NOTES FROM THE U. S. BUREAU OF MINES.*

TREATING NATURAL-GAS GASOLINE TO MEET THE "DOCTOR TEST."

By D. B. Dow.

THE problem of making natural-gas gasoline that will pass the test for objectionable sulphur compounds, known as the "doctor test," has been in the past a matter of no importance to the manufacturers of casing-head or absorption gasoline, because their market was limited to refineries, which mixed the product with "straight-run" gasoline and purchased it on a gravity or distillation basis. Recently an export market has opened for this type of gasoline, so it is now desirable that it pass the "doctor test."

The Bureau of Mines has worked out, at its petroleum station at Bartlesville, Okla., a cheap and efficient method for treating the gasoline to render it "sweet" to the doctor test. The method is, briefly, scrubbing the gasoline with a solution consisting of 20 per cent. caustic soda, 7 per cent. litharge, with 2 or 3 per cent. powdered sulphur added, then rewashing with water. The method of application will vary in different plants, as a wide variety of scrubbing installations could be used. One simple arrangement is to introduce the gasoline at the bottom of a steel tower packed with steel shavings, and filled three-quarters full of the solution, the gasoline being drawn off at the top into a second tower containing water and steel shavings.

A fuller account is given in a recent report issued by the bureau.

CONSUMPTION OF REAGENTS USED IN FLOTATION.

By Thomas Varley.

IN April, 1919, the Bureau of Mines requested mill operators to supply information on the tonnages treated both by gravity concentration and flotation, the amount of concentrates produced by each system of milling, and the consumption of oils, acids, and

* Communicated by the Director.