No. 855,373. PATENTED MAY 28, 1907.

J. A. WILSON, JR.

# RADIATOR FOR AUTOMOBILES.

APPLICATION FILED SEPT. 7, 1906.

Fig. 1.

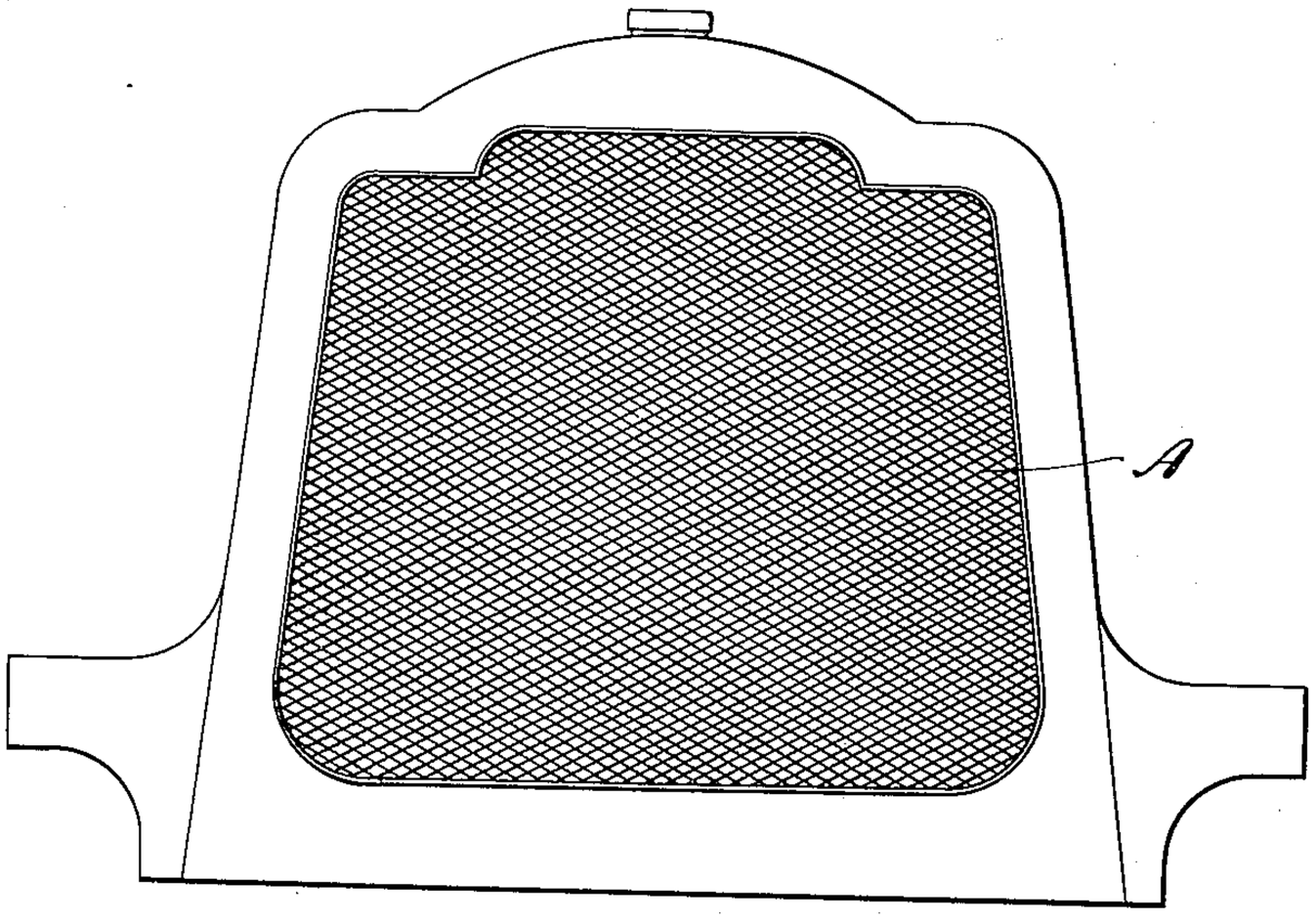



Fig. 3.

