

that otherwise could not be attempted. To name a thing is to know it. The wonderful electrical units are a fluent language that gives the widest opportunity to thought. By their character they educate our faculties of definition and of relation. They typify all quantitative thinking, not merely electrical. They are the epitome, the last word of the great minds of our age, as to what the scientific method of thought is, in relation to the whole realm of matter and force.

Therefore although the subject matter of electrical engineering is covering a wider and wider range—so wide as to be almost incongruous—the electrical method of thinking is applicable throughout. It is spreading far beyond. As an electrical engineer, I even find myself thinking of the crowds passing in the streets in terms of amperes and volts, and of the fluctuations of the stock market in terms of current, inductance, capacity, resistance and resonance.

That which can impose form upon our thought enables us successfully to think of any kind of thing. The forms of thought established for electrical engineering are at once so comprehensive, so rigid, so rich in detail, and so illuminating that engineering does not bound them. They may be called the manifestation of science in civilization, the best representation of the scientific method at work for utilitarian ends. They prove that the profession of electrical engineering not only deals with single-phase motors, storage batteries, high-tension transmissions, turbo generators, coronas, carbon transmitters and commutation, *as an occupation*, but that it also is a *way of thinking*, and as such is not an occupation, but the latest and most highly developed scientific method of solving all kinds of practical problems of matter and force, for the benefit of the human race.

GANO DUNN

HONORARY DEGREES AT THE UNIVERSITY OF MICHIGAN

ON the occasion of the celebration of the seventy-fifth anniversary of the University of Michigan honorary degrees were conferred by vote of the senate council and board of regents on graduates of the university and former members of the university senate. The doctorates conferred on scientific men with the accompanying remarks were as follows:

THE DEGREE OF DOCTOR OF SCIENCE

Edward Allen Fay, of the class of 1862, educator, editor, one of the foremost Dante scholars in this country and historian of American schools for the deaf.

Doctor John Elmer Weeks, of the class of 1881, department of medicine and surgery, now professor of ophthalmology in New York and Bellevue University, joint discoverer of the Koch-Weeks bacillus.

Doctor John Jacob Abel, of the class of 1883, professor of materia medica and therapeutics in the department of medicine and surgery of this university from 1891 to 1893, now professor of pharmacology in Johns Hopkins University, distinguished for his researches and original contributions.

Doctor Henry Sewall, professor of physiology in this university from 1882 to 1889, now professor of physiology in the University of Colorado, whose research on immunization to the venom of the rattlesnake done while a professor in this university laid the foundation for the discovery of diphtheria antitoxin.

Bryant Walker, of the class of 1876, a man who, though a busy lawyer, has found the time to make himself well and favorably known for his published work on molluscs, a world authority on the group.

Charles Francis Brush, of the class of 1869, department of engineering, the earliest pioneer in the field of electric lighting, inventor of modern arc electric lighting, honored many times at home and abroad for his scientific achievements.

THE DEGREE OF DOCTOR OF ENGINEERING

George Henry Benzenberg, of the class of 1867, department of engineering, past president of the American Society of Civil Engineers, a noted authority on the construction of water works, distinguished civil engineer and citizen.

Cornelius Donovan, of the class of 1872, depart-

ment of engineering, a profound student of river hydraulics, a faithful servant of the United States government for thirty-eight years, and distinguished as the builder of the great jetties at the mouth of the Mississippi River.

THE DEGREE OF DOCTOR OF LAWS

Doctor William Henry Howell, of Johns Hopkins University, professor of histology and physiology in the University of Michigan from 1890 to 1892, distinguished teacher and investigator, a physiologist of the first rank.

Professor Andrew Cunningham McLaughlin, of the class of 1882, for many years a member of the historical staff of his alma mater, now professor and head of the department of history in the University of Chicago, a distinguished teacher whose published contributions have placed him in the front rank of American historical scholars.

Doctor James Playfair McMurrich, for thirteen years professor of anatomy in the University of Michigan, now professor of anatomy in the University of Toronto, distinguished as a teacher and for learned contributions to the sciences of biology and anatomy.

Henry Smith Carhart, for over twenty years professor of physics in the University of Michigan, now a worthy recipient of the honors of the Carnegie Foundation, distinguished as scholar and author and for his service in the cause of international electrical units and standards of measurements.

Robert Simpson Woodward, a graduate of the University of Michigan in the class of 1872, since 1905 the president of the Carnegie Institution of Washington, engineer, astronomer, geographer, physicist, a renowned investigator of problems in the solution of which the whole world is interested.

THE FUNERAL OF M. POINCARÉ

THE funeral of M. Henri Poincaré took place on July 19. After religious ceremonies at the church of Saint-Jacques-du-Haut-Pas the procession passed to the cemetery of Montparnasse, where eulogies were delivered by the minister of public instruction, speaking for the government and the university, M. Claretie for the French Academy, M. Appell for the Faculty of Science, by M. Bigourdan for the Bureau of Longitudes, by M. Painlevé for the Academy of Sciences and General Cornille for the Polytechnic School. From

Nature we learn that the pall-bearers were MM. Guist'hau, minister of public instruction, Jules Claretie, Lippmann, Appell, Bigourdan, General Cornille, Painlevé and Zeiller. The hearse was covered with wreaths which had been sent by the staff and teachers of the Ecole Polytechnique, the Faculty of Science, the French Physical Society, the Observatory of Meudon, the Association of Pupils and Past Pupils of the Faculty of Science, the General Association of Students, the French League of Moral Education, etc. The chief mourners were MM. Léon Poincaré, son of the deceased; Emile Boutroux, his brother-in-law; Raymond Poincaré, President of the Ministerial Council, and Lucien Poincaré, Director of Secondary Education and Minister of Public Instruction, his cousins. There were also present: Captain Grandclément, representing the president of the republic; MM. Antonin Dubost, president of the senate; Klotz, minister of finance, and Lebrun, minister for the colonies; the representatives of the president of the chamber, MM. Steeg, Fernand David, Briand, Jean Dupay, Pams, René Besnard and Léon Bérard, members of the government; the delegacy of the French Academy, consisting of MM. Jules Claretie, director; Henri Roujon, treasurer; Thureau-Dangin, permanent secretary; Denys Cochin, the Marquis de Ségur, Masson, and Marcel Prévost; the delegacy of the Academy of Sciences, consisting of MM. Lippmann, president, Darboux and van Tieghem, permanent secretaries; Émile Picard, Painlevé, Humbert, members of the section of geometry; the members of the higher council of public instruction, the members of the council of the university; the delegacy of the professors of the faculty of science, consisting of MM. Andoyer, Goursat, Königs, Abraham, Cartan, Borel, Pinseux, Houssaye and Perrin; a delegacy of members of the corps des mines, of the bureau des longitudes, of the association of pupils and past pupils of the faculty of science; Sir J. Larmor, senior secretary, and Mr. Dyson, representing the Royal Society of London; the mayor and the deputy-mayors of the fifth