

UNITED STATES PATENT OFFICE.

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LIQUID FUEL.

1,405,809.

Specification of Letters Patent.

Patented Feb. 7, 1922.

No Drawing.

Application filed November 22, 1917. Serial No. 203,336.

To all whom it may concern:

Be it known that I, MILTON C. WHITAKER, of New York city, in the county of New York and in the State of New York, have
5 invented a certain new and useful Improvement in Liquid Fuel, and do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates in general to fuels designed to be used in any desired manner, but it has application especially to fuels adapted to be used as a source of power, as for example fuels for burners and motor fuels.

The object of my invention is to provide
15 a fuel containing a light hydrocarbon, as well as alcohol, and an ingredient adapted to blend the same or form a solution with the hydrocarbon and alcohol.

A further object of my invention is to provide
20 a fuel of this character, which is of such a nature that only a very small quantity of the third ingredient is found necessary.

A further object is to provide a fuel of this character which contains a large percentage of the light hydrocarbon, notwithstanding the small percentage of the third ingredient.

A further object of my invention is to provide a fuel of this character in which
30 the third ingredient is pinene or some product containing the same.

A further object of my invention is to provide a fuel of this character in which the third ingredient is a pine oil, that is to say
35 the oil containing pinene obtained by distillation of pine wood with live steam.

Further objects of my invention will appear from the detailed description thereof contained hereinafter.

40 While my invention is capable of being carried out in many different ways, for the purpose of illustration I shall describe only certain ways of carrying out the same herein.

45 For example, a fuel made in accordance with my invention may be comprised of:
25 c. c. gasolene,

25 c. c. kerosene,

25 c. c. ethyl alcohol,

14 c. c. pine oil, s. g.—.920 to .940.

As another example of my invention, the fuel may be comprised of:

25 c. c. gasolene,

25 c. c. kerosene,

25 c. c. ethyl alcohol,

10 c. c. pine oil, s. g.—.920 to .940.

It will be understood, however, that I may use other terpenes instead of the pine oil hereinabove referred to.

It will be understood, also, that, instead
60 of the gasolene and kerosene referred to in the above example I may use only gasolene.

While I have described my invention above in detail, I wish it to be understood that many changes may be made therein
65 without departing from the spirit thereof.

I claim:

1. A fuel consisting mainly of gasolene, kerosene and an alcohol and containing a blending agent comprising a terpene.

2. A fuel consisting mainly of gasolene, kerosene and ethyl alcohol and containing a blending agent comprising a terpene.

3. A fuel consisting mainly of gasolene, kerosene and an alcohol and containing a
75 relatively small amount of a blending agent comprising a terpene.

4. A fuel consisting mainly of gasolene, kerosene and ethyl alcohol and containing a blending agent comprising pinene.

5. A fuel consisting mainly of gasolene, kerosene and alcohol in about equal parts and about half a part of pine oil.

6. A fuel consisting mainly of gasolene, kerosene and alcohol and containing about
85 half a part of a blending agent comprising a terpene.

In testimony that I claim the foregoing I have hereunto set my hand.

MILTON C. WHITAKER.

Witnesses:

G. R. TRAUTMAN,
M. ARMERDING.