G. M. SMALLWOOD.

TIRE HEATER.

APPLICATION FILED AUG. 19, 1907.

916,209. Patented Mar. 23, 1909.

Fig. 1.

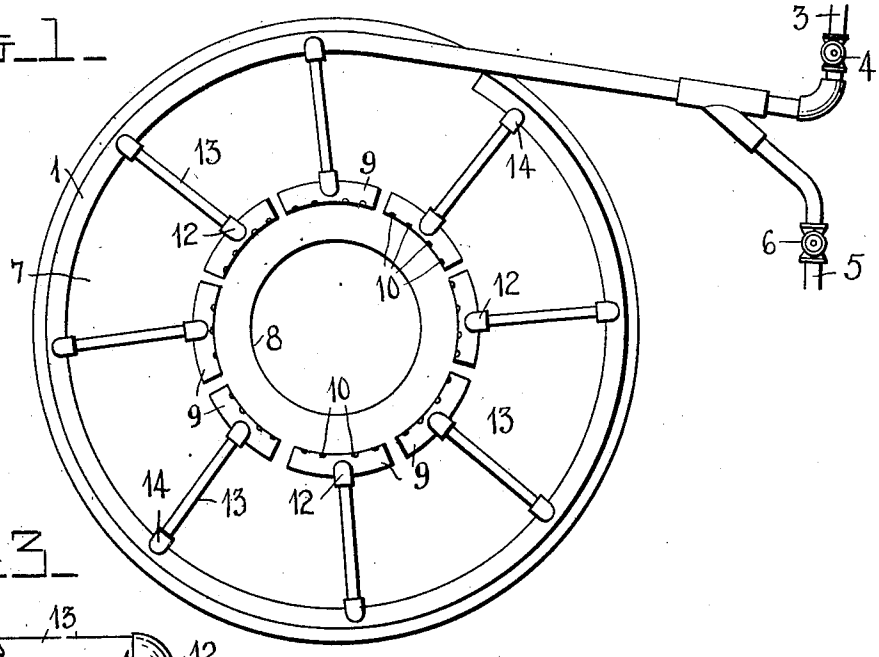


Fig. 3.

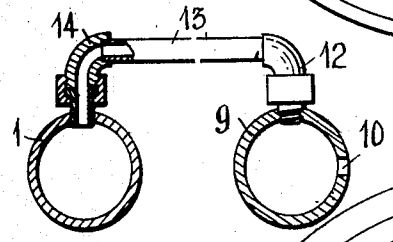
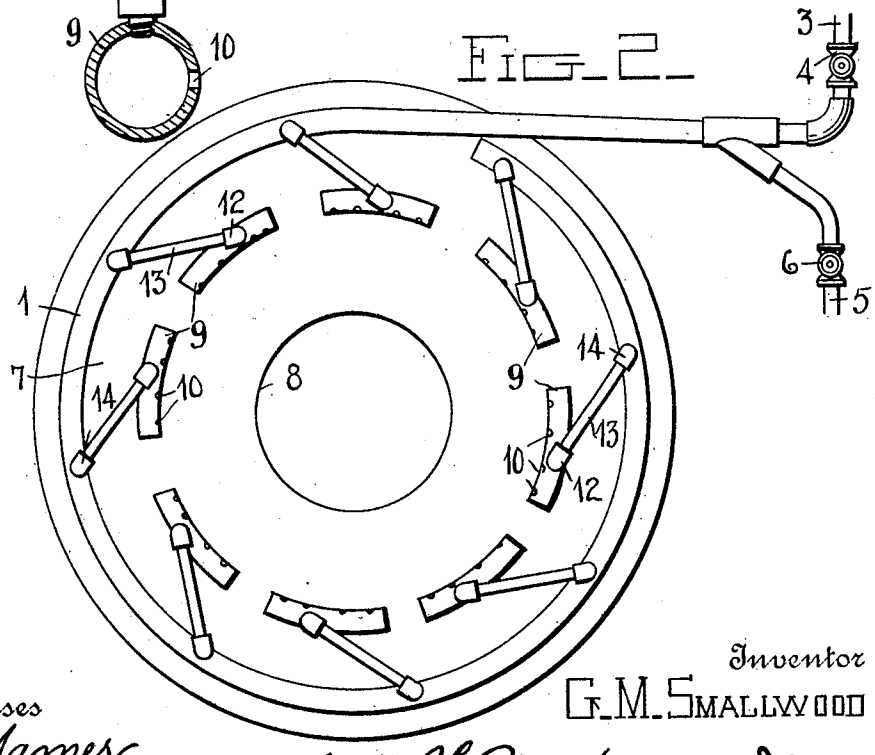


Fig. 2.



