

tance. For a great many years fuller's earth was imported from England, the only known source of supply, but in 1893 it was by accident discovered in this country. At Quincy, Fla., an effort was made, without success, to burn brick on the property of the Owl Cigar Company. An Alsatian cigar maker employed by the company called attention to the close resemblance of this clay to the German fuller's earth. As a result of this suggestion, the clay was tested and found to be fuller's earth, and the industry was developed. The principal use of fuller's earth in this country is in bleaching, clarifying, or filtering of fats, greases and oils. The common practise with mineral oils is to dry the earth carefully after it has been finely ground, and run it into long cylinders, through which the crude black mineral oils are allowed to percolate very slowly. As a result, the oil that first comes out is perfectly water white and much thinner than that which follows. The oil is allowed to continue percolating through the earth until the color reaches a certain maximum shade. Then the fuller's earth itself is clarified by a steaming process and used over again. With vegetable oils, however, the process is radically different. The oil is heated beyond the boiling point of water in large tanks, from 5 to 10 per cent. of its weight of fuller's earth is added, and the mixture is vigorously stirred and then filtered off through bag filters. The coloring matter remains with the earth, the filtered oil being of a very pale straw color. American fuller's earths are better adapted than the English earths for use on mineral oils, but the English earths are superior for the treatment of fats and vegetable oils. In clarifying vegetable and animal fats with American earths a more or less disagreeable taste is left—just why has never been determined. To show the growth of the American industry it is only necessary to state that from 6,900 tons in 1895 the production increased to 33,486 tons in 1909. This was the maximum, the output for 1910 being 664 tons less. Florida was the leading producing state in 1910, furnishing 57.38 per cent. of the total output. The other producing states, named

in the order of their rank in output and value in 1910, were Georgia, Arkansas, Texas, California, Massachusetts, South Carolina and Colorado.

UNIVERSITY AND EDUCATIONAL NEWS

SIR WILLIAM MACDONALD has completed a large purchase of land on the slope of the mountain adjoining Mountroyal Park and will give the property to McGill University. A new campus and residential buildings will be established upon it. The purchase price was over \$1,000,000. Including the cost of Macdonald College and its endowment, this brings Sir William Macdonald's total gifts to McGill University to \$10,000,000.

THE New York legislature has passed a bill to appropriate \$10,000 for the establishment of a school of sanitary science and public health at Cornell University.

MR. R. C. FORSTER has made a further gift of £30,000 to the fund for providing new chemical laboratories at University College, London.

AT Cornell University Dr. D. C. Gillespie has been appointed assistant professor of mathematics. Mr. G. W. Nasmyth has been appointed instructor in physics and Mr. J. Mackenzie instructor in economic geology.

DR. ELLIOT R. DOWNING, in charge of the department of biology of the Northern State Normal School, Marquette, Mich., has been appointed assistant professor of natural history in the school of education of the University of Chicago.

DR. THOMAS L. PORTER, who has been assistant in physics in Northwestern University and Clark University, has been appointed professor of physics in Colorado College.

DR. BENJAMIN F. LOVELACE, professor of chemistry in the University of Alabama, has been elected associate professor of chemistry in the Johns Hopkins University. Dr. Stewart J. Lloyd, adjunct professor of chemistry and metallurgy, has been promoted to the professorship of chemistry in the University of Alabama.