who spent a number of years in the mining camps, and then became interested in the oil business in Coalinga field, California, where he had much practical experience. For the past several years he has been with the California State Mining Bureau as deputy supervisor. He has recently been appointed as petroleum engineer with the Bureau of Mines, to take charge of the Dallas office, Texas. Government leases in Louisiana will be taken care of in conjunction with the demonstration work in Louisiana and Texas.

The supervisory work under Mr. F. B. Tough will cover the operating regulations to govern the production of oil and gas under the Act of February 25, 1920. These regulations cover only the active drilling, production, and gaging of oil and gas, the supervision of which has been assigned to the Bureau of Mines by the Honorable John Barton Payne, secretary of the interior. Other regulations relating to the giving of leases and permits, collection of royalty moneys, etc., are under the supervision of the General Land Office.

The operating regulations, before being submitted to the secretary of the interior, were submitted to representatives of the oil industry in the states concerned at a conference held in Washington under Assistant Secretary of the Interior Vogelsang, on April 1 and 2. These regulations, therefore, have the approval of representatives of the industry with practical field and business experience in oil and gas. The administration of the regulations will be undertaken by experienced engineers.

## THE REORGANIZATION OF THE NELA RE-SEARCH LABORATORIES

The Nela Research Laboratory was organized in 1908 under the directorship of Dr. Edward P. Hyde as the physical laboratory of the National Electric Lamp Association. The name was changed to Nela Research Laboratory in 1913, when the National Electric Lamp Association became the National Lamp Works of General Electric Company. For some years the laboratory was devoted exclusively to the development of those sciences on which the

art of lighting has its foundation, but in 1914 the functions of the laboratory were extended by the addition of a small section of applied science, which had an immediate practical objective.

The section of applied science is now being largely extended as a separate laboratory of applied science under the immediate direction of Mr. M. Luckiesh, who becomes director of applied science, and a new building is being constructed to house this branch of the work, which will be carried forward with a staff of several physicists, an engineer, an architect and a designer, together with the necessary technical and clerical assistants.

As has already been noted in SCIENCE, Dr. Ernest Fox Nichols, formerly president of Dartmouth College, and more recently professor of physics at Yale University, has accepted an invitation to assume the immediate direction of the laboratory of pure science, under the title of director of pure science. The work of this laboratory, which will be continued in the present building, will be somewhat further extended under the new organization.

The Laboratory of Pure Science and the Laboratory of Applied Science will together constitute the Nela Research Laboratories, and will be coordinated under the general direction of Dr. Hyde, who becomes director of research.

## THE LISTER MEMORIAL

AT a public meeting held at the Mansion House, London, in October, 1912, the following proposals for commemorating the work of Lord Lister were adopted: "The placing of a memorial in Washington Abbey, to take the form of a tablet with medallion and inscription; the erection of a monument in a public place in London; and the establishment of an International Lister Memorial Fund for the achievement of surgery, from which either grants in aid of researches bearing on surgery or awards in recognition of distinguished contributions to surgical science should be made, irrespective of nationality." Nature reports that a meeting of the general committee was held in the rooms of the Royal Society on Monday, July 19, to receive and adopt the report of the executive committee appointed in The chairman, Sir Archibald Geikie, stated that the sums received in respect of subscriptions from the British Empire and foreign countries amounted to £11,846 5s. 10d. A memorial tablet, executed by Sir Thomas Brock, was unveiled in Westminster Abbey on November 1, 1915, and steps are being taken for the erection of a monument in a public place in London. In order to carry out the scheme for the establishment of the International Lister Memorial Fund for the Advancement of Surgery, it was resolved that: (a) Out of the general fund a sum of £500, together with a bronze medal, be awarded every three years, irrespective of nationality, in recognition of distinguished contributions to surgical science, the recipient being required to give an address in London under the auspices of the Royal College of Surgeons of England. (b) The award be made by a committee constituted of members nominated by the Royal Society, Royal College of Surgeons of England, Royal College of Surgeons in Ireland, University of Edinburgh, and University of Glasgow. (c) Any surplus income of the general fund, after providing for the erection of a monument and defraying administrative expenses, be either devoted to the furtherance of surgical science by means of grants or invested to increase the capital of the fund. The Royal College of Surgeons of England has consented to become the trustees and administrators of the Lister Fund and to carry out its objects, subject to the above provisions of the scheme. The subscription list is still open, and the honorable treasurer of the fund is Sir Watson Cheyne, Bart., to whom donations may be addressed at the Royal Society, Burlington House, London, W. 1.

## SCIENTIFIC NOTES AND NEWS

CAMBRIDGE UNIVERSITY has conferred the degree of doctor of laws on Dr. John J. Abel, professor of pharmacology at the Johns Hopkins Medical School, and on Dr. Harvey Cushing, professor of surgery in Harvard University.

Dr. William W. Keen, professor emeritus of surgery at the Jefferson Medical College, president of the International Surgical Society, recently in conference at Paris, presided at the opening sessions.

Professor M. T. Bogert, of Columbia University, recently nominated a tariff commissioner by President Wilson, has declined the appointment.

Dr. John G. Adami, vice-chancellor of the University of Liverpool, formerly professor of pathology and bacteriology in McGill University, has been elected to an honorary fellowship in Christ's College, Cambridge.

THE Journal of the American Medical Association reports that having reached the age limit, Dr. Amalio Gimeno y Cabañas, professor of pathology at the University of Madrid, senator and at one time minister in the cabinet, was given an ovation in the university amphitheater at a special gathering for the purpose. He was presented with a medallion and a banquet followed.

Professor Albert S. Flint, of the department of astronomy of the University of Wisconsin, retires from active work this month after thirty-one years of service on the university faculty. He will continue his association with the department as emeritus professor of astronomy.

Dr. Marcus Benjamin, editor of the publications of the United States National Museum in Washington, has received from the French minister of public education the award of the Palms, with the rank of "Officier de l'instruction publique,"

THE Canadian Council of Scientific and Industrial Research has awarded \$5,000 to Professor J. C. McLennan, of the University of Toronto, for his research into the properties of helium.

THE Prussian Academy of Science has granted Dr. Agnes Bluhm 1,000 Marks to continue her experimental work on problems of heredity.

DR. SAMUEL W. HAMILTON, of the Utica State Hospital, has been appointed chief medical di-