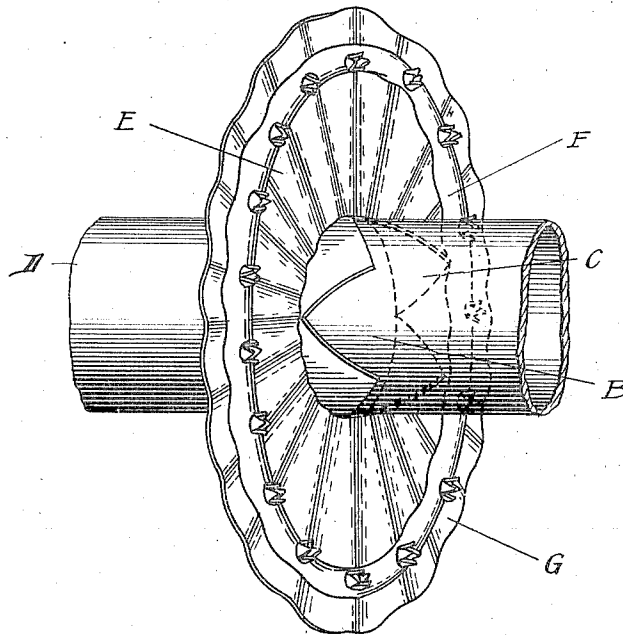


No. 821,698.

PATENTED MAY 29, 1906.

B. BRISCOE.
RADIATOR DISK.
APPLICATION FILED OCT. 17, 1904.



Witnesses
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UNITED STATES PATENT OFFICE.

BENJAMIN BRISCOE, OF DETROIT, MICHIGAN.

RADIATOR-DISK.

No. 821,698.

Specification of Letters Patent.

Patented May 29, 1906.

Application filed October 17, 1904. Serial No. 228,869.

To all whom it may concern:

Be it known that I, BENJAMIN BRISCOE, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Radiator - Disks, of which the following is a specification, reference being had therein to the accompanying drawing.

The invention relates to radiating disks or flanges intended for increasing the amount of radiating-surface of the tubular water-cooler.

The invention consists in the peculiar construction of said disk, as hereinafter set forth.

It is essential in the construction of coolers of this type, first, that sufficient radiating-surface be provided to disperse the heat, and, secondly, that this radiating-surface should have a good conducting contact with the tube through which the hot water is passed. It is also desirable that the radiating disks or flanges should be properly spaced from each other to permit of the circulation of air therebetween and that they should be sufficiently rigid to retain their shape. To fulfil these necessary conditions, my improved construction is one which permits of the arrangement of a large amount of radiating-surface in a comparatively small space, each radiating-disk being secured in position and adapted to permanently retain its shape, and a good conducting contact-bearing being provided between each disk and the conduit.

In the formation of my construction of radiator-disks, which I have shown in perspective in the accompanying drawing, a sheet-metal blank is fashioned by severing and stamping at the central portion thereof, so as to form a circular aperture B with a series of laterally - projecting segmental points C, adapted to snugly fit the outer surface of the water-conduit, such as D. Surrounding this central aperture B is a zone of the disk which is radially corrugated, as at E, and surrounding this is an annular bead or rib F. This bead, together with the corrugations in the portion E, serves to stiffen the disk, so that it cannot be easily bent out of

shape, while the segmental points C hold the disk in a plane at right angles to the axis of the conduit. The corrugations E and bead F also serve to increase the amount of radiating-surface within a given space, and, furthermore, by providing a roughened surface over which the air-current passes greater efficiency is obtained in dispersing the heat than by the use of a plane smooth surface.

Outside of the annular bead F the disk may be provided with a circular corrugated portion G.

In operation the heat of the water passing through the conduit D is conducted from the walls of said conduit first to the points C and then to all portions of the surrounding disk. A plurality of these disks are arranged in the well-known manner in such relation to each other as to provide only a sufficient air-space between for the passage of the cooler and air-current, and this in traveling over the corrugations and in striking against the annular beads will absorb the heat and carry it away.

In order to further increase the efficiency of the radiator-disks, I preferably strike out the metal in the bead F at a series of points so as to form apertures through the disk, through which the air may circulate and also projecting points against which the air-current will impinge in circulating between the disks, such a construction being illustrated in the drawing.

What I claim as my invention is—

A radiator-fin comprising a sheet-metal disk having its central portion severed and struck out to form bearings for engagement with the conduit, a crimped or corrugated zone surrounding the central aperture, a bead surrounding said crimped or corrugated zone, the said bead having a series of apertures formed therein, the metal around said apertures being struck out to form projecting points.

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

BENJAMIN BRISCOE.

Witnesses:

J. A. BRISCOE,

FRANK BRISCOE.