L. S. ROWELL.

Tire Heating-Furnaces.

No. 149,341. Patented April 7, 1874.

Fig. 1.

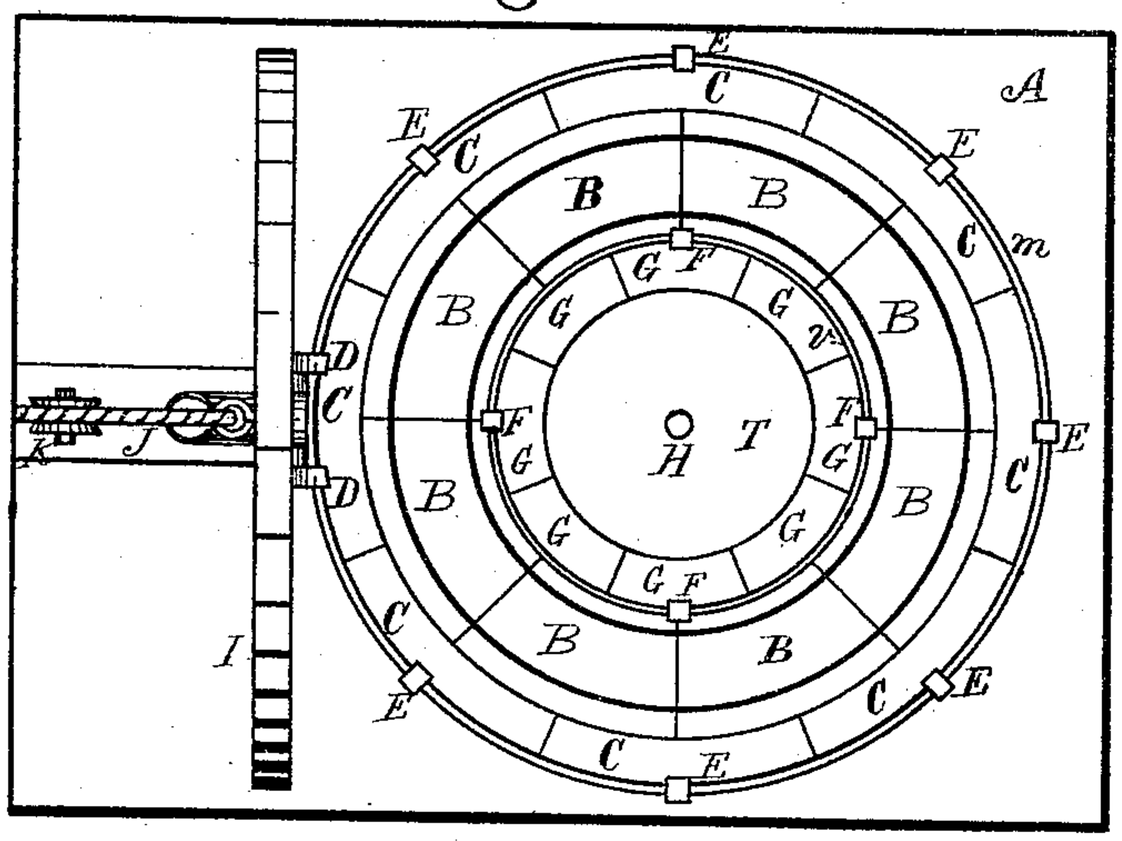


Fig. 2.

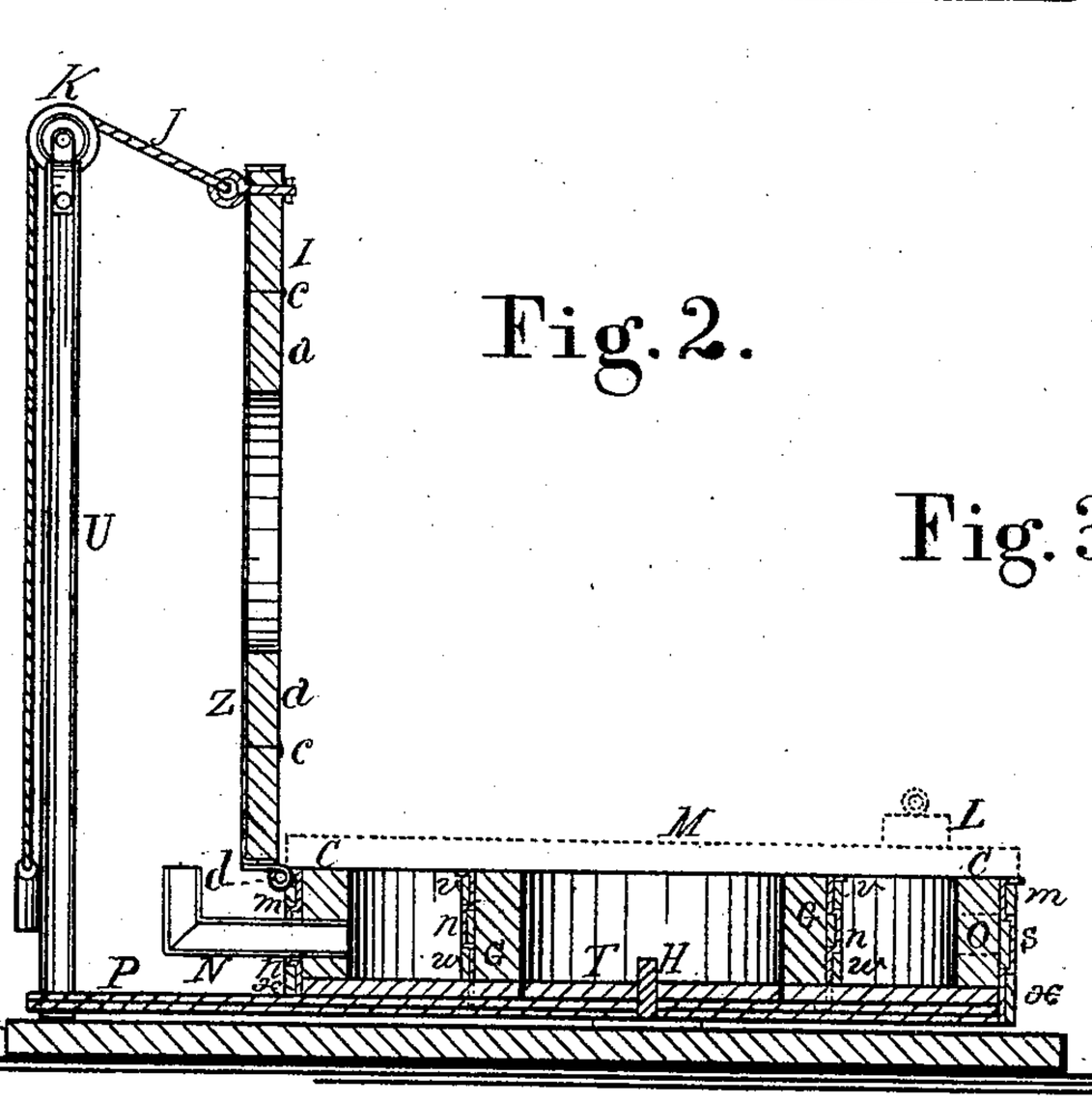
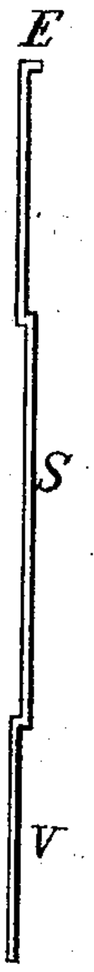


