

W. A. DYER.
FUEL IGNITER.

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1,001,374.

Patented Aug. 22, 1911.

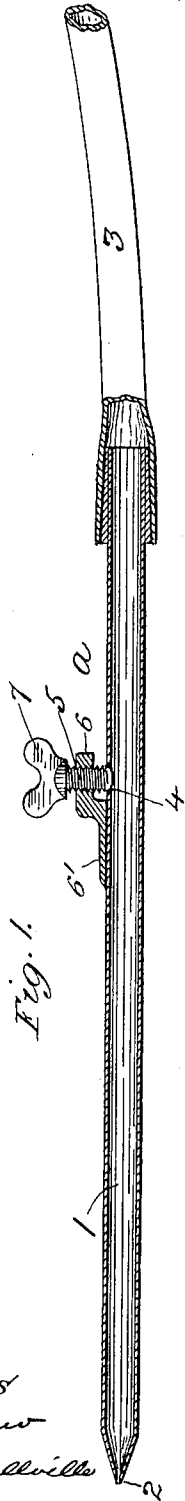


Fig. 1.

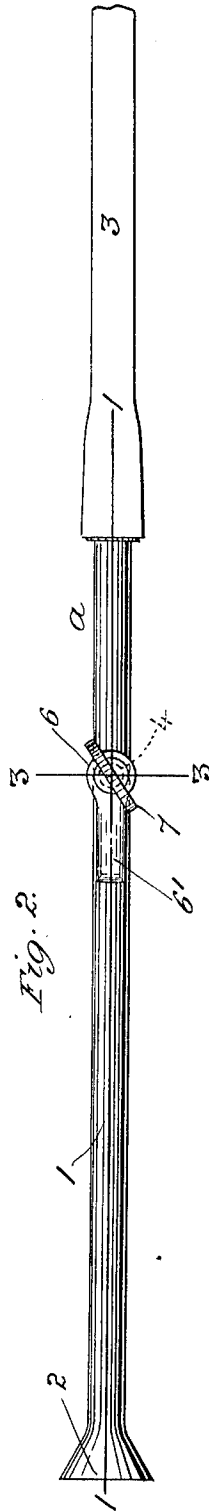


Fig. 2.

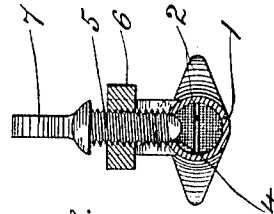


Fig. 3.

WITNESSES
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WILLIAM A. DYER, OF ST. LOUIS, MISSOURI.

FUEL-IGNITER.

1,001,374.

Specification of Letters Patent. Patented Aug. 22, 1911.

Application filed January 13, 1911. Serial No. 602,493.

To all whom it may concern:

Be it known that I, WILLIAM A. DYER, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented a new and useful Improvement in Fuel-Igniters, of which the following is a specification.

My invention relates to means for igniting fuel contained in a hard coal or other stove, fire-grate, or other fire-box, and has for its object to provide a portable device by which the fuel may be readily and quickly ignited without the use of wood or other kindling material as at present.

It consists in features of novelty as hereinafter described and claimed, reference being had to the accompanying drawing forming part of this specification, whereon,

Figure 1, is a vertical longitudinal section through my improved fuel igniter on line 1, 1, in Fig. 2; Fig. 2, a top plan thereof, and Fig. 3, a vertical transverse section to enlarged scale through the igniter, on line 3, 3, in Fig. 2.

Like letters and numerals of reference denote like parts in all the figures.

a represents my improved fuel igniter which consists of a metallic pipe 1 of suitable length and diameter for portability, and of sufficient thickness of wall to insure its strength and rigidity when handled as hereinafter more particularly referred to.

The pipe 1 is adapted at one end by flattening as shown to form a preferably fan-shaped outlet 2, or otherwise provided thereat with a suitable nozzle, the other end of the pipe 1 being preferably tapered as shown, or otherwise adapted externally, so that when inserted within the open end of a rubber or other flexible tube or hose (broken away) 3, the latter will be elastically held thereon in air-tight connection with the pipe 1, the other end (not shown) of the flexible tube 3 being adapted for connection with an ordinary illuminating gas jet burner, or other gas supply outlet, provided with a stop cock or other regulating device.

In operation, the pipe 1 being held by the hand and gas admitted therein through the flexible tube 3, and ignited at its outlet 2, the outlet end portion 2 of the pipe 1 is then inserted between or beneath the fire-grate bars of the stove or other fire-box and the flame of the gas issuing from the pipe 1 directed against, and among the coal or other fuel contained therein, where-

by the latter is readily and quickly ignited without the use of the ordinary underlying kindling material, the ignition being more rapidly effected by agitating and changing the position of the outlet end portion 2 of the pipe 1 among the coal, the pipe thereby operating practically as a substitute for the ordinary poker.

For regulating the flow and intensity of the gas flame, I preferably form a circular opening 4 through the wall of the pipe 1 at a convenient distance from its outlet end 2 for admitting air to the interior of the pipe 1, the opening 4 being closed, and opened to any desired extent, by any suitable means, preferably, as shown, by the end of a screw 5 which is adapted to operate through a correspondingly screw-threaded lug or bracket 6 which is located opposite to, and at a suitable distance from the opening 4, the lug 6 having a foot or flange 6' secured to the outside of the pipe 1 by brazing or otherwise, and the screw 5 having a handle 7 beyond the lug 6 for rotating the screw 5 in either direction and thereby moving its free end to or from the opening 4, and so closing or opening the same as desired.

The advantages of my device are, lightness and simplicity, portableness and facility of handling; also, by its use, when the coal in a stove has been previously ignited in the ordinary manner, and subsequently, owing to neglect or inefficiency of the kindling material used, becomes dead as often happens, it can be readily and quickly re-ignited without the necessity of removing it from the stove and re-laying, thereby obviating the trouble and dirt caused by such removal. Furthermore, the device can be used for heating water and other purpose when the stove is unavailable, in case of sickness or other emergency.

What I claim as my invention and desire to secure by Letters Patent is:—

1. A device of the class described, comprising a metal pipe, one end of which is formed into a nozzle, and the opposite end adapted to receive a flexible tube, there being an air inlet opening formed through the wall of the pipe intermediate of the ends thereof, a bracket on the pipe adjacent the opening therein, and an adjustable member on said bracket adapted to close the opening and to control the passage of air there-through.

2. A device of the class described, com-

prising a metal pipe having one end formed into a nozzle and the opposite end adapted to receive a flexible tube, there being an air inlet opening formed through the wall of the pipe intermediate of its ends, a bracket fixed on the pipe adjacent the opening, and a screw operating through said bracket, the point of which screw is adapted to enter and close the opening in the pipe.

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Witnesses:

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