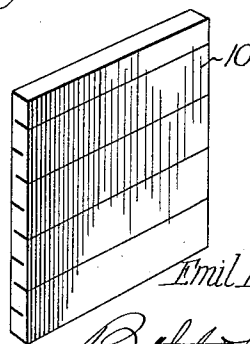
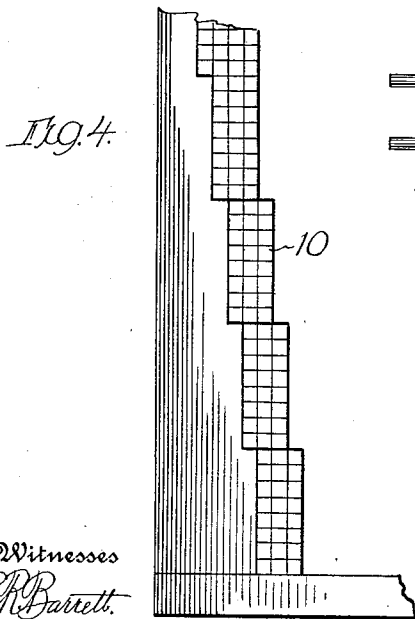
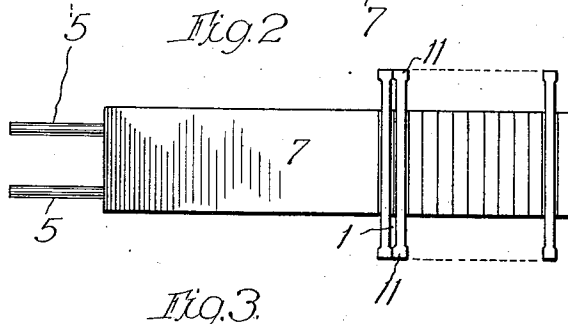
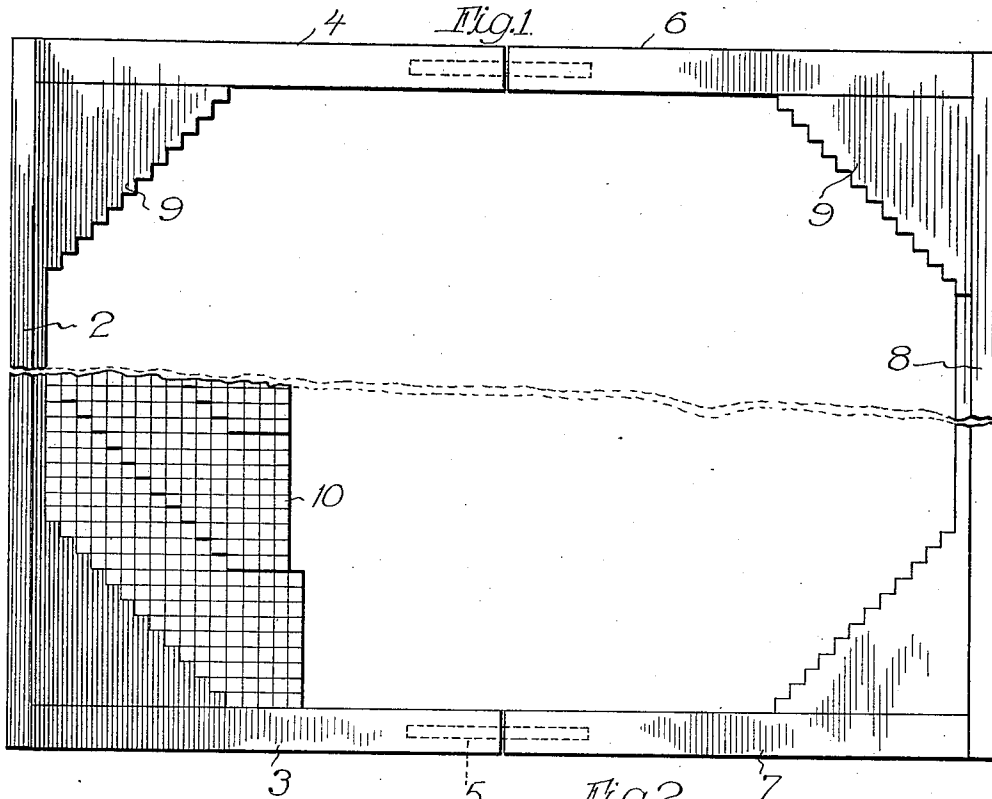


E. K. F. STREICHERT.
 RADIATOR ASSEMBLING DEVICE.
 APPLICATION FILED JAN. 14, 1914.

1,096,068.