Witnesses

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GEORGE M. SMALLWOOD, OF RIVERSIDE, CALIFORNIA.

TIRE-HEATER.

No. 916,209. Specification of Letters Patent. Patented March 23, 1909.

Application filed August 19, 1907. Serial No. 389,243.

To all whom it may concern:

Be it known that I, GEORGE M. SMALLWOOD, a citizen of the United States, residing at Riverside, in the county of Riverside and State of California, have invented certain new and useful Improvements in Tire-Heaters; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in tire heaters.

The object of the invention is to provide a tire heater adapted for the use of gas, and having means whereby the burners may be adjusted to heat various sized tires either for setting the same or removing them from the wheel.

With this object in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a plan view of a tire heater constructed in accordance with the invention; Fig. 2 is a similar view showing the manner in which the burners are adjusted to heat a larger sized tire; and Fig. 3 is a detail cross sectional view through the gas supply pipe and one of the burners of the device.

Referring more particularly to the drawings, 1 denotes a gas supply pipe, which is arranged in the form of a circle of suitable size, one end of the pipe being closed, while the other end extends beyond the circular portion thereof, and has connected thereto a Y-coupling, 2. To one branch of the Y-coupling is adapted to be connected a service pipe 3, in which is arranged a cut-off valve, 4. To the other branch of the Y-coupling is connected an air pipe 5, having a cut-off valve 6.

The circular pipe 1 is adapted to rest upon and is supported by a circular base plate 7, in the center of which is preferably formed a circular opening, 8. Arranged on the plate 7, within the circular pipe 1, is a series of segmental pipe sections 9, the opposite ends of which are closed. Said sections are provided on their inner sides with a series of perforations 10, whereby the same are adapted to form burners.

The burner sections 9 are each provided with a coupling or union 12, to which is connected one end of a branch gas supply pipe 13. The opposite ends of the supply pipe 13 are connected by unions or couplings 14, to the circular supply pipe 1, whereby gas is supplied to each of the burner sections.

By pivotally connecting the burner sections 9 to the ends of the branch supply pipes 13, and the opposite ends of said pipes to the main supply pipe 1, by means of the unions 14, said segmental burner sections may be swung outwardly and inwardly toward or from the circular gas supply pipe 1, thereby increasing or decreasing the circle formed by the inner sides of said segmental burner sections, thus providing for the accommodation of larger or smaller tires, which, in practice, are placed upon the supporting plate 7 around the opening 8, and within the circle formed by the burner sections. When the tires have thus been arranged, the flames from the perforations on the inner sides of the burner sections are directed upon the outer sides of the tire, thus quickly heating and expanding the same.

The connection of the air pipe 5 with the gas supply pipe is provided to increase the pressure of the gas through the pipes 1, and the burner sections.

A tire heater of the character described may be employed for heating the tires for setting, and also for removing the same from a wheel without danger of burning the rim of the wheel.

Having thus described my invention, what I claim as new and desire to secure by Letters-Patent, is:

In a device of the class described, the combination with a plate having a centrally disposed opening, a circular pipe arranged on the plate and near the outer periphery of the same, a plurality of non-flexible spaced pipe unions pivotally connected to the pipe, a plurality of inwardly projecting non-flexible pipes connected to said unions, pipe unions arranged on the inner ends of the pipes, and a plurality of curved burners having openings formed on their inner sides and pivotally secured to the inner unions.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEORGE M. SMALLWOOD.

Witnesses:

B. B. BUSH,

I. L. REHWOLD.