

G. F. LYNCH.
Covering for Steam Boilers.

No. 229,620.

Patented July 6, 1880.

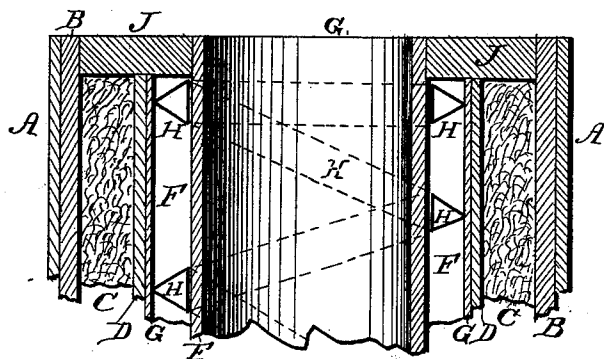


Fig. 1.

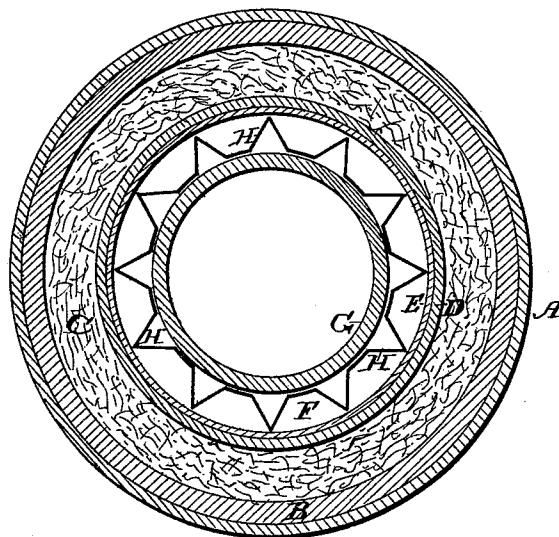


Fig. 2.

Attest:
J. B. Brock
Jno. Bowles

Inventor:
Geo. F. Lynch.
by Jas. B. Erwin,
Atty.

UNITED STATES PATENT OFFICE.

GEORGE F. LYNCH, OF MILWAUKEE, WISCONSIN.

COVERING FOR STEAM-BOILERS.

SPECIFICATION forming part of Letters Patent No. 229,620, dated July 6, 1880.

Application filed November 26, 1878.

To all whom it may concern:

Be it known that I, GEORGE F. LYNCH, of the city and county of Milwaukee, and State of Wisconsin, have invented a new and Improved Covering for Steam Boilers and Pipes, Water-Pipes, Refrigerators, &c.; and I do hereby declare that the following is a full and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a sectional view.

Letter G represents the pipe to be covered; H, an angular spirally-wound wire, placed diagonally or straight around the surface to be covered; E, a sheet metal or any other substance indestructible by heat, placed over or around said wire, forming, when completed, the space F for non-circulating air.

D is a heavy paper coated with cement, placed over the sheet metal and lapped and cemented to hold it together.

C is a hair-felting, or any other body that is a good non-conductor, placed over the paper and fastened by wire or other means to keep it secure.

B is another paper, prepared with a coating of cement or heavy paint, and is placed over the felting and lapped and cemented to hold it on.

A is a canvas, made impervious to water by cement or paint coating placed outside, and on this paper lapped and cemented and finished, if desirable, by paint or varnish.

J represents the filling of cement, placed at the end of all, to seal up the air-spaces and form a finish on the same.

The angular spirally-wound wire and sheet metal, being formed and put on, will not be affected by expansion and contraction. Therefore it may be used to form a non-circulating or dead-air space on highly-heated pipes or surfaces under a covering of any fire-proof non-conducting cement or coating, which, if placed on the pipe directly, would be cracked and thrown off by expansion and contraction.

Fig. 2 represents an end view with letters corresponding.

Having thus described my invention, I do not claim a non-circulating or dead-air chamber of felt, paper, canvas, and cement, or either of them, broadly, for the prevention of the radiation of heat from boilers, steam-pipes, &c., as I am aware that they are not new. Neither do I confine or limit myself to either the peculiar relative arrangement of felt, paper, canvas, and cement, or to the peculiar curves or angles given to the wire which I use to support the exterior sheet-metal walls of the dead-air chamber, as neither constitutes the essence of my invention; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. The device for supporting the exterior walls of a non-circulating or dead-air chamber for steam pipe and boiler covering, consisting of one or more series of corrugated wire, so bent that the extreme points of the angles or curves of the wire serve to support the external walls of the space in their proper position around the boiler or pipe, all substantially as specified.

2. In coverings for boilers and steam-pipes, the device for forming a dead-air chamber, consisting of a sheet-metal plate, E, and one or more series of corrugated or angular spirally-wound wires arranged to sustain the sheet-metal plate, all substantially as and for the purpose specified.

3. The steam-pipe covering consisting of paper, cement, canvas, and hair-felt, sheet-metal plate E, and corrugated supporting-wire H, all substantially as and for the purpose specified.

GEO. F. LYNCH.

Witnesses:

T. M. HIRSCHBERG,
D. L. HUGHES.