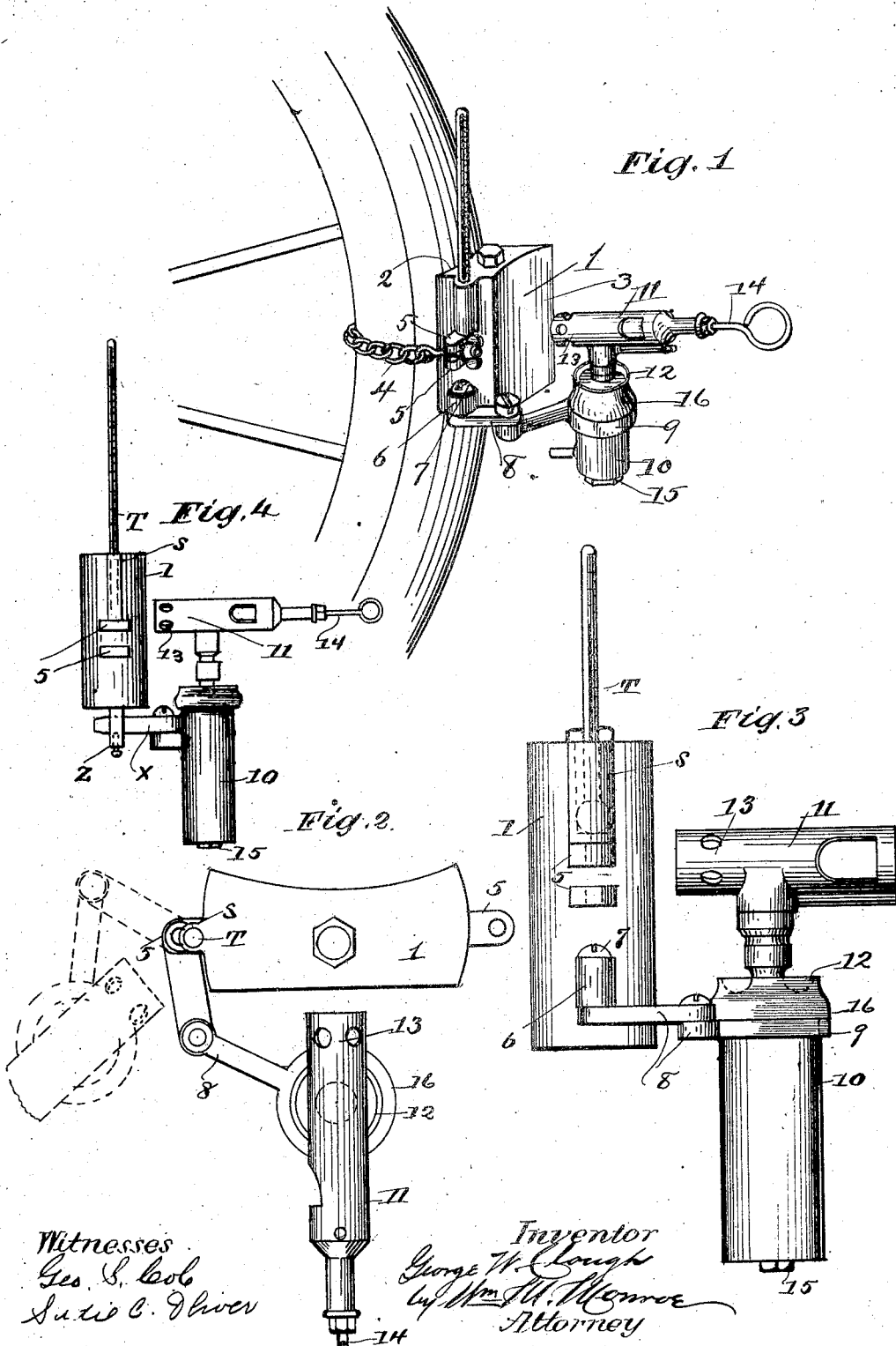


973,476.

Fig. 1



UNITED STATES PATENT OFFICE.

GEORGE W. CLOUGH, OF CLEVELAND, OHIO.

PORTABLE VULCANIZER.

973,476.

Specification of Letters Patent.

Patented Oct. 25, 1910.

