

P. W. CASSIL.

TIRE-HEATER.

No. 191,310.

Patented May 29, 1877.

Fig. 1

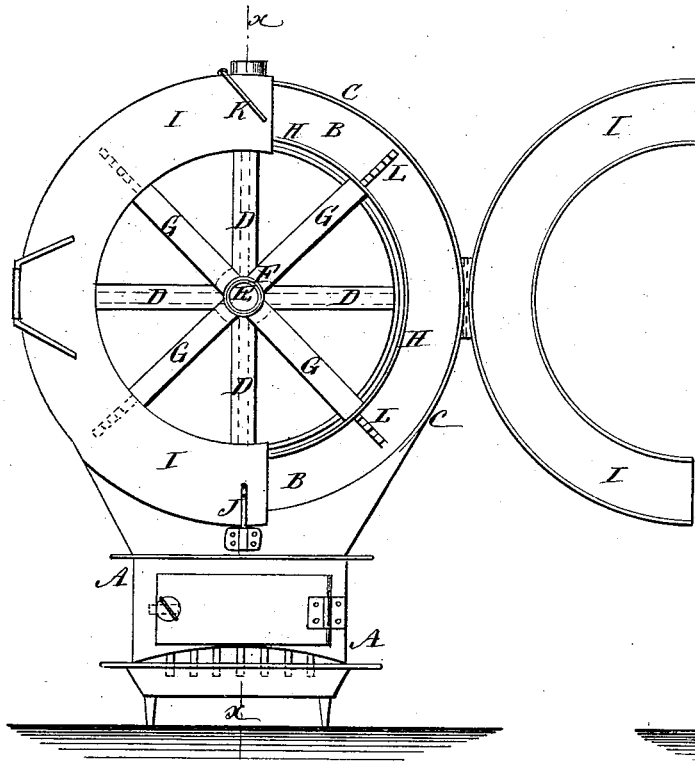


Fig. 2

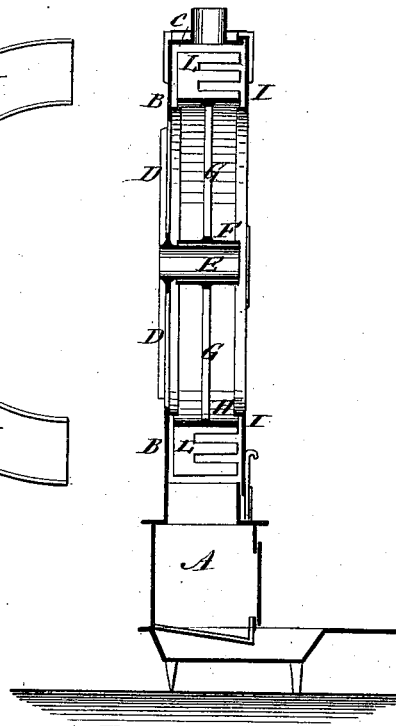


Fig. 3

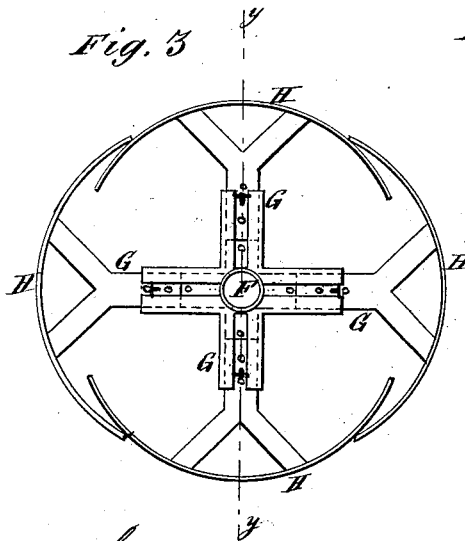
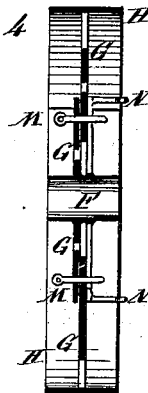


Fig. 4



WITNESSES:

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# UNITED STATES PATENT OFFICE.

PHILIP W. CASSIL, OF NEW ATHENS, OHIO.

## IMPROVEMENT IN TIRE-HEATERS.

Specification forming part of Letters Patent No. 191,310, dated May 29, 1877; application filed April 16, 1877.

*To all whom it may concern:*

Be it known that I, PHILIP WARD CASSIL, of New Athens, in the county of Harrison and State of Ohio, have invented a new and useful Improvement in Tire-Heater, of which the following is a specification:

Figure 1 is a front view of my improved tire-heater, one of the doors being shown open. Fig. 2 is a vertical section of the same, taken through the line *x x*, Fig. 1. Fig. 3 shows a modification of the same. Fig. 4 is a detail section, taken through the line *y y*, Fig. 3.

Similar letters of reference indicate corresponding parts.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

A represents the furnace or fire-box, to the top of which is secured the ring heating-chamber. The heating-chamber consists of the ring-plate B, having a ring-flange or rim, C, formed around its outer edge.

To the ring-plate B are attached the outer end of a number of arms, D, the inner ends of which meet in the center of the ring-plate B, and have a journal, E, attached to them.

The journal E may be hollow or solid, and upon it is placed a hub, F, to which are attached a number of radial arms, G, to the outer ends of which is attached a rim, H. The rim H fits against the inner part of the ring-plate B, and forms the inner wall of the heating-chamber.

The front of the heating-chamber is formed of two half-ring plates, I, which are hinged at the middle parts of their outer or convex edges to the outer rim C, so that they may be swung back to allow the tires to be readily put in and taken out. The doors I are secured in place, when closed, by bolts J, buttons K, or other convenient fastenings.

To the convex side of the inner rim H are attached slotted plates L, to serve as racks to receive the different-sized tires, and support them so that the fire may circulate all around them.

The rim H may be made in sections of such a length that their adjacent ends will overlap each other, as shown in Fig. 3, and the arms G may be made in two parts, overlapping and sliding upon each other, so that the rim H may be expanded or contracted as more or fewer tires are to be heated at a time, to economize fuel.

One part of the arms G should have its edges bent over to form grooves to receive the edges of the other part, and the two parts have a number of holes formed through them to receive the pins M by which they are secured in place when adjusted.

To the outer parts of the adjustable arms G are attached handles N for convenience in adjusting them.

By this construction, by turning the rim H all parts of the tires will be brought directly over the hottest part of the fire, so that the said tires will be heated and will expand evenly.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the racks L with the revolving inner rim H of a tire-heating chamber, substantially as herein shown and described.

PHILIP WARD CASSIL

Witnesses:

GEO. W. WILLIAMS,  
JAS. WILLIAMS.