Fig. 3.



Witnesses,

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UNITED STATES PATENT OFFICE.

LYMAN S. ROWELL, OF CHEBANSE, ILLINOIS.

IMPROVEMENT IN TIRE-HEATING FURNACES.

Specification forming part of Letters Patent No. **149,341**, dated April 7, 1874; application filed February 18, 1874.

To all whom it may concern:

Be it known that I, LYMAN S. ROWELL, of Chebanse, in the county of Iroquois and State of Illinois, have invented an Improvement in Tire-Heating Furnaces, of which the following is a specification:

The nature of the present invention is as follows: The walls of the circular furnace are composed of brick, set on end on a bed or foundation, and held together by bands or hooks, or both, and covered with a lid to confine the heat. One side of the furnace is provided with a draft-flue, and the other side with a smoke-flue. The lid is balanced and held in any given position by a pulley and weighted cord, and is held to the walls of the furnace by a suitable weight, and the lid is hung by eye-clamps of novel construction.

In the drawings, Figure 1 is a plan or top view of my improvement in tire-heating furnaces; Fig. 2, a sectional elevation thereof; Fig. 3, an enlarged elevation of one of the clamps which hold the bands in place.

A represents a foundation of wood or other material, on which my improvement in tire-heating furnaces rests. P represents the bottom of the furnace, which, in this case, is made of two thicknesses of boards or planks placed transversely to each other, and cut in a circular form to correspond with the form of the brick-work, said boards or planks being elongated at one end to support a post, U. An iron band, X, Fig. 2, is placed around the circular part of the bottom P, and fastened to it by nails or spikes, so that it will project above the said bottom and above the layer of brick or tile B, which cover the bottom and protect it from heat, a layer of cement or mortar being first put on the board to better attain that end. The outside wall of the furnace is formed in this case by a series of curved brick, C, whose lower ends rest on the tiles or brick B, and their outer sides bear against the lower band X, the joints being filled with cement or mortar to make the furnace fire-tight. After the wall is so laid, the ends V of clamps V S E are put between the band X, and fastened to the bottom P by nails, and then an upper band, *m*, is placed over the wall closely and locked in place by the upper ends E, so as to hold the mason-work firmly in position. The inner wall is composed of bricks G, set on the top of the tiles B, and they are held in place by clamps *n* and bands *w v*, similar in construction to the bands X *m* and clamps V S E.

The bands *n* may, if required, be put through the bottom P and fastened to it, and thus prevent the mason-work from becoming detached.

The lid I is formed by a disk of sheet metal, Z, which has bolted to it at *c c* fire-brick *a a*, said bricks being either drilled to receive the bolts or nails; or the latter may be put between the bricks, provided the nails or bolts have large heads to lap over the bricks. The iron periphery of the lid is provided with strap-eyes D, Fig. 1, which connect with eyes *d*, formed on the back set of clamps, so as to make hinges for the lid to swing on. To balance the lid I, a weighted cord or chain, J, is fastened to it, and runs over a pulley on the top of the standard U; and to hold the lid flat on the walls of the furnace, a weight, L, (dotted lines,) is employed. To enable the furnace to be set so as to bring the draft-flue (dotted lines) O to the wind, to secure a proper draft, the furnace is pivoted at H to the foundation A, so as to be turned in any direction. The tire is shown at *f f*. The fuel for heating them is put in between the walls G C, and the lid closed.

In the drawing, circular brick are shown in the walls, but ordinary building-brick can be used; however, a greater number will be required.

I have in the foregoing described a complete tire-heating furnace, the novelty of which is set forth in the claim.

I claim—

The tire-heating furnace composed of the walls G C, bottom P, bands X *m w v*, clamp S *n*, eye-clamp *d*, lid I, weighted cord J, and post, substantially as described.

LYMAN S. ROWELL.

Witnesses:

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