

at Martinette, Wis., and Escanaba, Mich.; and probably a third station will be established at Ashland, Wis. The expense of the experiments will be borne jointly by the bureau and the companies. Cedar and tamarack telephone and telegraph poles will be furnished by the state of Wisconsin free of cost, and two railroad companies have agreed to haul them to the experiment stations without charge for freight.

UNIVERSITY AND EDUCATIONAL NEWS.

A GIFT of \$50,000 by Mr. Edward D. Adams, in memory of his son, Ernest K. Adams, has been made to Columbia University for the foundation of a research fellowship in physical science. The gift is accompanied by a valuable collection of scientific apparatus to be allotted to the electrical, physical and psychological laboratories of the university.

It was made a condition of granting a charter to the University of Leeds that an endowment fund of at least £100,000 should be collected. Of this sum over \$60,000 has been subscribed.

THE Liverpool city council has voted the sum of £10,000 towards the support of the University of Liverpool.

By the will of Mr. G. T. B. Wigan, M.A., of Trinity College, Cambridge, a sum of above £9,000 was bequeathed to the university, the annual income to be applied for the purpose of promoting and encouraging scientific education or research in the university.

THE University of Aberdeen will celebrate the four hundredth anniversary of its foundation in the summer of 1906.

THE commissioner of agriculture for the Dominion of Canada, Mr. Robertson, will resign on January 1, to take charge of the new agricultural college established by Sir William MacDonald. According to the *London Times*, this will probably be the most complete agricultural college in the world. It is to be known as the Macdonald Foundation for Rural Education, the organization of which will be in the hands solely of Sir W. Macdonald and Mr. Robertson. It is to consist of three de-

partments. The first will be for original research in bacteriology as applied to soils and products, in the biology of animals and plants, and in agricultural chemistry. The second will be a department of farms for the practical illustration of the discoveries in the research department, and the third will be a department of instruction combining a farm school and a college of agriculture. There will be residences for men and women students. The laboratories will be equipped in the most complete manner, and the best features of the principal agricultural colleges in Europe and America will be adopted. The amount of Sir W. Macdonald's benefaction is said on good authority to be not less than £1,000,000.

ON the occasion of the installation of Lord Kelvin as chancellor of the University of Glasgow, on November 29, the degree of LL.D. was conferred on Dr. James Thomson Bottomley, F.R.S., Arnott and Thomson demonstrator in experimental physics in the University for 24 years from 1875; Admiral Sir John Charles Dalrymple-Hay, F.R.S.; Mr. Guglielmo Marconi; and the Hon. Charles A. Parsons, F.R.S.

PROFESSOR WILLIAM G. RAYMOND, of the Rensselaer Polytechnic Institute, has been appointed professor of civil engineering and head of the departments of engineering in the Iowa State University at Iowa City. Professor Sherman M. Woodward, of the University of Arizona, has been called to the chair of steam engineering.

PROFESSOR HARRIS J. RYAN, of Cornell University, has been appointed professor of electrical engineering at Stanford University.

MR. ANDREW CARNEGIE has been reelected Lord Rector of the University of St. Andrews without opposition, Mr. Andrew Lang and Sir Henry Craik having declined to stand.

AUGUSTUS EDWARD HOUGH LOVE, M.A., D.C.L., F.R.S., Sedleian professor of natural philosophy at Oxford, formerly fellow of St. John's College, Cambridge, has been elected to an honorary fellowship at Queen's College.

MR. E. VERNER has been elected to a newly established chair of applied chemistry at the University of Dublin.