

tion of sugar from the vegetable we have named, deserves not only the attention of the chemist, but of the politician, considering the expanded interests of Europe and Africa as connected with the state of the Western Archipelago. The method of M. Achard is as follows: The roots are first carefully cleansed from all impurity; they are then cut into small pieces, and exposed to the bearing of a powerful press. The sugar under this process exudes from the vegetable mass, and in this state it appears glutinous, and of a dark color. Besides the saccharine matter, it abounds with albumen, extractive matter, and other substances, which must be separated from it; and the only difficulty attending the operation, is the exclusion of these impure and redundant ingredients. To effect this, he mixes in a cauldron of tin, or of tinned copper, one hundred pounds of the extract, in the state we have described, with three ounces and six drams of the sulphuric acid diluted in about a pint of water. The ingredients are afterwards poured over into vessels, to remain for the space of twelve, eighteen, or twenty-four hours. Twelve hours is a competent interval for ordinary purposes, but twenty-four is more beneficial, and the acid prevents the sugar itself from undergoing any pernicious alteration. The next step is, to separate the sulphuric acid from the extract; and this is done, by incorporating with the sugar seven ounces and a half of wood ashes, and afterwards two ounces and six grains of slacked lime. By these means, the sulphuric acid will disunite from the albumen, and the ashes with the lime will separate the acid, which will appear in the state of an insoluble salt. The application of lime is not at all new in our sugar refineries, indeed, it is constantly employed to assist the crystallization. The only thing requisite to complete the process of obtaining sugar from the beet root, is to clarify the saccharine residuum, and this part of the operation is so generally understood, that no explanation is necessary."

UNIVERSITY AND EDUCATIONAL NEWS.

THE Union Theological Seminary of New York City, one of the few theological schools

of university standing, has received an anonymous gift of \$1,100,000, which includes a site adjacent to Columbia University, where new buildings will be erected for the seminary.

MR. BRADFORD MERRILL, of the *New York World*, has made a statement on behalf of Mr. Joseph Pulitzer in regard to the school of journalism established by him at Columbia University. It appears from this statement that Mr. Pulitzer has decided that the school shall not be established until after his death. Mr. Merrill says: "To avoid all uncertainties or misconception, I may add that the endowment of the college is absolutely irrevocable, and its establishment beyond a shadow of doubt. The first million is already in the actual possession of Columbia University. The second million is legally provided for, as well as a still further voluntary sum not mentioned in any agreement. Even the nomination of the advisory board is made in an instrument that will take effect instantaneously at Mr. Pulitzer's death."

MR. ANDREW CARNEGIE's gift of \$125,000 to Oberlin College for the erection of a library building, which we recently noted, was conditioned upon the raising of \$100,000 for endowment. The gift of Mr. Carnegie makes up \$300,000 of the \$500,000 necessary to secure the \$100,000 given by an anonymous Boston donor. To secure the latter, \$200,000 must be raised by July 1, 1905.

MRS. GOLDWIN SMITH has given \$20,000 to Cornell University.

By the will of the late Edward A. Good-nough, of Worcester, gifts are made as follows: \$25,000 to Mount Holyoke College, \$15,000 to Iowa College, \$25,000 to the Huguenot Seminary in South Africa, \$5,000 to Washburn College in Kansas, \$10,000 to Drury College in Missouri.

SIR JOHN NUTTING, of Dublin, has given \$25,000 to Trinity College for scholarships.

DR. EUGENE PARK COWGILL, of the University of Missouri, was recently elected to the position of instructor in physiology, University of Kansas. He began his duties with the opening of the new year.