

J. HARRIS, Jr.
Device for Heating Tires.

No. 159,820.

Patented Feb. 16, 1875.

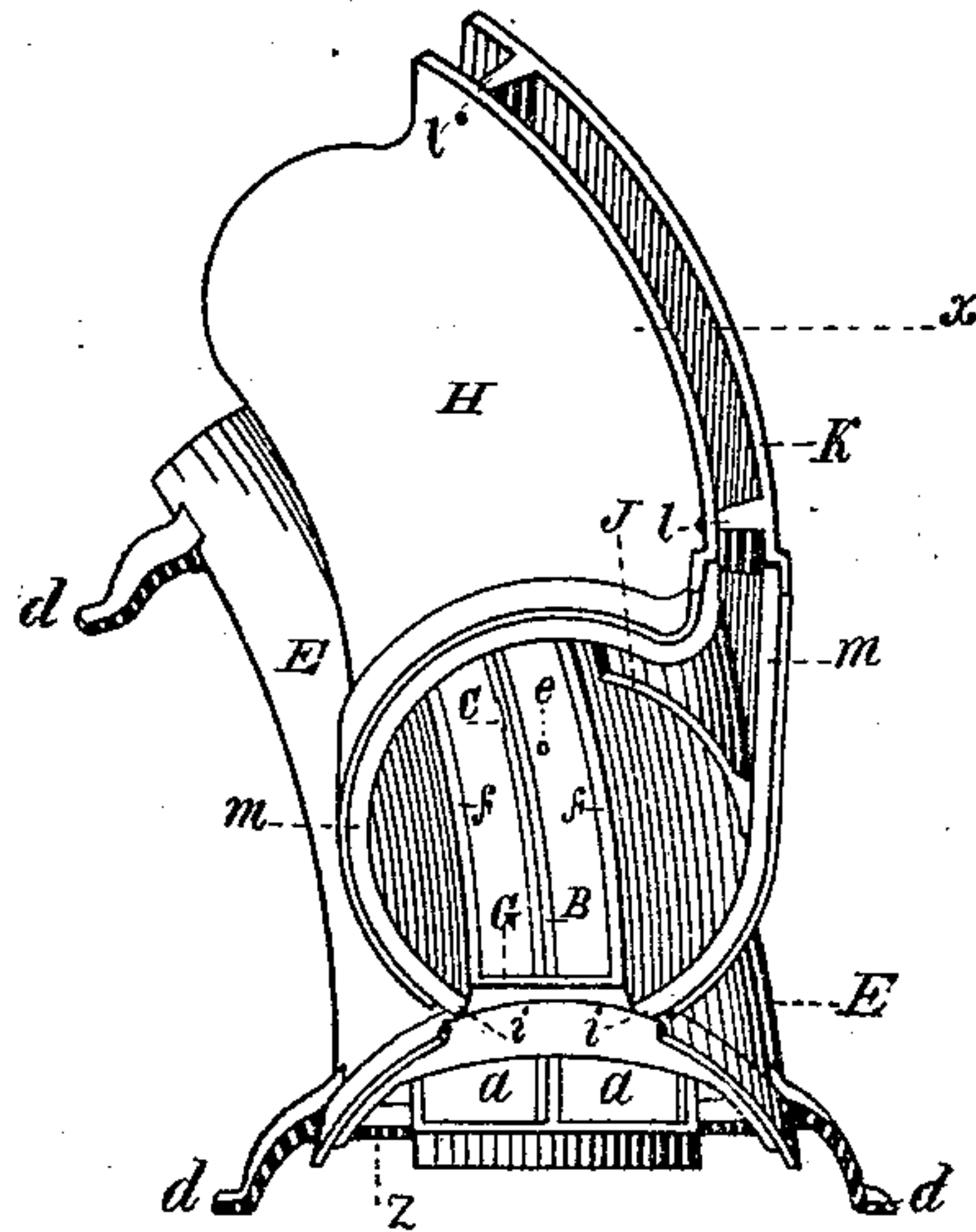


Fig. 1.