Application filed November 3, 1909. Serial No. 526,634.

To all whom it may concern:

Be it known that I, GEORGE W. CLOUGH, a citizen of the United States, and resident of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Portable Vulcanizers, of which I hereby declare the following to be a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide a portable form of vulcanizing device, for repairing automobile tires, by means of which tire repairs can be practically and effectively performed, while upon the road, and which is simple in construction and mode of operation, and adjustable for application of heat to any desired portion of the periphery of the tire and for varying degrees of heat.

The invention comprises a metallic receptacle for the generator of steam one side of which is recessed to fit the curvature of the tire. The receptacle can be removably secured to any portion of the tire, and heating instrumentalities are adjustably secured to the receptacle, by means of which the heat can be applied to the back or sides of the receptacle and the flame can also be directed at any angle thereupon to regulate the intensity of the heat.

The invention further comprises the combination and arrangement of parts and construction of details as hereinafter described, shown in the accompanying drawings, and specifications and pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of the device; Fig. 2 a plan view thereof, and Fig. 3 a vertical elevation, and Fig. 4 a detail in elevation of a modified form.

In these views 1 is the receptacle shaped on the front face 2 to correspond with the contour of the tire and having a preferably flat back wall 3. The receptacle is removably secured to the tire and wheel rim by means of the chain 4, secured between the lugs 5, cast integral on the receptacle body.

At one edge of the receptacle is cast a lug or lugs 6, to which is pivotally secured at 7 an extension or folding arm 8, the outer extremity of which is provided with the ring shaped support 9, in which is supported the oil tank 10 for the fuel supply of the burner 11 above. This is shown as a gaso-

lene burner, where 12 is a drip cup in which a small quantity of the oil is ignited to generate the initial supply of gas for the burner.

13 is the commingling tube and 14 the inlet valve.

The tank 10 is provided with an opening closed at 15 through which the gasoline may be inserted. The tank also has an overhanging rim 16, which supports it upon the ring shaped extremity 9 of the extensible arm.

It will be seen that with this device it will be possible to vulcanize a patch in the tire while on the road, since the amount of gasoline required to supply the burner is small and can easily be spared from the engine supply. Again the adjustability of the extension arm makes the application of heat locally possible since the burner can be directed to each side and to the rear wall separately as desired and the heat is easily controlled by means of the valve 14 in the burner, and by directing the flame diagonally across the face of the receptacle or directly toward it at will, the folding extensible arm making this action possible.

A socket S, preferably at one side of the receptacle is designed to hold a thermometer T, so that the exact temperature of the receptacle can be ascertained and can be regulated when in excess of, or lower than the degree required for vulcanizing the tire.

The burner can also be detached for repair, or for substitution of one more powerful if desired. A modified form of attaching means is shown in Fig. 4 where Z is a socket secured to or integral with the receptacle, and X is an arm (extensible if desired) secured to the gasoline tank.

Having described the invention what I claim as new and desire to secure by Letters Patent is:

1. In a portable vulcanizer for an automobile tire, in combination, a water receptacle provided with a recessed face adapted to correspond in shape with the surface of the tire, a burner adjacent thereto, adapted to direct the flame upon the vertical walls of the receptacle, a gasoline tank for said burner and a support for said burner and tank, said support secured to said receptacle and adjustable to permit of applying the flame from the burner to the rear and side walls of the receptacle alternately, and to apply the flame at any desired angle thereto.

2. In a portable vulcanizer, for automobile tire repair, in combination, a water receptacle provided with a recessed face adapted to conform to the tire surface, a
5 horizontally directed burner adjacent thereto, and supporting means therefor, attached to said receptacle, said supporting means being extensible, permitting of adjusting the said burner at any horizontal angle
10 relative to the walls of said receptacle.

3. The combination with a water receptacle shaped for direct application to the sur-

face of an automobile tire, of a horizontal burner tube adjacent thereto, an extensible arm secured to said receptacle upon the
15 outer end of which said burner tube is supported, and a gasoline tank secured to said burner tube.

In testimony whereof, I hereunto set my hand this 11th day of October 1909.

GEORGE W. CLOUGH.

In presence of—

WM. M. MONROE,

SAMUEL LIPPERT.