SALIENT FACTS CONCERNING UTAH'S COAL RESOURCES AND INDUSTRY.

It is estimated that there is enough coal in Utah supply the present demand for at least 500 years.

In 1929 the coal mined in Utah totaled 5,150,000 tons. In 1932 the output was 2,852,127 tons; in 1934 it dropped to 2,406,183 tons. The decline of more than 50% is ascribed to the depression and to replacement of coal by other fuels, particularly by gas which was introduced into Salt Lake in 1930. In 1935 the coal output in Utah was 2,985,000 tons, an increase of half a million tons over 1934. Gas now sold in the Salt Lake Region, Ogden and Provo equals half a million tons annually in terms of coal. That tonnage is permanently lost to the coal industry, unless gas from coal can be made to replace all or a part of the natural gas now being imported and thus return that tonnage to its former place.

If raw coal in the amount that was mined in 1929 were treated to remove the oil and gas contents and make a solid smokeless at the same time, from the 5,000,000 tons of raw coal there would be produced:

15,000,000,000 cu. ft. of gas. 3,000,000 barrels of oil (42 gals. per brl. 3,500,000 tons of smokeless coal (char)

That amount of gas at 25 cts. per thousand cu. ft. would be worth \$3,750,000: the oil at \$1.00 per bl. would be worth \$3,000,000; the smokeless coal would be more valuable than raw coal, but its market value has not yet been determined. The smokeless coal thus produced would be in amount a half million tons in excess of the raw coal mined and sold in 1935; so that it would be adequate to take care of the demand and if sold at the price of raw coal last year would still leave the \$6,750,000 worth of oil and gas to pay for the processing, or show new wealth, or income.

Utah's coals are richer in oil than the coals of most other states. Smoke produced in the burning of raw coal comes from the oils in the coal. By extracting the oils from the coal it is rendered smokeless.

Therefore, in burning raw coal we are using up the valuable oil and gas contents to produce heat and a vast amount of smoke at the same time.

ABOUT SMOKELESS COAL

Smokeless coal is ordinary, bituminous coal with the oils and gas removed. There are several ways of processing coal to render it smokeless. Only experimentation will tell which process is best suited to Utah coals. One process developed at the University of Utah, using superheated steam is known to be successful with a large number of our coals.

Smokeless coal is light and porous. It resembles charcoal and can easily be kindled. It burns with a blue flame and without the slightest trace of smoke. The name char has been applied to it. It is higher in heat giving, that is, it produces more heat per pound than the raw coal from which it is made.

For the same amount of heat that is contained in one ton of smokeless coal, obtained from use of natural gas, you will pay from \$13 to \$15, at the cost of gas sold for domestic use. Therefore, if smokeless coal were to be made and sold for home use in competition with natural gas, it would be a cheaper commodity at any price under \$13 per ton. It is thought possible to process coal and sell it in competition with raw coal, which costs only one-third to one-half that of natural gas in Utah. But it will give more heat per ton than the same coal before it is processed, because moisture is entirely removed. The heating can be controlled and produced where it is wanted, so that more useful heat can be obtained from smokeless coal than from the raw product.

Smokeless coal can be used in all of the common stoves, fire-places, furnaces, or any of the ordinary equipment now in use. No change will be necessary, when Smokeless Coal comes onto the Utah market.