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APPARATUS FOR BURNING CRUDE PETROLEUM.
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Inventor:

Witnesses

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UNITED STATES PATENT OFFICE.

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APPROATUS FOR BURNING CRUDE PETROLEUM.

Apparatus for Burning Crude Petroleum, of which the
following is a specification.

The object of my invention is to produce a preferred
form of apparatus for the practice of my process or
method described in co-pending application, Serial
Number 293,807 filed Dec. 29, 1905.

In the application above referred to, the principle
of my invention consists in introducing an oxygenous
fluid, under pressure, into a confined stream of crude
petroleum, or the like, at a point adjacent to but re-
moved from its point of combustion.

My present application is intended to comprehend
apparatus for the carrying out of that process in simple
and, therefore, preferred form of embodiment.

Referring to the accompanying drawing, which con-
stitutes a part of this application and in which a view
in side elevation of a preferred form of my apparatus is
shown.

1 indicates an air-tight tank or reservoir of any de-
sired capacity for holding a supply of crude oil. It is
2 provided with a filling plug 2, which when in place
renders the tank air-tight, but which may be removed
for replenishing the tank with oil as often as required.

From the bottom of the tank 1 an oil-supply pipe 3 leads
to a jet or burner 4, which is also designated as a point
3 of combustion. The burner 4 may be of any desired
construction adapted to deliver oil from the pipe 3 in
combustible form. It may be located also at any con-
venient point and as far removed from the tank 1 as con-
venience may dictate.

The illustration presented in
35 the drawing is intended to be only diagrammatical and
of suggestive scope sufficient to afford full explication
of the principle of my invention.

The pipe 3 is preferably provided with a valve 5 by
which the flow through the pipe 3 may be regulated or
40 completely interrupted, at will.

6 indicates an air-tank of any suitable form and di-
6mensions. It is provided with a valve-controlled
filling nipple 7, to which a compressor may be connect-
ed at will, and it is connected as by a pipe 8 with the
pipe 3. The point of connection indicated by the
45 numeral 9 of the pipe 8 may be regulated or
40 completely interrupted, at will.

10 means are provided for introducing an oxygenous
fluid, under pressure, into the confined stream of crude
petroleum or the like, at a point adjacent to but removed
from its point of combustion.

The pipe 8 is preferably provided with a valve 10 for
55 regulating the flow of oxygen at will.

The invention is distinguished, both in the mode of operation and in the results obtained.

I claim:

1. In apparatus for burning crude petroleum or the like, the combination with an oil tank, burner, and oil pipe leading from said tank to the burner, of means for supplying air or oxygenous fluid to the oil while yet in liquid
form and confined in the pipe before it reaches the burner.

2. In apparatus for burning crude petroleum or the like, the combination with an oil tank, burner, and oil pipe leading from said tank to the burner, of means for supplying a force feed of the oil from the tank, and means to supply air or oxygenous fluid to the oil while yet in liquid
form and confined in the pipe before it reaches the burner.

3. In apparatus for burning crude petroleum or the like, the combination with an air-tight oil tank, burner, and oil
5. In apparatus for burning crude petroleum or the like, the combination with an air-tight oil tank, burner, and oil
6. In apparatus for burning crude petroleum or the like, the combination with an air-tight oil tank, burner, and oil
7. In apparatus for burning crude petroleum or the like, the combination with an air-tight oil tank, burner, and oil
8. In apparatus for burning crude petroleum or the like, the combination with an air-tight oil tank, burner, and oil
9. In apparatus for burning crude petroleum or the like, the combination with an air-tight oil tank, burner, and oil
10. In apparatus for burning crude petroleum or the like, the combination with an air-tight oil tank, burner, and oil
pipe leading from said tank to burner, of means of supplying compressed air or like oxygenous fluid into the oil pipe between the tank and the burner, and means of supplying compressed air to the tank for feeding the oil thence to the oil pipe.

4. In apparatus for burning crude petroleum or the like, the combination with an oil tank, burner, and oil pipe leading from said tank to burner, of means for feeding the oil from the tank, means of supplying air or like oxygenous fluid to the oil while yet in liquid form and confined in the pipe before it reaches the burner, and means for regulating the flow of oil and air, respectively.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JEROME P. STAFFORD

Witnesses:

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