his botanical attainments to material account, he obtained, through the influence of his friend, Sir Joseph Banks, with George III., the chair of regius professor of botany in this university. It was a bold venture for him to undertake so responsible an office, for he had never lectured, or even attended a course of lectures, and in Glasgow, as in all other universities in the kingdom, the botanical chair was, and had always been, held by a graduate in medicine. Owing to these disgualifications his appointment was naturally unfavorably viewed by the medical faculty of the University. But he had resources that enabled him to overcome all obstaclesfamiliarity with his subject, devotion to its study, energy, eloquence, a commanding presence, with urbanity of manners, and, above all, the art of making the student love the science he taught. After 20 years of the professorship his father retired and undertook the directorship of the Royal Gardens, Kew. Since that period great changes had been introduced in the method of botanical teaching in all our universities, due, on the one hand, to a vastly advanced comprehension of the structure of plants and of the functions of their organs, and, on the other, to a recognition of the fact that the study of the animal and vegetable kingdoms could not be considered apart. Furthermore, chemistry, physics, and greatly improved microscopes were now necessary for the elucidation of the elementary problems of plant life. The addition of the building in which they were assembled was evidence of the resolve that botany should not fall from its well-earned position. The botanical laboratory would prove an invaluable aid to research under the ægis of its distinguished director, and in that belief he now declared it open.

THE HARVARD CHEMICAL LABORATORY.

PROFESSOR T.' W. RICHARDS writes in the last number of the *Harvard Graduate Magazine* in regard to research work, as follows :

"Original investigation, which has added so much to the intellectual life of the Laboratory, continues with unabated vigor. In the last five years about seventy papers have been published by the officers and students in Boylston Hall. These covered a wide range of subjects,

about half of them concerning organic chemistry, and the other half physical and inorganic chemistry. Professor Jackson's extended researches upon the structure of aromatic substances have yielded in the hands of many students a large number of interesting new compounds and the basis for further generalization upon the mechanism of chemical action. Professor Hill's precise and detailed study of pyromucic acid has now in part given place to an extremely interesting series of syntheses of the benzol ring. In physical chemistry several comprehensive papers on chemical thermodynamics have appeared, and various phenomena were studied in the Laboratory by both instructors and students. For example, the passage of electricity through gases received attention; modern theory of dissociation was studied in its relation to the sense of taste; a new basis for thermometric standardization has been found; and the fundamental Law of Faradav has been subjected to a verification more rigorous than ever before. The study of the law of definite proportions, the one other chemical law which seems to rank with Faraday's in unfailing precision, has been steadily continued. In the last ten years the atomic weights of copper, barium, strontium, calcium, zinc, magnesium, cobalt, nickel, uranium and cæsium have all been studied with a care which seems to carry conviction with it. This work has all been handicapped by the inadequate quarters in which it had to be performed, and we now have to face the bitter alternative of being obliged either to turn away graduate students, or else so to crowd them together as to make accurate investigation almost impossible."

SCIENTIFIC NOTES AND NEWS.

HARVARD UNIVERSITY has conferred the LL D. degree on Dr. H. S. Pritchett, president of the Massachusetts Institute of Technology; on Professor J. H. Van't Hoff, professor of physical chemistry at the University of Berlin, and on Professor C. S. Sargent, director of the Arnold Arboretum. The honorary M.A. was conferred on Dr. Hugo Münsterberg, professor of psychology, and on Dr. Theobald Smith, professor of comparative pathology. In conferring these last degrees, President Eliot referred to the