S. W. ZENT.

COOLING DEVICE FOR ENGINE CYLINDERS.

APPLICATION FILED FEB. 15, 1909.

927,702. Patented July 13, 1909.

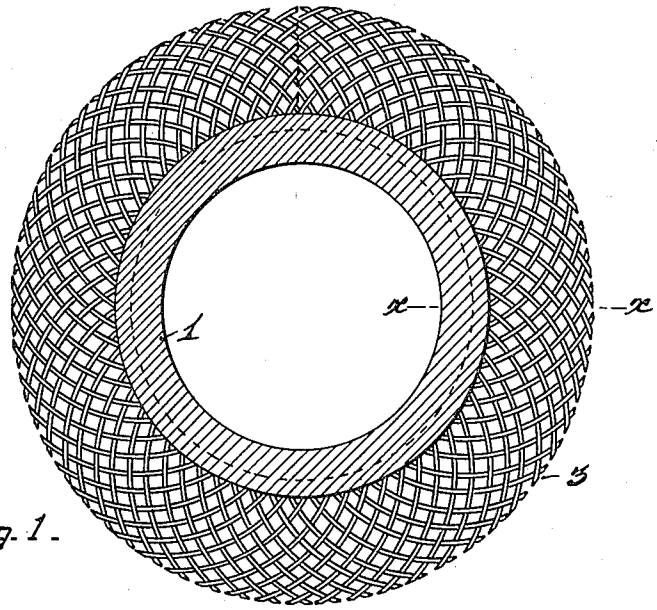


Fig. 1.

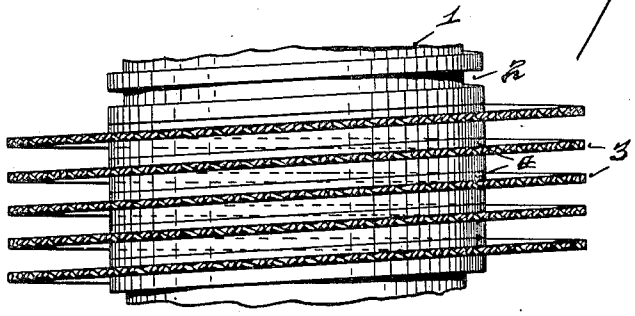


Fig. 2.

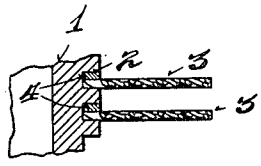


Fig. 3.

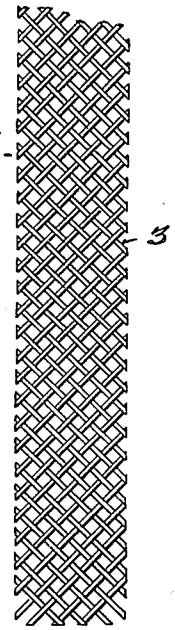


Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

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COOLING DEVICE FOR ENGINE-CYLINDERS.

No. 927,702. Specification of Letters Patent. Patented July 13, 1909.

Application filed February 15, 1909. Serial No. 477,970.

To all whom it may concern:

Be it known that I, SCHUYLER W. ZENT, a citizen of the United States, residing at Miamisburg, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Cooling Devices for Engine-Cylinders, of which the following is a specification.

My invention relates to heat radiating means, primarily employed for cooling or radiating the heat from the cylinder of an explosive engine.

The object of my invention is to provide an explosive engine cylinder with reticulated material projected longitudinally and spirally around the outside periphery.

Another object of my invention is to provide cooling means applied to the cylinder of an explosive engine with a spiral air passage around said cylinder.

The features of my invention are more fully set forth in the description of the accompanying drawings, forming a part of this specification, in which:—

Figure 1 is a horizontal section through an engine cylinder with my invention applied thereto. Fig. 2 is a side elevation of a portion of the engine cylinder. Fig. 3 is a section on line x, x Fig. 1. Fig. 4 is a plan view of a portion of the strip of reticulated material.

This invention relates to an improvement upon a former patent issued to Lewis D. Zent, May 8, 1906, No. 820,278, for improvement in cooling device for engine cylinders. Engines cooled in this manner are primarily employed in automobiles in which a fan is used to force currents of air against the engine cylinders, assisting in carrying off the heat radiating from the engine. In the construction disclosed, it is possible to drive these air currents completely around the periphery of the cylinder instead of only against a portion, enabled by spirally securing the gauze around the engine cylinder, whereby a continuous passage is formed around the entire cylinder between the strips.

1 represents an engine cylinder provided with a spiral groove 2, extending the entire length of the cylinder.

3 represents a strip of woven wire fabric which is inserted within said groove and secured therein, preferably, by calking with a strip 4 of softer metal than the engine cylinder, such as copper, in the groove along the side of the woven wire strip. The mounting of the woven wire strip with the wire cut on the bias and in a continuous strip spirally around the outer periphery of the engine cylinder, allows every wire in the strip to lead from the cylinder wall, providing greater efficiency and enabling a free circulation of air around the entire circumference of the cylinder. The spiral air passage between the continuous spiral radiating strip is highly advantageous, irrespective of the wires with reference to the radii of the cylinder.

Having thus described my invention, I claim:—

1. A cylinder for an explosive engine, in combination with a strip of woven wire cut on the bias and secured spirally around the outer periphery of the cylinder with each wire of the strip leading from the cylinder and in contact therewith, substantially as described.

2. A cylinder for an explosive engine, in combination with reticulated material cut on the bias and secured around the outer periphery of the cylinder with one end of every strand in contact with the cylinder and extended outwardly therefrom, substantially as described.

3. A cylinder for an explosive engine, in combination with reticulated material cut on the bias and secured spirally to the outside periphery of the cylinder with one end of every strand in contact with the cylinder and extended outwardly therefrom, substantially as described.

In testimony whereof, I have hereunto set my hand.

SCHUYLER W. ZENT.

Witnesses:
RUTH E. HUGHES,
WM. R. HUGHES.