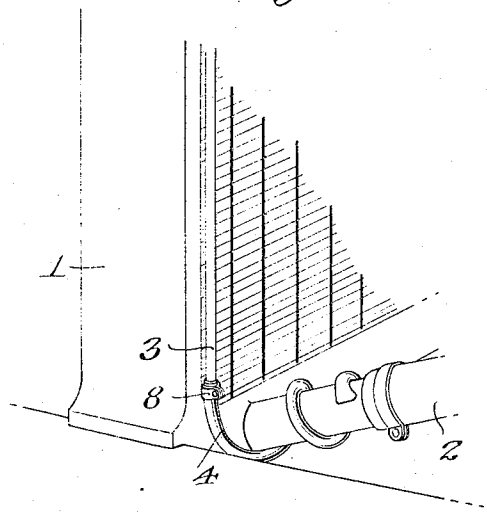


Fig. 2.

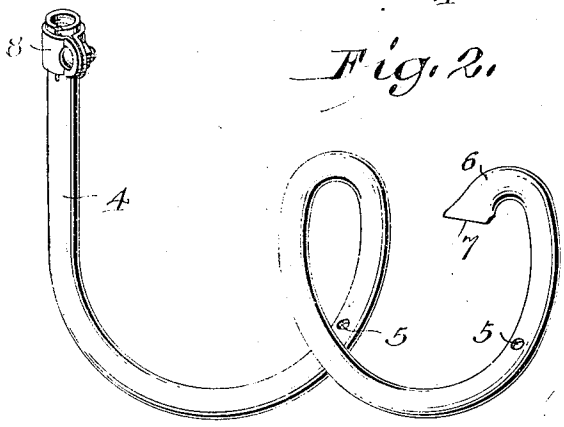


Fig. 4.

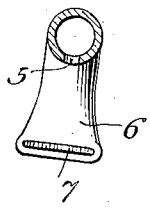
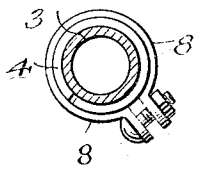


Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE F. WILSON, OF ELMWOOD, NEBRASKA.

ANTIFREEZE ATTACHMENT FOR RADIATORS.

Application filed June 13, 1922. Serial No. 568,041.

To all whom it may concern:

Be it known that I, GEORGE F. WILSON, a citizen of the United States, residing at Elmwood, in the county of Cass and State of Nebraska, have invented new and useful Improvements in Antifreeze Attachments for Radiators, of which the following is a specification.

This invention relates to an attachment for radiator jackets of motor vehicles, and has for its object to provide an attachment, in a manner as hereinafter set forth, to prevent radiators from freezing in cold weather particularly when the vehicle is traveling and further to reduce to a minimum the freezing of a radiator when the car is stopped.

Further objects of the invention are to provide an attachment for the purpose set forth which is simple in its construction and arrangement, strong, durable, efficient and convenient in its use, readily set up with respect to the radiator and comparatively inexpensive to manufacture and use.

With the foregoing and other objects in view, the invention consists of a novel construction, combination and arrangement of parts, as hereinafter more specifically described and illustrated in the accompanying drawing wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which come within the scope of the claims hereunto appended.

In the drawing wherein like reference characters denotes corresponding parts throughout the several views:—

Figure 1 is a perspective view, illustrating a radiator provided with a water outlet pipe and a steam overflow pipe and further showing the adaptation of an attachment in accordance with this invention as applied to the overflow and water outlet pipes,

Figure 2 is a perspective view of the attachment,

Figure 3 is a sectional detail illustrating the attachment clamped to the overflow pipe of the radiator,

Figure 4 is a cross sectional view of the attachment showing one of the outlet openings.

Referring to the drawing in detail, 1 denotes a radiator, 2 a water outlet pipe which extends from the bottom of the radiator, and 3 the steam overflow pipe for the radiator.

The attachment in accordance with this invention and which is designed to prevent freezing of the radiator consists of a flexible tubular body 4 constructed of any suitable material and of a nature so that the tubular body can be coiled or wound around the pipe 2 and grip the same. The tubular body 4 at points throughout its length is formed with outer ports 5 opening against the pipe 2, and said body 4 at its outlet and is flared as at 6 to provide a contracted outlet 7.

The body 4 is adapted to be secured to the steam overflow pipe 3 by a clamping element 8 and when in position, is not only connected to the overflow pipe 3, but is also coiled around pipe 2 with the ports 5 opening thereagainst.

Relative to the operation of the device or attachment, the moment circulation through the radiator is retarded on account of freezing, the radiator will begin to steam, the steam exhausting through the overflow pipe into the body 4. The heat from the steam, as the steam passes through the body 4, will act against the pipe 2, to heat the same, thus warming the water and thus preventing freezing of sufficient intensity to burst the radiator pipe.

What I claim is:—

1. An attachment for the purpose set forth comprising the combination with the water outlet pipe and steam overflow pipe of a radiator, of a tubular member connected to the outlet end of the overflow pipe and coiled around that end of the outlet pipe communicating with the radiator, said tubular member forming a steam conductor and formed intermediate its ends with outlet ports opening against said outlet pipe and further having a contracted discharge outlet at its outer end.

2. An attachment for the purpose set forth comprising a steam conducting member adapted to communicate with the steam overflow pipe of a radiator for conducting steam therefrom to heat the water outlet pipe of the radiator, said member having an outlet at its free end and further provided with outlet ports intermediate of its ends adapted to open against the water outlet pipe of the radiator.

3. The combination with the water outlet and steam overflow pipe of a radiator, of a tubular member connected to the outlet end of the overflow pipe and coiled around the discharge end of the outlet pipe, said

tubular member providing a steam conductor and formed with outlet ports opening against said outlet pipe and further having a discharge outlet at its outer end.

4. An attachment for the purpose set forth comprising a hollow tubular element constituting a steam conductor and adapted to have one end clamped to the steam overflow pipe of a radiator and further adapted to be coiled around the water outlet pipe of a radiator, said element having intermediate its ends outlet ports and further having an outlet at its detached end.

5. An attachment for the purpose set forth comprising a flexible hollow tubular element constituting a steam conductor and adapted to have one end clamped to the steam overflow pipe of a radiator and further adapted to be coiled around the water outlet pipe at that end thereof, which communicates with the radiator, said member provided intermediate its ends with outlet ports opening against the water outlet pipe and further having a contracted outlet at its free end.

In testimony whereof, I affix my signature hereto.

GEORGE F. WILSON.