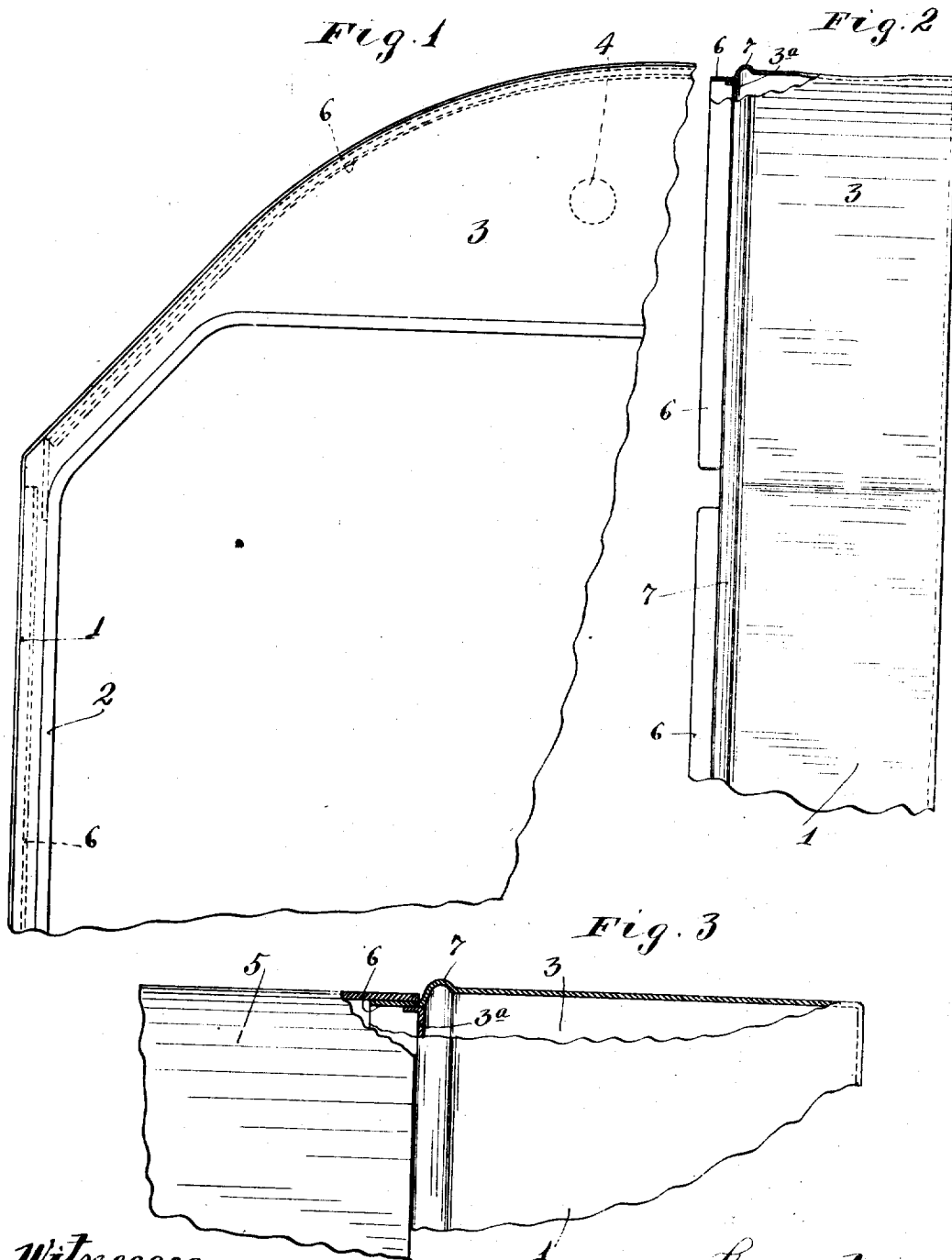


W. DIETZ.
 AUTOMOBILE RADIATOR.
 APPLICATION FILED MAY 26, 1909.

974,777.

Patented Nov. 8, 1910.