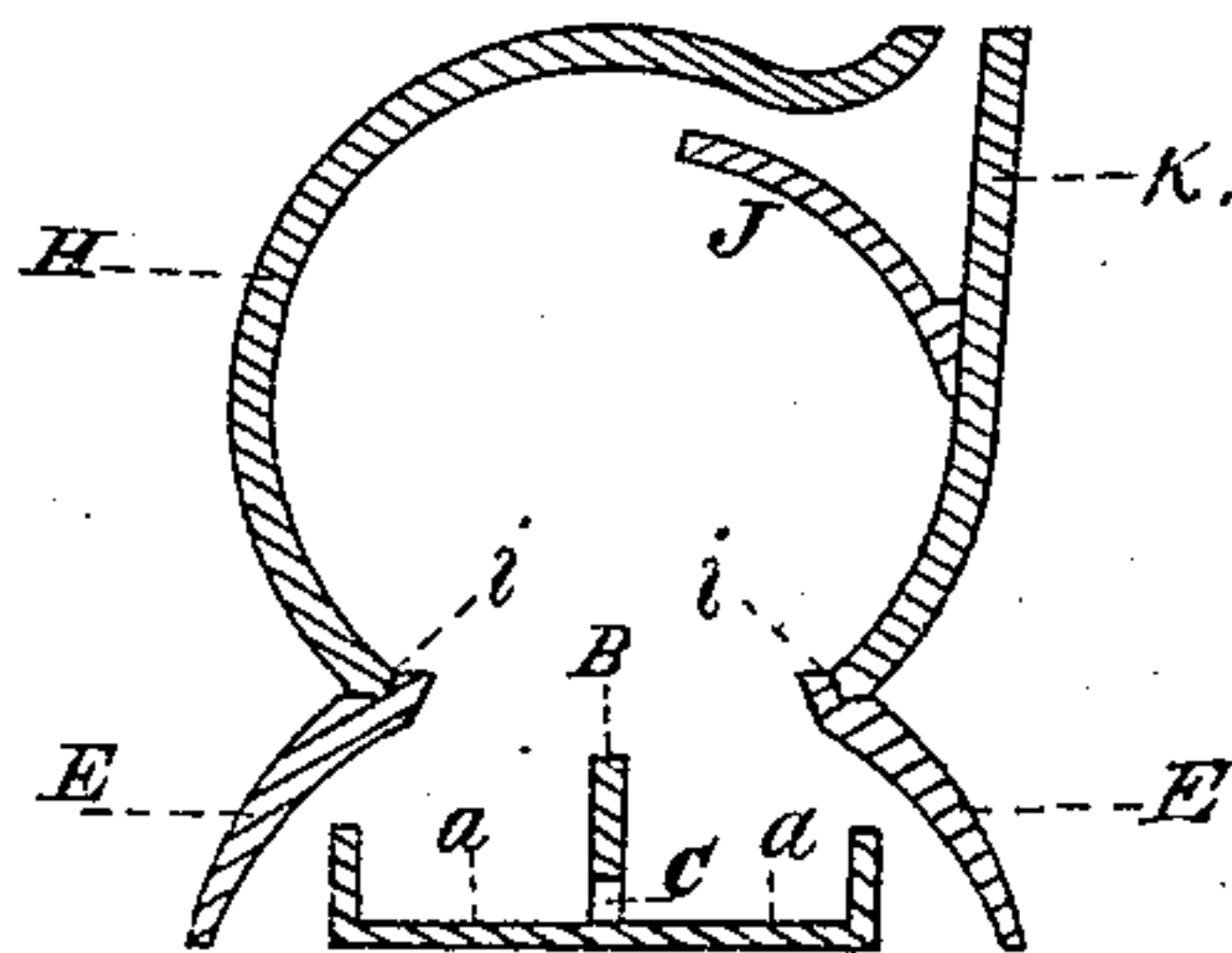


Fig. 2.

Witnesses;
Samuel C. Oliver
H. E. Metcalf,

Inventor;
Joseph Harris, Jr.
Per C. A. Shaw,
Atty.

