

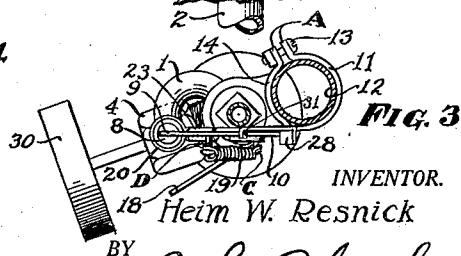
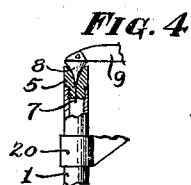
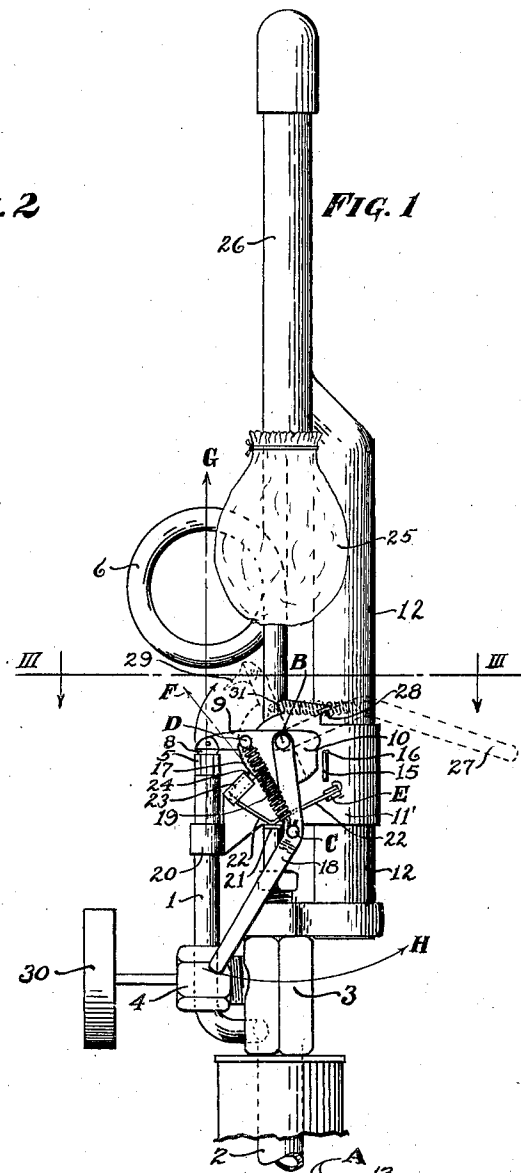
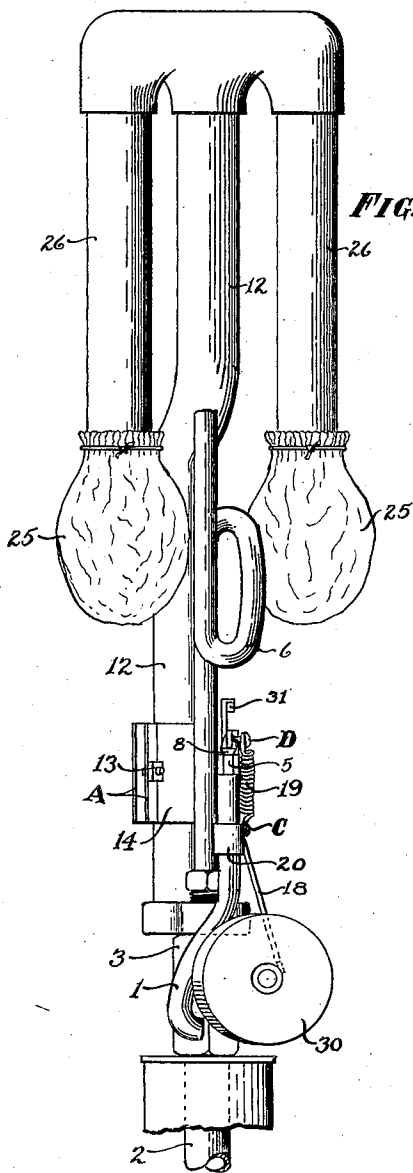
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IGNITION AND GENERATING MEANS FOR GASOLINE LAMPS

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IGNITION AND GENERATING MEANS FOR GASOLINE LAMPS

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My invention relates to an ignition and generating means for gasoline lamps.

The object of my invention is to provide a friction ignition means co-acting with a jet opening and closing means.

A further object of my invention is to ignite the generating means eliminating the use of a match.

These and other objects will hereinafter be more fully explained.

Referring to the drawings:

Fig. 1 is an elevation illustrating my invention as applied to a standard make of gasoline lamp.

Fig. 2 is a transverse view of Fig. 1.

Fig. 3 is a sectional view taken on the line III—III in Fig. 1.

Fig. 4 is a detailed view of the jet and needle closing means, with parts broken away for convenience of illustration.