Patented May 12, 1914.



Witnesses
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UNITED STATES PATENT OFFICE.

EMIL K. F. STREICHERT, OF DETROIT, MICHIGAN.

RADIATOR-ASSEMBLING DEVICE.

1,096,068.

Specification of Letters Patent.

Patented May 12, 1914.

Application filed January 14, 1914. Serial No. 812,057.

To all whom it may concern:

Be it known that I, EMIL K. F. STREICHERT, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Radiator-Assembling Devices, of which the following is a specification, reference being had therein to the accompanying drawings.

In assembling radiators that are built up of series of plates arranged to form a cellular cooling section in which the transverse walls of the several sections are alined in a completed structure so as to form a substantially continuous fin from side to side of the radiator or are otherwise arranged in definite relation, it is desirable to so dispose the parts, where the contour of the radiator is other than rectangular, in such manner as to avoid cutting the margins of the assembled cellular section or otherwise trimming it for mounting in the exterior frame.

The invention relates to an assembling frame for securing the cooling section of a radiator and holding it while it is being soldered or brazed, the frame being so disposed as to permit of the formation of a section of any outline desired while at the same time the tube forming plates are maintained in proper alinement.

The invention consists in the matters hereinafter set forth and more particularly pointed out in the appended claim.

In the drawings, Figure 1 is a plan view, partially broken away, of a frame that embodies features of the invention; Fig. 2 is a view in detail of one section thereof showing the method of its operation; Fig. 3 is a view in detail of a form of radiator section that may be held by the frame; and Fig. 4 is a view showing a variation of the frame where a slightly inclined side is required in the completed radiator.

The device is herein shown in condition for use with a cellular section having rectangular openings, the cells of which are formed by plates folded on themselves as indicated in Fig. 3, and off-set at their ends as indicated in Fig. 2 to produce the desired upright water passages shown by the space indicated at 1. The frame itself consists of

two parts one having a side member 2, an inwardly extending bottom member 3 and a top member 4, suitable dowel pins 5 extending from the extremities of the members 3 and 4 and entering guide sockets in the companion members 6 and 7 of the mating part, such members being joined by the end member 8. Or other guiding means may be used. Spacing blocks 9 are included in the frame and have serrated margins whose strips correspond in height to the height of the cells of a radiator tube such as indicated at 10. Or the steps of the serrated edges may be multiples in height of this cell height as indicated in Fig. 4 where it is desired to produce a slightly inclined margin. The steps are equal in width to the width of the tube 10. The frame itself is narrower than the cooling section if it is desired to clamp it so that the marginal portions 11 of the latter project a sufficient distance to be readily dipped for soldering or manipulated for brazing.

In use the frame is put together loosely and the radiator built up by inserting the requisite number of tubes to obtain the section, the tubes being cut to length and filling the frame completely. By pressing the frame together and clamping it there by any suitable means the built up section is readily handled for soldering or brazing. As a result of the use of the frame the contour of the cellular portion of the radiator is obtained without cutting away any portion thereof after it has been soldered, thus saving material and labor and at the same time producing a cooling section that is more regular in outline than can be obtained by the usual method. The frame also constitutes a ready means for carrying and holding the section during the soldering and brazing process. The frame is also available for holding the parts of the cellular section together, of a radiator that is formed of tubes or water circulating members of other design than those herein illustrated, by appropriate arrangement of the serrated margins.

Obviously, changes in the details of construction may be made without departing from the spirit of my invention and I do not care to limit myself to any particular

form or arrangement of parts as set forth in the appended claim.

What I claim is:—

5 An assembling frame for automobile cooling sections comprising oppositely disposed parts having serrated inner margins, and guiding means for maintaining the parts in alinement, the serrations of the margins be-

ing arranged to hold the elements of an assembled radiator section in alinement. 10

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

EMIL K. F. STREICHERT.

Witnesses:

ANNA M. DORR,

C. R. STICKNEY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."