Witnesses.
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UNITED STATES PATENT OFFICE.

WILLIAM DIETZ, OF DETROIT, MICHIGAN, ASSIGNOR TO McCORD MANUFACTURING COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MAINE.

AUTOMOBILE-RADIATOR.

974,777.

Specification of Letters Patent.

Patented Nov. 8, 1910.

Application filed May 26, 1909. Serial No. 498,540.

To all whom it may concern:

Be it known that I, WILLIAM DIETZ, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Automobile-Radiators; and I 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.

My invention relates to radiators such as used in connection with automobiles, and is particularly directed to the improvement of the construction of the "hood ledging"; and to the above ends, the invention consists of the novel devices and combinations of devices hereinafter described and defined in the claim.

Hitherto, it has been customary to form the hood ledging in several pieces, and to solder the same to the sheet metal outer frame of the radiator, and it has also been customary to solder the upper edge of the back plate of the upper tank of the radiator to the back upper corner of the radiator frame. In practice, the separately formed hood ledging was first soldered to the outer frame of the radiator, and thereafter, the back of the upper tank, was soldered to the said outer frame, at practically the same place, so that very great care had to be taken to prevent the second soldering from loosening the soldered joint of the hood ledging, and thereby causing leaks in the top of the tank, where they are very difficult to repair. Furthermore, the solder of the hood ledging to the outer frame, in itself, is an expensive process.

In accordance with my invention, I form the hood ledging integral with the sheet metal outer frame of the radiator, by rolling or pressing the edge of said frame, and I solder the upper edge of the back plate of the upper tank of the radiator to the ledging or rear portion of the said frame, so that there is only one soldered joint in the vicinity of the ledging. This accomplishes several important results. In the first place, it very greatly reduces the cost of applying the ledging; in the second place, it makes the ledging and the rear edge of the radiator frame very much stiffer than the old construction; and in the third place, by

eliminating one of the solder joints, it removes the danger of opening of soldered joints by second soldering at approximately the same place.

In the accompanying drawings which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings: Figure 1 is a view in front elevation with some parts broken away, and some parts removed, illustrating my invention as applied to a radiator of the type known as the McCord automobile radiator; Fig. 2 is a side elevation of the parts shown in Fig. 1, some parts being broken away; and Fig. 3 is an enlarged fragmentary view in side elevation, some parts being broken away and some parts being sectioned, showing a portion of an engine hood seated on the ledging.

The numeral 1 indicates the outer frame, and the numeral 2 the inner frame of the radiator, and the numeral 3 indicates the upper tank of the said radiator into which the hot water from the engine is delivered through a pipe 4 indicated by dotted lines only in Fig. 1. The numeral 5 indicates the engine hood which is shown only in Fig. 3. The vertical tubes and fins of the radiator are not shown in the drawings, and may be of any suitable construction.

The hood ledging 6 is formed integral with the outer frame 1 and is joined to the rear edge of the latter by a pressed or rolled bead or rib 7, which very greatly stiffens the rear edge portion of the said frame 1. The hood ledging 6 is offset or pressed so that it stands inward of the body portion of the frame 1, and the front end of the engine hood 5 is adapted to rest thereon as shown in Fig. 3. The back plate 3^a of the upper tank 3, at its upper edge, is soldered to the rear edge portion of the outer frame 1, and there is no other soldered joint adjacent thereto. The importance of this construction has already been stated. The pressed bead or rib 7, as is evident, very greatly stiffens the rear edge of the frame 1, and greatly stiffens the hood ledging 6.

In practice, this improved hood ledging construction has been found to be very much more efficient than the hitherto used soldered ledging, and furthermore, it has been found that the radiator may be constructed therewith at a very considerably reduced cost.

What I claim is:

In an automobile radiator, the combination with an inner radiator frame, of an outer frame inclosing the said inner frame, and the said outer frame being formed from sheet metal and having its rear edge rolled or pressed to form a hood ledging and stiffening bead, which latter integrally connects

said ledging to the said outer frame, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM DIETZ.

Witnesses:

H. A. McCORD,
J. B. KENDALL.