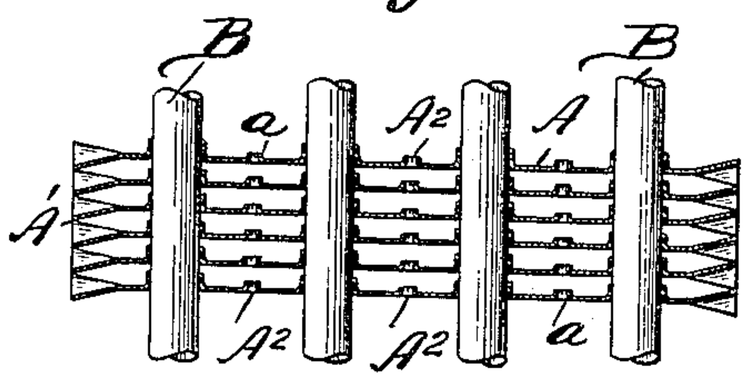
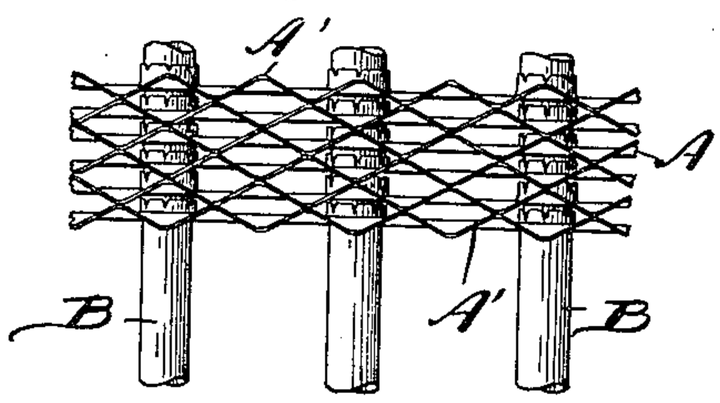



Fig. 2.



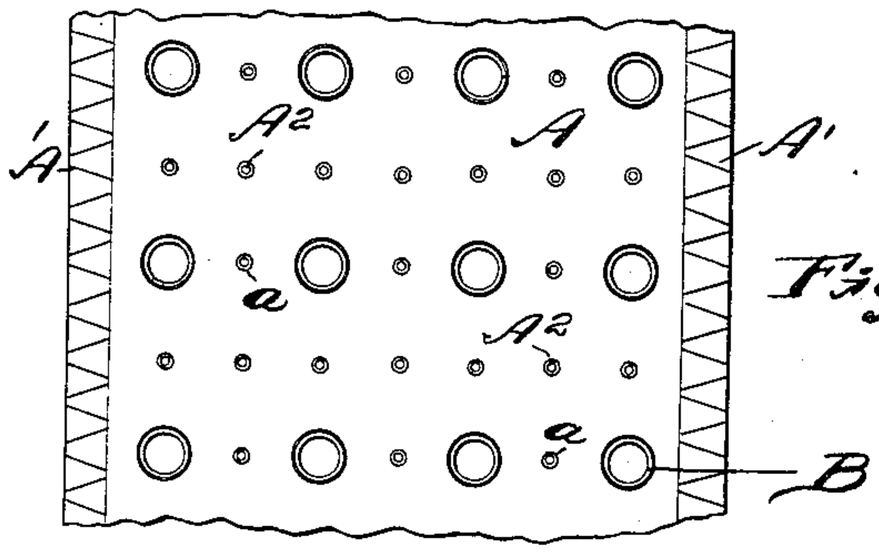




Fig. 4.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## RADIATOR FOR AUTOMOBILES.

No. 855,373. Specification of Letters Patent. Patented May 28, 1907.

Application filed September 7, 1906. Serial No. 333,615.

*To all whom it may concern:*

Be it known that I, JOHN A. WILSON, Jr., a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Radiators for Automobiles; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improvement in radiators for use in automobiles shown in the accompanying drawings and more particularly pointed out in the following specification and claims.

In the drawings: Figure 1 is a front elevation of the radiator; Fig. 2 is a detail view showing the formation of the outer edge of the plate surrounding the tubes; Fig. 3 is a sectional view of a detail at right angles to Fig. 2, showing how the plates support each other by means of their crimped ends; and, Fig. 4 is a plan view of a portion of one of the plates.

The object of this improvement consists in so constructing the radiating fins or disks, surrounding the pipes of the radiator, that they not only afford added radiating surface, but serve to bind the tubes together, at the same time supporting each other, while their peculiar construction provides a perfect circulation between the plates and around each tube.

Referring to the letters of reference shown in the drawings, A indicates the radiating plates arranged horizontally and perforated for the passage of the tubes B of the radiator.

In order that the disks may mutually support each other and be separated sufficiently to afford proper circulation for the air, the plates are crimped at their outer edges, as shown at A′, the apex of each crimp contacting with what might be termed the inverted apex of the contiguous plate, at which point, they may be secured together if desired.

$A^2$ indicates perforations formed in the plates through which the air circulates and surrounding which is the wall or "bur" *a*, serving to deflect the air as it circulates between and through the plates or disks.

Having thus described my invention, what I claim is:—

In a radiator, a plurality of independent pipes, and a plurality of radiating plates embracing the pipes to bind them together, the plates having oppositely disposed crimped edges, the crimped edges of each plate engaging with the corresponding crimped edges of the adjacent plates, whereby each plate is spaced throughout its surface intermediate the crimped edges from the corresponding adjacent plates.

In testimony whereof, I sign this specification in the presence of two witnesses.

JOHN A. WILSON, JR.

Witnesses:

S. E. THOMAS,

HENRY E. VILLEROT.