Jan. 10, 1928.

1,655,971

E. J. PFLUG

AUTOMOBILE RADIATOR CORE

Filed June 9, 1927

FIG. 1

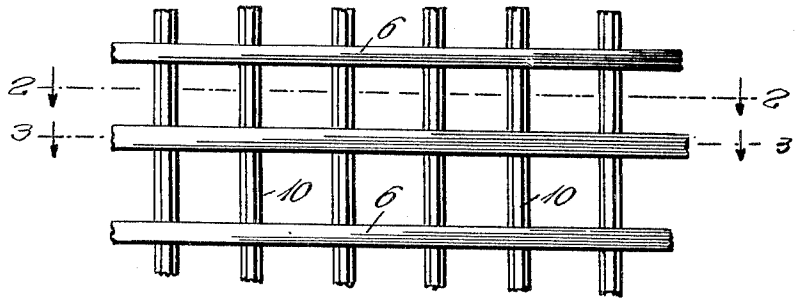


FIG. 2

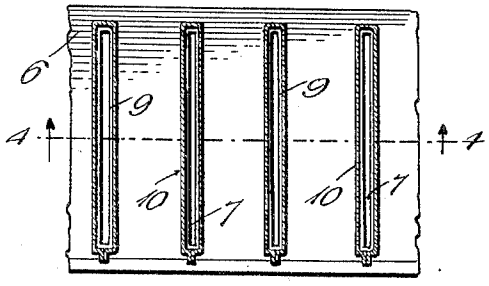


FIG. 3

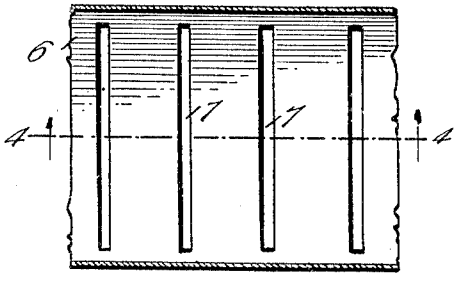


FIG. 4

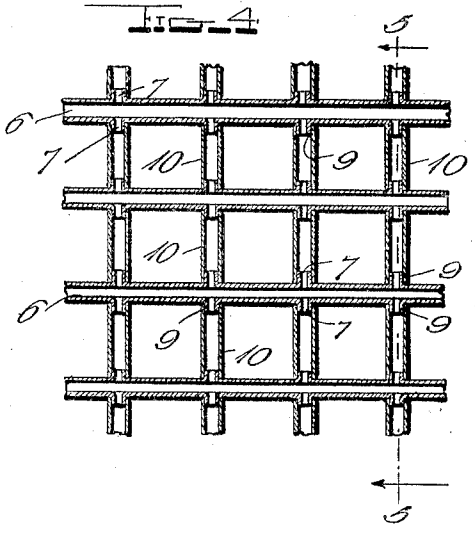
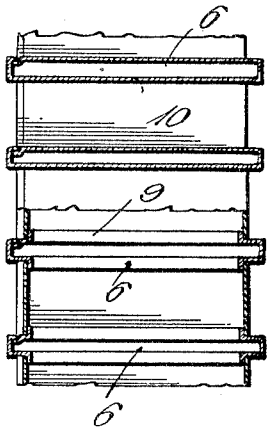


FIG. 5



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Patented Jan. 10, 1928. 1,655,971

UNITED STATES PATENT OFFICE.

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AUTOMOBILE RADIATOR CORE.

Application filed June 9, 1927. Serial No. 197,673.

The invention relates to improvements in radiator cores of the honey-comb type and it aims to provide a new and improved construction which gives more cooling space than the ordinary honey-comb radiators, and is more accessible for making repairs.

With the foregoing in view, the invention resides in the novel subject matter hereinafter described and claimed, the description being supplemented by the accompanying drawings.

Fig. 1 is a fragmentary elevation of a portion of a core constructed in accordance with my invention.

Figs. 2 and 3 are horizontal sectional views on the correspondingly numbered lines of Fig. 1.

Fig. 4 is a vertical sectional view on line 4—4 of Figs. 2 and 3.

Fig. 5 is a vertical transverse section on line 5—5 of Fig. 4.

In constructing the core, I make use of a plurality of flat tubes 6 formed of sheet metal and disposed in spaced parallel relation, said tubes being parallel both longitudinally and transversely. These tubes are formed with longitudinally spaced, transverse slots 7 in their upper and lower sides, and continuous vertical flanges 9 are integral with said sides around said slots, said flanges projecting outwardly from the tubes as shown most clearly in Fig. 4.

Interposed between the tubes 6 and positioned at right angles thereto, are a number of short, flat, metal tubes 10 whose ends snugly receive the flanges 9 and abut the opposite sides of said tubes 6. The tubes 6 and 10 may be soldered together only at the ends of the latter if desired, but after assembling the proper number of tubes to form a complete core, said tubes are preferably held in assembled relation and the entire core structure then dipped in molten lead or other desired metal. Thus, the entire core will be coated with this metal and all seams will be tightly sealed.

The core may be connected with headers in any desired manner, preferably by soldering, and the complete radiator will be unusually efficient as it presents a large cooling surface and permits circulation of the water in numerous directions, instead of only allowing vertical circulation as customary. Moreover, the structure even though of honeycomb formation, may be easiy repaired whenever necessary.

I claim:

In a radiator core, a plurality of flat sheet metal tubes disposed in spaced parallel relation and having transverse slots in their opposite sides, said sides being provided with continuous outstanding flanges around said slots, and short flat sheet metal tubes interposed between the first named tubes and secured thereto, the aforesaid flanges being snugly received in the ends of said short tubes.

In testimony whereof I have hereunto affixed my signature.

EDWARD J. PFLUG.