No. 666,193. Patented Jan. 15, 1901.

I. HARVEY.

TIRE HEATER.

(Application filed Sept. 13, 1900.)

(No Model.)

Fig. 1.

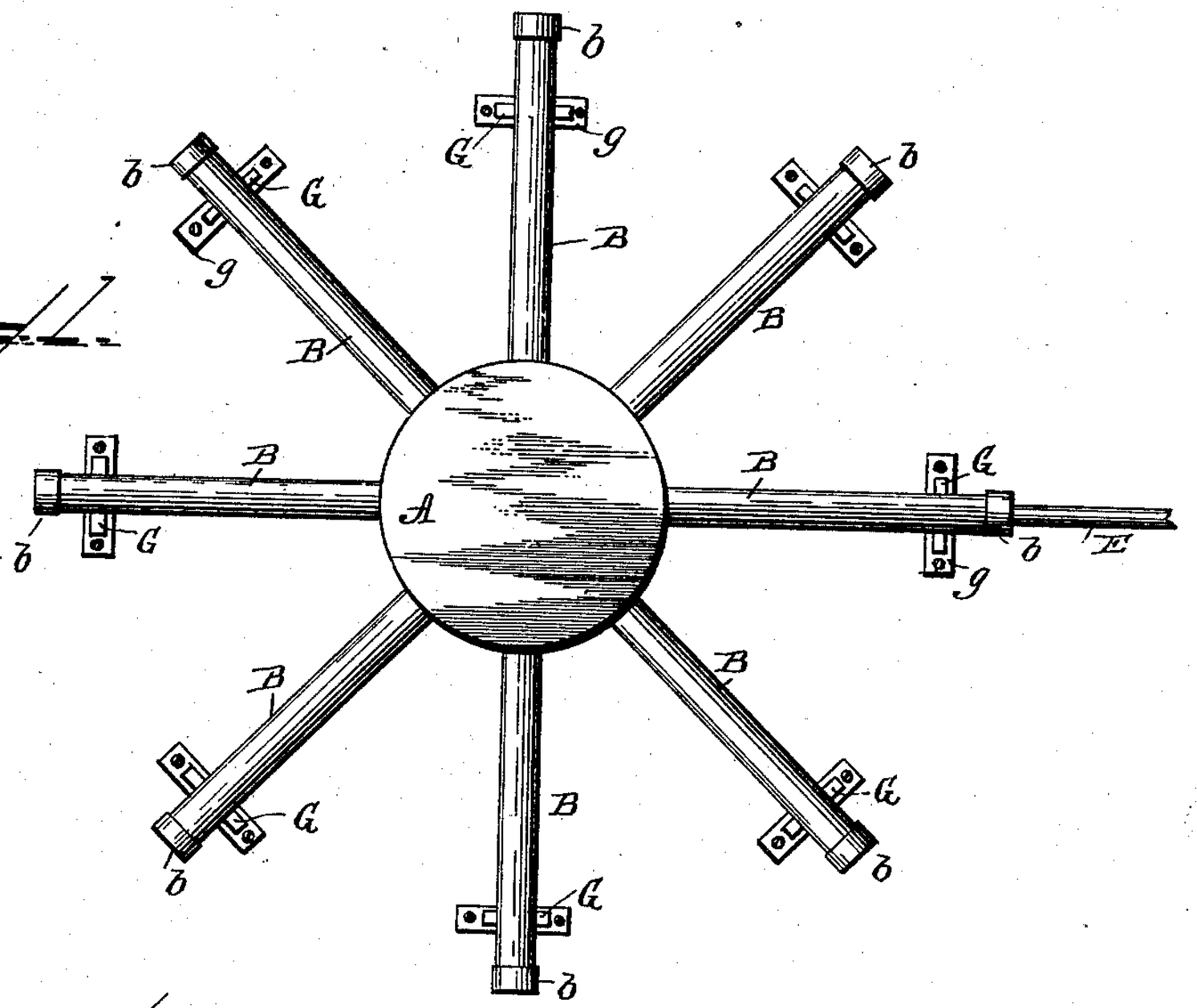


Fig. 2.