The mechanism herein disclosed consists of an auxiliary pipe 1 entering the feed pipe 2 below the valve 3, the said pipe 1 being curved to pass around the valve stem bushing 4 so that the jet 5 will be in vertical alignment beneath the generating coil pipe 6, the said pipe 6 being a part of the original equipment of the lamp. The jet is a member fitting in the end of the auxiliary pipe as shown in Fig. 4 and has a fine orifice 7 axially positioned therein, the outer end of which is funnelled to receive a needle point 8, the said point being rigidly attached to an arm 9 which is integral with a disc like member 10 hereinafter described.

As an attaching means for elements of the orifice closing means and the ignition means I have provided a clamp 11, made as follows: The clamp consists of a bracket 11' having one end curved to fit snugly on the pipe 12 the end being turned out as at A and having an aperture to receive a bolt 13. The other portion of the clamp consists of an arcuate member 14 having an apertured outward-turned end similar to that as shown at A and being en-

gaged by the bolt 13 as tensioning means for the clamp. The opposite end of the said arcuated member has a lip 15 outwardly turned and integral therewith, the said lip extending through a slot 16 as stationary supporting means therefor while the said bolt is being tightened, and being thus arranged the clamp is easily attached and removed. On the straight portion of the bracket is pivotally connected a disc-like member 10; said member having an arm 9 with the needle point attached thereto and for the purpose heretofore described, there is also arranged on the edge of the disc-like member an arcuated knurled portion 17, the center of curvature of which is at the pivot point of member 10 as shown at B.

At the point B above referred to is a lever 18 pivotally connected thereto and rotatable independent of the disc, the said lever has a bend as at C, at which point one end of a coil spring 19 is attached, the other end being attached to the disc member 10 in close proximity to the arm 9 as at D, the said spring functioning to rapidly move the arm 9 and thereby actuate the needle point to open and close the port as hereinafter described.

Integrally connected to the bracket 11 is a clasp portion 20 which is bent around the pipe 1 as supporting means for the upper end thereof for proper engagement of the needle point with the aperture. Laterally extending from the bracket is a stop member 21 functioning as a stop for the lever 18 as tensioned by the said spring. The said stop also functions as a bearing for a wire spring 22 which is rigidly connected to the bracket 11' as at E. Integral with the bracket member is a socket 23 which is formed by curling or rolling over a projected portion of the bracket member so that a crack is left between the bracket proper and the inside edge of the roll so that the spring 22 projects into the socket and can move longitudinally with the socket and exerts its pressure against the

rear end of a flint 24, which is slidably held in the socket 23, the said flint engaging snugly on the knurled edge 17 as a means to produce a spark simultaneously with the opening of the needle valve. The spark produced by rotation of the arcuated edge will follow along the line as indicated by the arrow F which crosses the flow of the gasoline as it ascends following along the line as indicated by the arrow G.

The flame caused by the ignition will contact with the pipe coil 6 heating it for the purpose of generating the gasoline contained therein to gas and lighting the mantles simultaneously. When so generated it is conveyed to the mantle 25 through the medium of the pipes 12 and 26. When the lever is drawn in the direction of the arrow H until it has reached the position as shown by dotted lines 27 it will contact with a stop member 28, at which time the spring 19 will suddenly actuate the rotation of member 10 thereby opening the jet as shown by dotted lines 29 and producing the spark as heretofore described. When the proper generation of gas has occurred, the lever 18 is drawn back to its normal position. At the moment the spring 19 crosses the axis of the pivot point B the tension thereof will suddenly close the jet by retraction of the needle point. Then opening the valve 4 by turning the hand wheel 30 the supply of the gasoline will flow freely through the generating coil 6, the generation will then be continued by the heat from the mantles which are lighted simultaneously by my ignition means herein disclosed.

Such modifications may be employed as lie within the scope of the appended claims.

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

1. In combination with a gasoline lamp, having an auxiliary pipe connected with the feed pipe of the lamp below the valve, a funneled jet positioned in the outer end of the auxiliary pipe, a bracket attached to the feed pipe of the lamp, a needle carried by a disc-like member, and an arcuated knurled portion positioned on the disc, said disc being pivotally mounted on said bracket, a lever pivotally engaging with the disc-member but rockable independent of the disc, the disc and the lever being connected by a spring actuating means to open or close the jet as the lever is rocked, a spring supporting socket carried by the bracket and a flint positioned in the socket to engage with the knurled edge of the disc, by which means a spark is frictionally produced as the lever is rocked for the purpose specified.

2. In combination with a gasoline lamp having an orifice to emit fuel, a disc pivotally carried on the lamp and having a portion of its peripheral edge knurled and the disc having an arm integrally connected and out-

wardly extending and having on its outer extremity a needle to close the orifice, a lever pivotally carried by the pivot of the disc and rockable independent thereof, a coil spring connecting the lever and the arm of the disc by which means the orifice is opened and closed as the lever is rocked, a spring tensioned flint to engage on the knurled portion of the disc as ignition means for gas as the orifice is opened.

In testimony whereof I affix my signature.
HEIM W. RESNICK.

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