UNITED STATES PATENT OFFICE.

JOSEPH HARRIS, JR., OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN DEVICES FOR HEATING TIRES.

Specification forming part of Letters Patent No. 159,820, dated February 16, 1875; application filed January 18, 1875.

To all whom it may concern:

Be it known that I, JOSEPH HARRIS, JR., of Boston, in the county of Suffolk, State of Massachusetts, have invented a certain new and useful Improvement in Apparatus for Heating Wheel-Tires, of which the following is a description sufficiently full, clear, and exact, to enable any person skilled in the art or science to which my invention appertains to make and use the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is an isometrical perspective view, and Fig. 2 a vertical lateral section, taken on the line *x*, Fig. 1.

Like letters of reference indicate corresponding parts in the different figures of the drawing.

My invention relates to that class of apparatus for heating wheel-tires in which petroleum, or some product of the hydrocarbon oils is employed as fuel; and consists in a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, by which a simpler, cheaper, and more effective device of this character is produced than is now in ordinary use.

It is well known that in setting wheel-tires by the ordinary process, an exposed fire of wood or coal is usually employed, the fire being arranged in the form of a circle corresponding with the tire to be heated. Such a method is not only objectionable on account of the large expenditure for fuel and labor, which is necessary in carrying it out, but frequently endangers surrounding property.

My invention is designed to obviate these difficulties and objections, and to that end I make use of means which I will now proceed to describe in detail.

In the drawing, E E represent the body of the apparatus, consisting of two curved and inwardly-inclined sides, resting upon the legs *d d*. Supported on the bars *z*, extending laterally across the body, between the legs, there is a shallow trough, *a a*, divided longitudinally by the vertical fin or flange B, through which there is an aperture near its lower side, at C. A curved flue or top, consisting of the side pieces H K, connected by the rivets and studs *l l*, rests upon the body

E, the lower edges of the top fitting into the rabbet *i i*, formed in the upper edges of the body. A curved deflector or throttle, J, is attached to the interior of the side K, and acts to prevent the too ready escape of the flame and other products of combustion from the apparatus, which is made in sections, designed to be united to form a circle corresponding in diameter with the diameter of the tire to be heated, Fig. 1 representing a segment of such a circle.

For the purpose of uniting the sections more properly, a rabbet is formed in the ends, or the parts are halved at *m m*, to secure perfect joints.

In the use of my improved apparatus, a series of the sections represented in Fig. 1 are joined end to end, to form a circle of the necessary dimensions. The top of the apparatus is then removed, separating from the body at *i i*, and the troughs *a a*, filled with petroleum, or the fluid to be used in heating the tire, the tire being laid upon the rests G, forming the ends of the troughs. The fluid is then ignited, and the top or flue replaced, heating the tire in a manner which will be readily apparent without a more explicit description.

The flange B is cast integral with the trough, and its object is to act as a conductor in conveying heat from the flame to the fluid used for fuel, causing a more rapid evaporation, and thereby increasing the flame and heat.

A small pipe, *e*, in the bottom of the trough, is designed for drawing off the fluid when the apparatus is not in use.

It will be obvious that a series of the bodies E may be connected to form a permanent circular trough or rest for the tire, if desired; also, that a series of the tops or flues may be so connected as to be raised conjointly in inserting or removing the tire.

It will also be obvious that the flange B may be made detachable from the trough, and may be composed of brass, copper, or any other conductor of heat without departing from the spirit of my invention.

Having thus explained my invention, what I claim is—

1. The tire-heating apparatus described,

the same consisting of the body E E, trough *a a*, and top H K, combined and arranged to operate substantially as and for the purpose specified.

2. In a tire-heating apparatus, the trough *a a*, provided with the vertical flange B, substantially as and for the purpose specified.

3. In a tire-heating apparatus, the deflector J, substantially as and for the purpose set forth.

JOSEPH HARRIS, JR.

Witnesses:

C. A. SHAW,
ELBRIDGE HARRIS.