

UNITED STATES PATENT OFFICE.

WALTER T. SCHREIBER, OF BALTIMORE, MARYLAND, ASSIGNOR TO U. S. INDUSTRIAL ALCOHOL CO., A CORPORATION OF WEST VIRGINIA.

MOTOR-FUEL.

1,398,948.

Specification of Letters Patent.

Patented Nov. 29, 1921.

No Drawing.

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To all whom it may concern:

Be it known that I, WALTER T. SCHREIBER, of Baltimore, in the State of Maryland, have invented a certain new and useful Improvement in Motor-Fuel, and do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates particularly to fuels adapted to be used in internal combustion engines generally.

The object of my invention is to provide an efficient fuel for use in internal combustion engines generally, and which contains a comparatively heavy hydrocarbon, but the constituents of which are such as to enable the fuels to be utilized in the same manner as the light hydrocarbon fuels previously used for this purpose.

Another object of my invention is to provide motor fuels containing hydrocarbons from which the lower paraffin hydrocarbons above propane, up to and including heptane, are substantially absent.

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

For example, in carrying out my invention, I may provide a motor fuel comprised of the following:—

90 to 92 parts by volume of kerosene, 8 to 10 parts by volume of sulfuric ether.

The kerosene may be any light hydrocarbon distillate having a specific gravity between 30° Bé. and 50° Bé. These are usually hydrocarbons from which the lower members of the paraffin series of hydrocarbons above propane and up to and including heptane are substantially absent. The proportion of sulfuric ether may be varied to some extent, but it is desirable to use about the proportions stated, these being substantially more than 2% of ether based on the weight of the fuel mixture.

Instead of the sulfuric ether, I may use one of a number of other volatile low-boiling constituents and which have boiling points not in excess of 56.5° C., such for example as acetylene, methyl ether, acetone, carbon disulfid, methane, ethane, propane.

It will be found that motor fuels made in this manner, while containing a very large percentage of comparatively heavy hydrocarbons, can, nevertheless, be used with the greatest advantage in internal combustion engines in the same manner that light hydrocarbons have been hitherto used, and with equally advantageous results.

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

I claim:

1. A fuel consisting of 90 to 92 parts by volume of a petroleum distillate having a density between 30° Bé. and 50° Bé., and about 10-8 parts by volume of a very volatile combustible constituent.

2. A fuel consisting of 90 to 92 parts by volume of a petroleum distillate having a density between 30° Bé. and 50° Bé., and about 10-8 parts by volume of ethyl ether.

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

WALTER T. SCHREIBER.

Witnesses:

JOHN P. GISCHER,
ARTHUR WRIGHT.