

J. Z. HANSON & R. THORP.

TORCH.

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1,030,086.

Patented June 18, 1912.

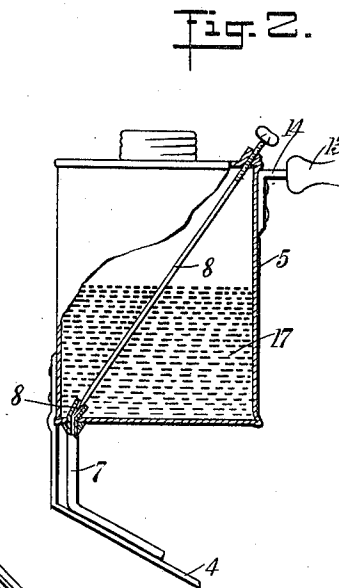
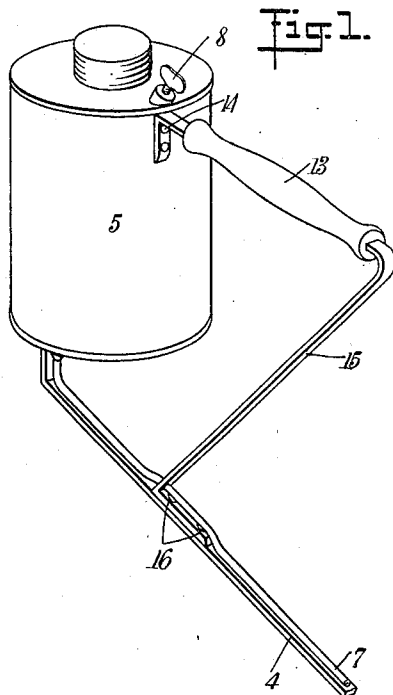
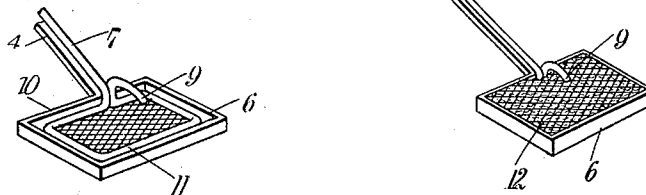


Fig. 3.



WITNESSES

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JOHN ZACIOUS HANSON AND RUDOLPH THORP, OF ABERDEEN, IDAHO.

TORCH.

1,030,086.

Specification of Letters Patent.

Patented June 18, 1912.

Application filed January 9, 1912. Serial No. 670,253.

To all whom it may concern:

Be it known that we, JOHN Z. HANSON, a citizen of the United States, and RUDOLPH THORP, a subject of the King of Norway, both residents of Aberdeen, in the county of Bingham and State of Idaho, have invented a new and Improved Torch, of which the following is a full, clear, and exact description.

Our invention relates to a new and improved form of torch particularly adapted for burning underwood or brush.

An object of our invention is to provide a torch of the above-indicated character, which is balanced to permit of ease in carrying the same, and a further object of our invention is to provide a torch which will form a low forwardly-spreading flame in advance of the same.

We attain the above-outlined objects by disposing on the upper end of the frame, a reservoir tank of combustible fuel, and at the lower forward end of the frame, an open top box containing an asbestos pad and forming the burner, within which pad terminates a fuel pipe leading from the reservoir. The device is supported between the burner and reservoir by a suitable handle.

With the above and other objects in view, as will more fully appear, the present invention consists in certain novel details of construction and arrangement of parts hereinafter described.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, and in which—

Figure 1 is a perspective view showing a preferred embodiment of our invention; Fig. 2 is a side elevation of the liquid fuel reservoir and its immediate attached parts, part of the side of the reservoir being broken away to show the controlling means; and Fig. 3 is a perspective view looking down upon the burner with the asbestos pad removed.

Described more in detail, we have shown a frame 4, normally adapted to extend downwardly and forwardly from the operator. Positioned on the upper end of the frame 4, is a liquid fuel reservoir 5. At the opposite lower end of the frame 4, is positioned a flat rectangular box construction 6 at an angle to the frame, so that it will assume a sub-

stantially horizontal position adjacent the ground, said box construction 6 adapted to form a fire plate leading from the reservoir 5. Preferably positioned on the frame 4, is a fuel conduit 7, the admission of the fuel to which is controlled by a needle valve 8, of any suitable construction, mounted in the reservoir 5. The lower end of the conduit 7 is preferably coiled within the box 6 and the outlet 9 is positioned adjacent the rear edge 10 of the box 6 and is inclined downwardly and forwardly above the plane of the upper edge of the box. Disposed about the coil 11 of the conduit 7, is an asbestos pad 12 of any suitable construction, and is shown more particularly in Fig. 1.

In order to balance the fire plate against the weight of the reservoir 5, the handle 13 has one end mounted on a bracket 14 attached to the reservoir and extending forwardly toward the fire plate substantially in the plane of the frame 4. From the end of the handle 13, opposite the bracket 14, a brace 15 extends to and is rigidly fastened on the top of the frame 4 by means of rivets 16.

It will be understood that a little of the liquid fuel 17 is permitted to pass through the conduit 7 and is ignited at the outlet 9. As this outlet is directed toward the asbestos, the flame at the outlet will quickly heat the asbestos, which heat will tend to vaporize the liquid fuel in its passage through the coiled part 11, so that heated combustible gases have passed through the outlet 9 with such force as to direct a fan-shaped flame for some material distance in advance of the fire plate.

Having thus described our invention, we claim as new and desire to secure by Letters Patent:

1. In a hand burner for clearing the ground of brush and underwood, a forwardly- and downwardly-extending frame, a liquid fuel reservoir carried by the upper end of said frame, a fire plate at the opposite forward end of said frame, a handle rigidly attached to and extending forwardly from said reservoir, and a brace connecting the forward end of said handle with said frame, where by grasping the torch by the handle, the torch is balanced to facilitate handling.

2. In a torch, a fire plate comprising a box, an asbestos pad carried by said box, 110

and a fuel conduit leading to said box, a portion of said conduit adjacent its outlet being disposed within the asbestos pad so as to vaporize the fluid passing through
5 said conduit, the outlet of said conduit disposed above said pad, to direct the vaporized fluid on to the same.

In testimony whereof we have signed our

names to this specification in the presence of two subscribing witnesses.

JOHN ZACIOUS HANSON.
RUDOLPH THORP.

Witnesses:

WILLIAM D. THOMAS,
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."