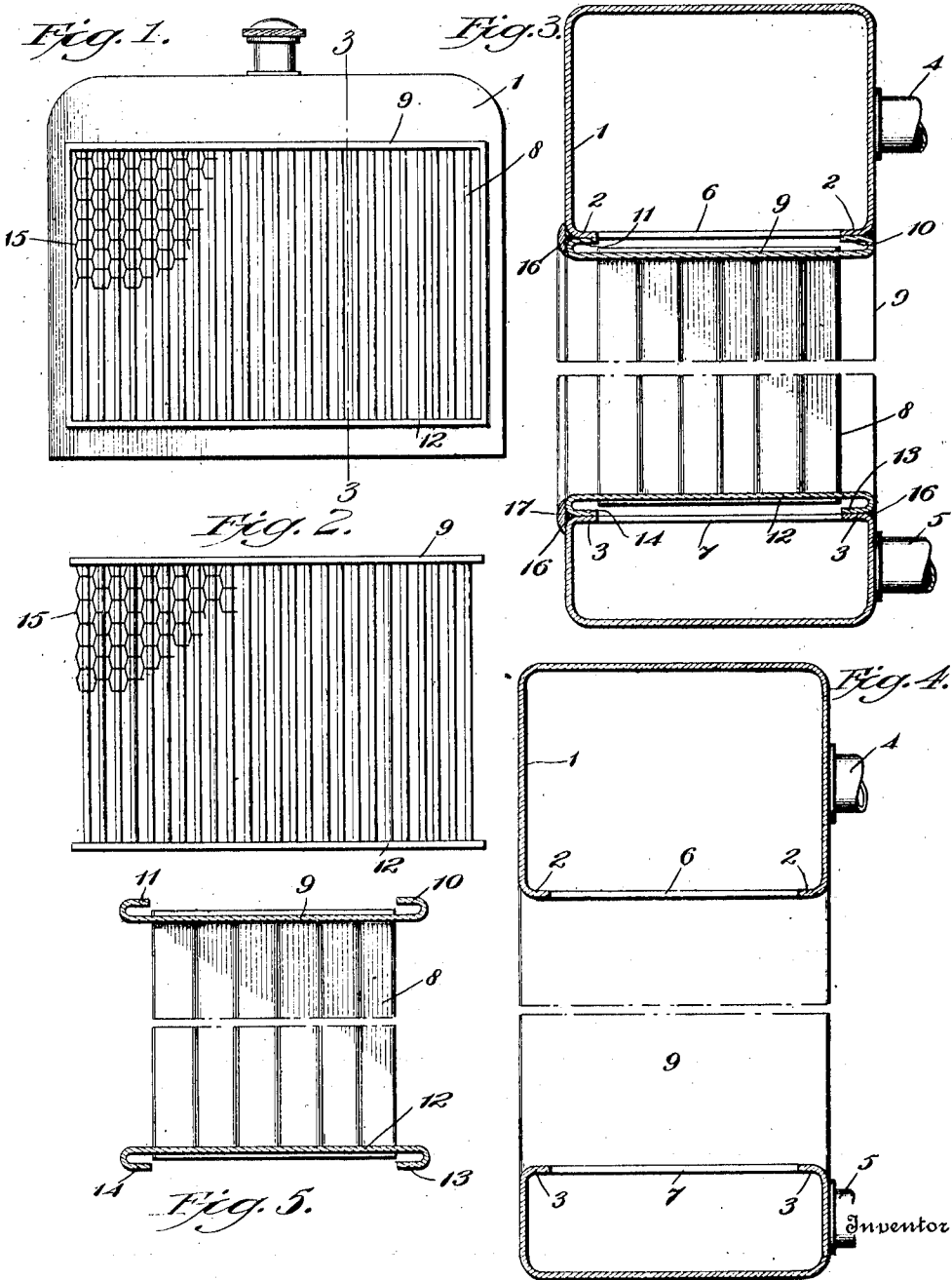


E. C. F. STREICHERT.
RADIATOR.
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1,053,546.

Patented Feb. 18, 1913.



Witnesses
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EMIL CARL FRIEDRICH STREICHERT, OF LOCKPORT, NEW YORK, ASSIGNOR TO THE
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RADIATOR.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EMIL CARL FRIEDRICH STREICHERT, a subject of the Emperor of Germany, residing at Lockport, in the county of Niagara and State of New York, have invented certain new and useful improvements in 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 improvements in radiators, and it consists in the constructions, combinations and arrangements herein described and claimed.

The object of my invention is to provide a strong and inexpensive radiator construction in which the water tubes and cellular air passages can be readily inserted as a unit and firmly secured in position.

In the accompanying drawings forming a part of this application, and in which similar reference symbols indicate corresponding parts in the several views:—Figure 1 is a diagrammatic front elevation, illustrating one embodiment of my invention, a portion of the cellular air-passage structure being indicated; Fig. 2 is a similar view of the radiator core or unit comprising the water tubes and air passages carried by upper and lower header plates; Fig. 3 is a section on the line 3—3 of Fig. 1, with the cellular air-passage structure omitted; Fig. 4 is a similar sectional view, with the radiator core or unit omitted; and Fig. 5 is a section of the radiator unit shown in Fig. 3.

Referring to the drawings, 1 indicates a tank provided with spaced flanges 2 and 3 curved inwardly from its front and rear walls to constitute parallel seats for firmly supporting the radiator core in position; said tank being provided with an inlet 4, and an outlet 5.

A series of water tubes 8 are secured to upper and lower header plates 9 and 12, which latter have their front and rear edges curved outwardly and extending parallel to said plates to constitute resiliently-supported flanges 10, 11, 13 and 14 spaced therefrom; any usual cellular air-passage structure 15 being also supported between the header plates. This provides an improved

construction, in which the resiliently-supported flanges of the header plates are adapted to be readily inserted between the spaced curved portions of the front tank flanges 2 and 3, and to maintain a strong clamping pressure on said tank flanges for firmly supporting the radiator unit in position. The radiator core can be efficiently locked in position by soldering the adjacent curved flange portions of the tank and radiator core, as at 16, and such solder may be ornamented with a border 17 or finished in any other desired manner.

The water admitted at 4 passes through the space 6 between the upper tank flanges to the tubes 8, from which it is delivered through the space 7 between the lower tank flanges and discharged through the outlet 5.

I claim:—

1. In a radiator, the combination of a tank provided with spaced flanges curved inwardly from its front and rear walls to constitute parallel seats, a series of water tubes, and header plates secured to said tubes and having their front and rear edges curved outwardly and extending parallel to the plates to constitute resiliently-supported flanges spaced from said plates, said resiliently-supported flanges being adapted to be readily inserted between the spaced curved portions of said front tank flanges and to maintain a strong clamping pressure on said seats.

2. In a radiator, the combination of a tank provided with spaced flanges curved inwardly from its front and rear walls to constitute parallel seats, a series of water tubes, header plates secured to said tubes and having their front and rear edges curved outwardly and extending parallel to the plates to constitute resiliently-supported flanges spaced from said plates, said resiliently-supported flanges being adapted to be readily inserted between the spaced curved portions of said front tank flanges and to maintain a strong clamping pressure on said seats, and means for securing said resiliently-supported flanges in position.

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

EMIL CARL FRIEDRICH STREICHERT.

Witnesses:

HALLEL NAVRON,
N. GOULD ALLEN.