

UNITED STATES PATENT OFFICE.

FREDERICK W. ROHRS, OF ROSEDALE, MARYLAND.

MOTOR-FUEL.

1,399,227.

Specification of Letters Patent.

Patented Dec. 6, 1921.

No Drawing.

Application filed October 3, 1920. Serial No. 415,568.

To all whom it may concern:

Be it known that I, FREDERICK W. ROHRS, citizen of the United States, residing at Rosedale, State of Maryland, have invented new and useful Improvements in Motor-Fuel, of which the following is a specification.

The present invention relates to a motor fuel which, while in some respects it resembles gasoline and is intended to be used as a substitute for gasoline, for example in running automobile engines and the like, possesses many properties much superior to the properties of ordinary gasoline which has a specific gravity of 56 degrees to 61 degrees Baumé, and whose initial boiling point varies between 80 degrees F. to 160 degrees F., and its final boiling point from 368 degrees F. to 400 degrees F., and the object of the invention is to produce a fuel which will be substantially better than ordinary gasoline for the purposes above specified. In compounding my fuel, I preferably start with kerosene of 50° Baumé at 70° F., the specific gravity of kerosene being between 54 and 32 degrees Baumé, and having a boiling point of 100 to 600 degrees F. This substance is mixed by the addition of one-half ounce acetone to 16 ounces of the kerosene. The acetone employed is preferably chemically pure, although acetone of any of the commercial grades of purity, relatively free from water, can be employed. To the amount of the mixture produced as above stated, is then added one gallon of ordinary gasoline of 64° Baumé at 80° F. The material is then thoroughly mixed and is ready for use in the same manner as ordinary gasoline is used. The carbureters of automobiles should be carefully adjusted, when changing from any other kind of fuel (such as ordinary gasoline) to this fuel.

At 70 degrees F. the following formula has been found to give the best results:

1 oz. of liq. acetone or approximately 1%,

16 oz. of kerosene or approximately 11%,
128 oz. (1 gal.) gasoline or approximately 88%.

I am aware that various mixtures have heretofore been proposed for use as substitutes for gasoline. Such materials in many cases have contained benzol, camphor, alcohol and other coal tar products, these materials invariably have been found to produce excessive quantities of carbon, poor cooling of the engine and consequent overheating of the engine. These materials and motor fuels containing the same and also motor fuels containing various other substances heretofore proposed have been found to also injuriously affect metal parts of the engine, carbureter and fuel system, whereas, the fuel of the present invention is free from these defects. Many of the artificial fuels heretofore proposed have also been found to injure shellac, gaskets and the floats of carbureters, which my fuel does not do. Products in the nature of motor fuel have heretofore been extensively advertised and it has been claimed that many of these will remove crystallized or free carbon from the interior of the engine cylinder. I make no claim to remove free carbon from the cylinder, but if the adjustment of the carbureter is proper, there will be no free carbon deposited in the engine cylinder, in the valve or on the spark plugs. The action of the acetone on the kerosene is to regulate and control the vaporization of the kerosene so that better vaporization of the fuel will result.

I claim:

1. A motor fuel consisting of 1 to 3% acetone, 8 to 15% kerosene and 80 to 90% gasoline.

2. A motor fuel consisting of 1% acetone, 11% kerosene and 88% gasoline.

In testimony whereof I affix my signature.

FREDERICK W. ROHRS.