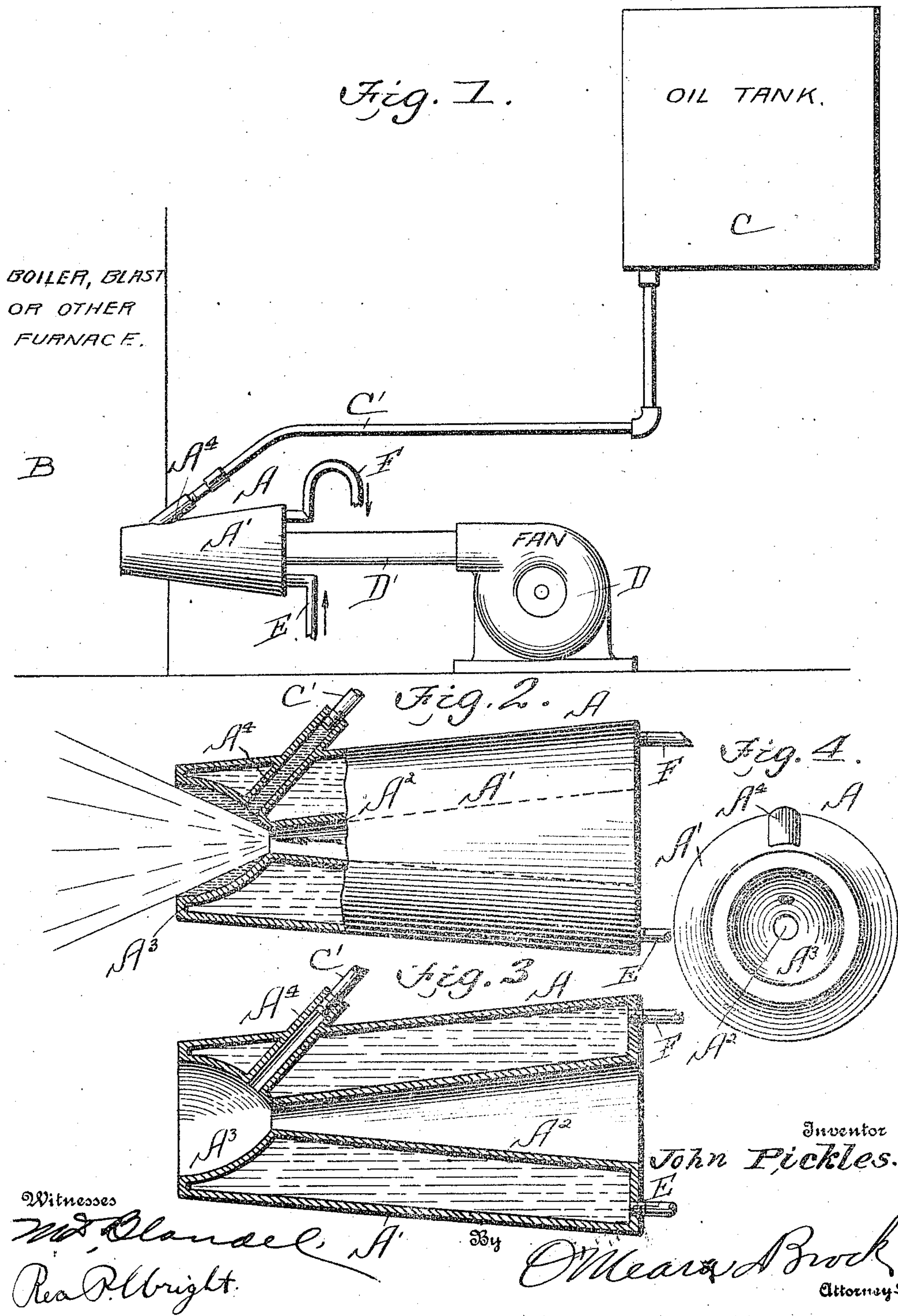


J. PICKLES.
OIL BURNING TWYER.
APPLICATION FILED AUG. 17, 1906.

966,704.

Patented Aug. 9, 1910.



UNITED STATES PATENT OFFICE.

JOHN PICKLES, OF DE SOTO, MISSOURI.

OIL-BURNING TWYER.

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Specification of Letters Patent.

Patented Aug. 9, 1910.

Application filed August 17, 1906. Serial No. 331,037.

To all whom it may concern:

Be it known that I, JOHN PICKLES, a citizen of the United States, residing at De Soto, in the county of Jefferson and State of Missouri, have invented a new and useful Improvement in Oil-Burning Twyers, of which the following is a specification.

This invention relates to twyers and more particularly to oil burning twyers, the object being to provide a twyer which will do away with the burning of charcoal and coke.

Another object of my invention is to provide the twyer with a concaved mouth which will retain a certain amount of oil, and heat the same before it comes into contact with the air blast.

With these objects in view, the invention consists in the novel features of construction, hereinafter fully described and pointed out in the claim.

In the drawings forming a part of this specification:—Figure 1 is a side elevational view of my improved device. Fig. 2 is a side view of my improved twyer partly broken away. Fig. 3 is a longitudinal sectional view of the twyer. Fig. 4 is an end view of the twyer.

Referring to the drawing A indicates my improved twyer which is formed of a frusto-conical casing A', having a central tapering air tube A², terminating in an enlarged concaved mouth A³, adapted to be secured in a furnace B. A tube A⁴, extends upwardly through the casing from the top of the mouth A³, to which a pipe C', is connected, leading from an oil tank C, arranged to one side of the furnace through which oil is

adapted to be fed to the mouth. A fan D is arranged to one side of the furnace, connected to the air tube A², by a pipe D' adapted to force the air and oil into the furnace. The casing is provided with a supply pipe E, and an outlet pipe F, through which cold water is adapted to circulate to keep the twyer from burning up by the intense heat.

From the foregoing description it will be readily seen that when the twyer is in use the concaved mouth will always retain a certain amount of oil against the air blast, thereby heating the same before it comes into contact with the air blast causing it to vaporize much quicker than it would if it comes into contact with the blast direct from the oil tube.

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

An oil burner comprising a frusto conical casing having a central tapering air tube terminating at the smaller end of the casing in an enlarged concaved oil retaining mouth, said casing and tube being connected at each end to form a cooling chamber, inlet and outlet water pipes communicating with said chamber, an air supply pipe connected to said air tube, and an oil supply pipe extending through the side of said casing and terminating at the inner concaved surface of said oil retaining mouth.

JOHN PICKLES.

Witnesses:

THEO. WALTHER,
A. L. PRATTE.