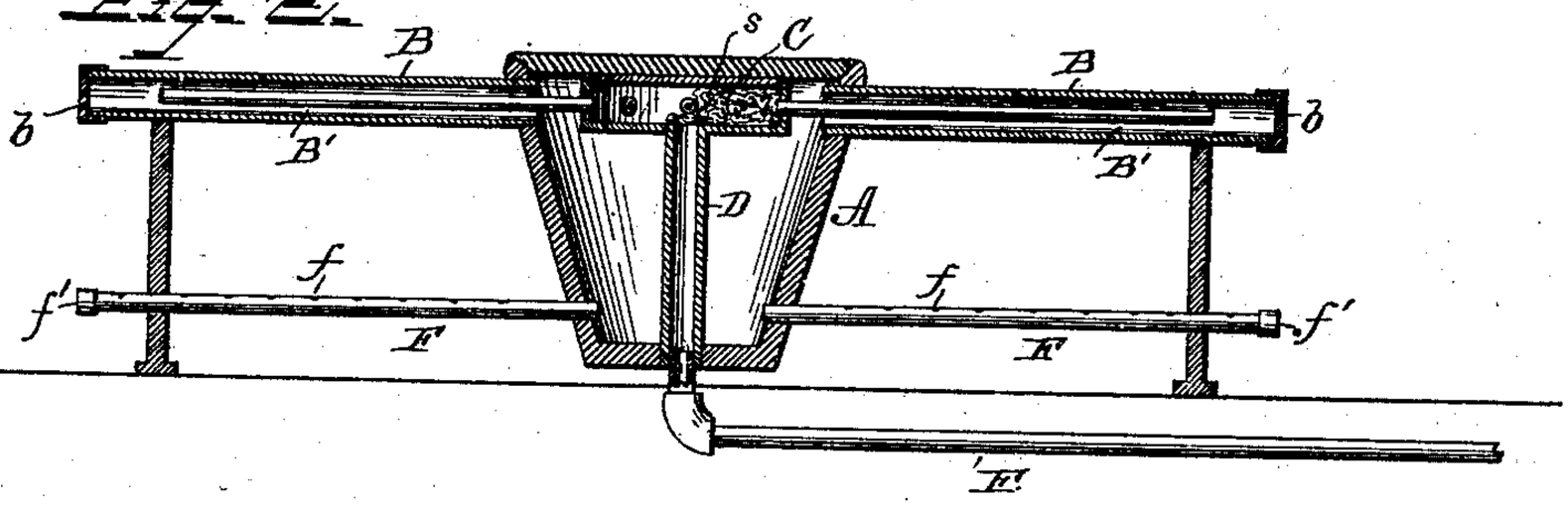
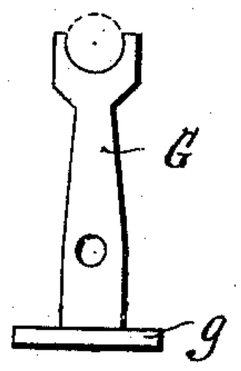


Fig. 3.



Witnesses
Chester L. Wells.
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UNITED STATES PATENT OFFICE.

ISAAC HARVEY, OF HARTLEY, IOWA, ASSIGNOR OF ONE-HALF TO LULA C. WILLIAMS, OF SAME PLACE.

TIRE-HEATER.

SPECIFICATION forming part of Letters Patent No. 666,193, dated January 15, 1901.

Application filed September 13, 1900. Serial No. 29,938. (No model.)

To all whom it may concern:

Be it known that I, ISAAC HARVEY, a citizen of the United States, and a resident of Hartley, in the county of O'Brien and State of Iowa, have invented a Tire-Heater, of which the following is a specification.

This invention is an improvement in tire-heaters, and relates more especially to that class which employ oil as fuel and in which the heat is generated by an arrangement of burner and vaporizing pipes to which the oil is fed.

The object of the invention is to provide a heater of this character which shall be simple and compact in its construction and disposition of parts, simple and convenient in operation, and will distribute the heat in such manner as to be effective in use.

The following specification enters into a detail description of my improved tire-heater, reference being had to the accompanying drawings, and to letters thereon, which designate the different parts, and what I claim as new in the particular construction and combination of parts is more specifically pointed out in the appended claim.

In the drawings forming a part hereof, Figure 1 is a plan view of a tire-heater constructed in accordance with my invention. Fig. 2 is a vertical transverse sectional view. Fig. 3 is a detail view of one of the standards which support the outer ends of the retorts and burner-pipes.

In carrying out my invention I employ a closed cylinder A, forming the central part of the device and the means for conveying the gas to the burner-pipes, as hereinafter described. This cylinder or casing is preferably of the shape shown in the drawings—that is, wider at the top, from which it tapers downward. Let into the upper end of said cylinder A and radiating therefrom are a number of retorts B, said retorts being closed at their outer ends by caps *b* and at their inner ends open into the cylinder A. Each retort has located therein centrally an oil-supply pipe B′. These oil-supply pipes radiate from box C, supported in the upper end of the cylinder A by means of a vertical pipe D, located in said cylinder, the said vertical pipe being connected at its lower end to the feed-pipe E.

Radiating from the lower part of the cylinder A is a series of burner-pipes F, corresponding in number with that of the retorts and disposed below the same. The burner-pipes are provided with a line of perforations *f* in their upper side, through which the gas escapes and is consumed. The outer ends of the burner-pipes are closed by caps *f*′, and their inner ends open into the cylinder or closed casing A to receive the gas, which flows into said cylinder from the retorts or generators.

The outer ends of the retorts and burners are supported by means of standards G, each having a semicircular opening in its upper end to receive the retort and a circular opening near its lower end to receive the burner-pipes, as well as a base or foot *g*.

From the foregoing description, in connection with the accompanying drawings, the construction and operation of my improved heater will be readily understood, for the oil is fed through the pipes E and D into the box C, from which it flows into the supply-pipes B′, and passing from the outer ends thereof drops upon the bottom of the heated retort B. The gas generated thereby flows into the casing A and into the burner-pipes F, by which it is consumed in passing out of the perforations.

It will be noted that the arrangement of the retorts provides a strong support for the tires while they are being heated, and the number of burner-pipes and disposition of the same will insure a thorough heating of the tires. The device, therefore, forms a compact, strong, durable, and effective means for heating tires.

The tops of the cylinder A and box C are removable, and it is proposed to stuff the said box with cotton waste *s*, so as to thoroughly clean the oil before it passes into the supply-pipes of the retorts.

Having thus described my invention, I claim—

In a tire-heater, the combination, of a cyl-

inder, retorts radiating from the upper part thereof, a box in the upper end of the cylinder, oil-supply pipes extending from the box into the retorts, a vertical pipe supporting said box, a feed-pipe connected to said vertical pipe, and burner-pipes radiating from the lower end of the cylinder and located below the retorts; together with standards supporting the outer ends of the retorts and burner-pipes, substantially as shown and described.

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

ISAAC HARVEY.

Witnesses:
E. E. HALL,
E. H. BRODERS.