INIQUITY OF GASOLINE TRUST

We discussed in the WEEKLY a couple of weeks ago the high price of gasoline, and made some mention of the Rittman process, which will, government experts believe, eventually greatly decrease its cost.

Today gasoline is the most serious problem in th motor world. With the cost now in Salt Lake of from twenty-five to thirty cents a gallon and in no city less than twenty cents a gallon, and with every prospect of the price going higher, and, according to Standard Oil, an eventful gasoline famine, the problem comes directly home to every owner of a motor car.

During the past week tests have been made on the coast and in eastern cities of other fuels. These were especially with a view to establish the claims of alcohol, gasoline and kerosene. The tests show t[illegible] former is far too expensive to [illegible]urned in motors of low compressio. designed essentially to use gasoline. This condition, of course, could easily be changed if manufacturers were called on to adopt motors with compression of one hundred forty pounds or over. In one test stock cars, all of the familiar 1916 types, were used. No changes were allowed in any equipment of carburetor save that the feed line on both the alcohol and kerosene burners was wrapped around the exhaust pipe a few times in order to facilitate combustion.

A gasoline primer was allowed on the oil burner. A trip of one hundred fifteen miles was taken, and at the end of the run the figures showed as follows: gasoline, 24.6 miles per gallon; kerosene 15.1 miles per gallon; alcohol, 29.3 miles per gallon. Without estimating the cost of each fuel, this would give alcohol all the better of it —only alcohol costs 73 cents a gallon, while kerosene is 9 cents.

This test is an average of various others, which have been made of late, going to show that both from the standpoint of economy and variety of fuel the use of gasoline is the most advantageous.

The need in the motor world is a cheaper gasoline. So long as Standard Oil controls the product little can be hoped in price reduction. However, with the Rittman process owned by the government and now fully tested it is hoped that a cheaper and just as effective gasoline will soon be on the market. The government permtis the use of the process wtih the understanding that the price shall not be excessive.

In the last week a full and comprehensive statement of the Rittman process has been made public in Washington. It should be of the greatest interest to motor car owners, and is as fe"ows:

"Cracking, kerosene, electricity." This terse expression of opinion is that of Dr. W. F. Rittman, one of the foremost chemical engineers of the country, in answer to the question. "What is the solution of the gasoline probelm?"

Dr. Rittman then proceeded to elaborate: With the consumption of gasoline increasing rapidly, with the supply of gasoline-yielding crude declining with equal celerity, and with exports of crude and fuels being continuously augmented, there is but one of three solutions to be hoped for of the critical gasoline problem. We must find some way of increasing the available supply of gasoline to meet the increased demand, or we must come to the use of fuels which have somewhat the same composition as the conventional motor fuel, but are more plentiful, or finally we shall have to look to some other agent for use in the propulsion of motor cars and the operation of other hydrocarbon-burning machines.

Now, however, the increase in demand and the decrease in supply have reached a position where this expedient, the use of "mixes"—combinations of high and low grade fuels, no longer serves to maintain the situation. Consequently the gasoline problem has reached an acute stage.

Our sole hope of early relief lies in cracking, unless, of course, new and abundant sources of crude supply are discovered.

Cracking is the technical name for a fractional distillation process, whereby crude oil is made to yield more gasoline than it gives under the ordinary methods of refining. Any petroleum product can be used under the Rittman process and is made to yield 200 per cent more gasoline than is possible with the older methods of distillation. Cracking, in simpler terms, means a breaking up or splitting up of the oil into other compounds, and should not be confused with a molecular destruction process in which the various components are so broken up as to produce elements.

Dr. Rittman has dedicated his cracking process to the American public, and under the present plans any one may apply for permission to use it, provided he agrees to give to the public all patentable ideas procured as a result of such use.

By means of the Rittman cracking process it is possible to obtain, from a given quantity of crude, fully 200 per cent more gasoline than under the ordinary process of refining, and it seems that the extensive use of the Rittman process is one solution to the gasoline problem. Under present conditions kerosene, asphaltic residuum and other oils cannot be made to yield gasoline, and the Rittman process by making these substances give up gasoline, increases the supply of the motor fuel. With a sufficient number of plants in operation the demand might be satisfied. There are at present six of these Rittman gasoline plants in the course of construction, and within a few years a sufficient number may be in operation to control the price of gasoline.

"Cracking processes merely give more gasoline from a given quantity of crude," says Dr. Rittman, "and only when a sufficient number of cracking plants are in operation can there be any material effect on the supply of gasoline and on its price. Six plants can produce about one thousand barrels of gasoline per day. This would be fuel for, say, approximately 20,000 motor cars. We believe that within a year or two there will be enough of these cracking plants in operation actually to control the price of gasoline. Certainly no other solution of the problem offers as early relief as this."

As long as fancy prices can be obtained for export crude, refiners will continue to send their product across the sea. With the gradual diminishing of the crude oil supply this means that you motorists can look for 30-cent gasoline in the spring and summer, when the demand becomes even greater than it is now. The 2,500,000 cars now in use consume considerably more than 1,000,000,000 gallons of gasoline annually. The 3,000,000 cars that promise to be in service by the end of 1916 will need 1,400,000,000 gallons of fuel to keep them running. The actual production of gasoline in 1915 amounted to about 1,200,000,000 gallons. To meet the demands of 1916 we shall have to increase our gasoline production to something like 2,000,000,000 gallons.

As an indication of what we may expect it may be mentioned that the United States government has had contracts for gasoline deliveries submitted by various refiners, and these contracts quote prices anywhere from seventeen to twenty-four cents per ballon, in tank form, for fuel to be delivered during the next six months. If the federal government must pay this price the private consumer certainly will have to pay 30 cents for his ten-gallon purchases.