

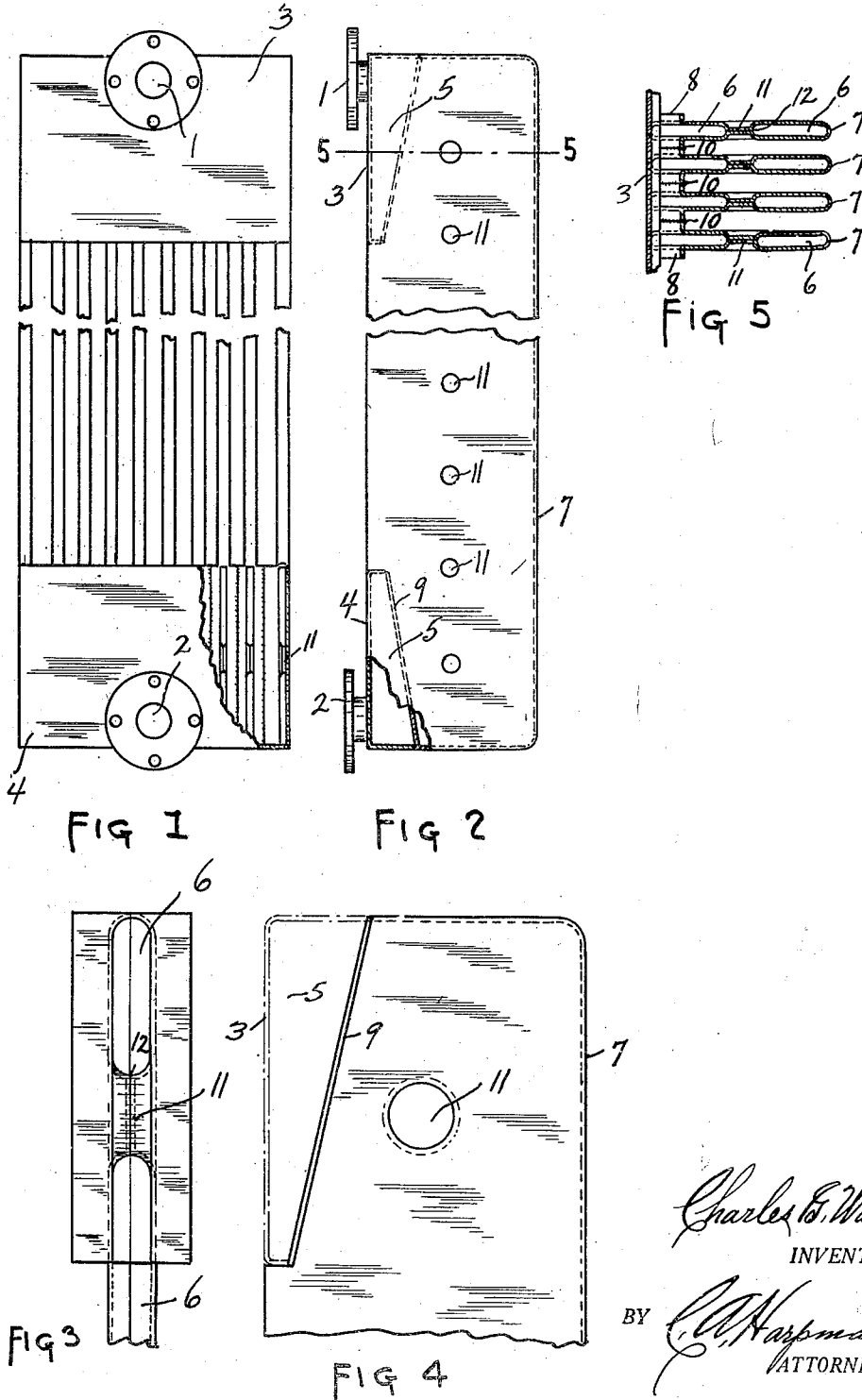
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RADIATOR FOR TRANSFORMER CASINGS

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RADIATOR FOR TRANSFORMER CASINGS

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This invention relates to radiators, and most particularly to radiators in connection with electric transformer casings.

An object of the invention is to provide a construction allowing for free passage of air about the radiator elements in both a horizontal and vertical direction.

Another object is to provide a device which employs a very thin cooling element, thus using a smaller number of said cooling elements than in devices commonly used for this purpose.

A still further object is to provide a device of this character having a header at both top and bottom in which one side of each header is formed from an out-turned portion of a sheet of metal used in making each of the radiator elements.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, can be made within the scope of what is claimed, without departing from the spirit of the invention.

The invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a vertical view of the device with parts broken away.

Figure 2 is a vertical side view of the device with the side broken away.

Figure 3 is a fragmentary enlarged detailed view of Figure 1.

Figure 4 is a fragmentary enlarged detailed view of Figure 2.

Figure 5 is a cross section taken on line 5—5 of Figure 2.

By referring to the drawings it will be seen that I have provided a radiator provided with an intake 1, and an outlet 2, in order to provide for a circulation of a cooling medium, desirably of oil. This radiator is constructed with an upper header 3 and a lower header 4. These headers are similar in construction. By referring to Figure 2 it will be seen that these headers 3 and 4 are provided each with a wedge shaped compart-

ment 5. To these headers 3 and 4 there is attached a plurality of flattened tubular elements 6, which open up into the wedge shaped compartments 5. These flattened tubular elements 6 are each formed of a single sheet of metal bent at point 7, and having out-turned portions 8 of a sheet of metal used in forming the compartments 6. Where the flattened tubular elements 6 join the compartments 5 along a line indicated as 9, the out-turned portions 8 are welded together at points 10, thereby forming a tight rear portion for headers 3 and 4.

In order to provide for greater strength and to prevent the flattened tubular elements 6 from bulging out, there are provided oppositely disposed indentations 11 which are welded at a meeting point at 12.

What I claim is:

1. In a device of the class described, a plurality of sheet metal flattened tubular elements spaced apart, a plurality of indentations oppositely disposed formed in said elements, said indentations welded at a common meeting point, upper and lower headers connected to said elements, out-turned extended portions formed on said elements, said out-turned portions placed adjacent to each other and welded at meeting edge in order to make a continuous back wall for each upper and lower header portion, an inlet and outlet for said device whereby a cooling fluid may be circulated therethrough, substantially as described.

2. In a device of the class described, a plurality of flattened tubular elements spaced apart, upper and lower headers for said flattened tubular elements, outwardly extended portions from the flattened tubular elements, said outwardly extended portions having engaging welded edges in order that a rear portion be formed for said upper and lower headers, and an inlet and outlet placed on upper and lower headers, respectively.

In testimony whereof I affix my signature.

CHARLES G. WATSON.