neering, and Charles F. Chandler, pioneer in industrial chemistry, was appointed dean of the faculty and professor of analytical chemistry. Various officers of the college volunteered their services. Torrey lectured on botany, Joy on geology, Peck on mechanics and mine surveying, Reed on physics, Van Amringe on mathematics.

Though founded as a School of Mines, provision was early made for courses leading to the Ph.B. and the C.E. degrees; later architecture, mechanical engineering and electrical engineering courses were added, and it became eventually the School of Engineering of Columbia University.

Though academically a part of the School of Engineering, the title School of Mines is still borne by the mining and metallurgical departments. Pioneer work is still being done. A separate course in mineral dressing, with provision for advanced instruction was recently established, and the first laboratory equipped to make tests upon underground excavations, considered as structures, has also recently been established there.

The School of Mines has a long list of distinguished graduates. Among those prominent in fields other than mining and metallurgy are Irving Langmuir, '03, director of research of the General Electric Company and Nobel prize laureate in 1932; H. Hobart Porter, '86, president of the American Waterworks and Electric Company. The late Nathaniel Lord Britton, '79, for many years director-in-chief of the New York Botanical Garden, and Carl Barus, '77, professor emeritus of physics at Brown University and formerly dean of the Brown Graduate Department.

THE SILLIMAN LECTURES AT YALE UNIVERSITY

THE twenty-sixth series of lectures on the Mrs. Hepsa Ely Silliman Foundation will be given at Yale University during October by Dr. Edwin Powell Hubble, astronomer of the Mount Wilson Observatory, Pasadena, California. The series, entitled "The Realm of the Nebulae," will consist of eight lectures given on Mondays, Wednesdays and Fridays, at 4:15 p. m., in Strathcona Hall, beginning on October 14.

The lectures will present the available information derived from direct observations in the observable region of space considered as a sample of the universe. They will sketch the formulation of the problems and indicate the nature of the material, the methods which have penetrated the field and the results to which they lead. Finally, the results will be compared with those to be expected in current theories of cosmology.

Following are the subjects of the individual lectures:

- 1. The Exploration of Space
- 2. Classification of Nebulae
- 3. Distribution of Nebulae
- 4. Distances of Nebulae
- 5. The Velocity-Distance Relation
- 6. The Local Group
- 7. The General Field
- 8. The Realm of the Nebulae

The subject is one of compelling scientific interest and will be handled by one who is a recognized leader in this field. Dr. Hubble is not only a master of the current theories of cosmology, but has with his associates at Mt. Wilson made the observations upon which these theories, particularly those of Einstein, deSitter and others, have been based.

SCIENTIFIC NOTES AND NEWS

Dr. Howard McClenahan, secretary of the Franklin Institute and director of the museum and of the Benjamin Franklin Memorial, has resigned as director but will continue as secretary of the institute, a position that he has held since 1925. Henry Butler Allen, chief metallurgist of the Henry Disston Company, has been elected director and will take up the work on October 1. Dr. McClenahan has been granted a year's leave of absence, which he plans to spend in travel abroad.

AT a meeting of the Board of Trustees on September 5, Clement Clarence Williams, since 1926 dean of the College of Engineering of the State University of Iowa, was elected president of Lehigh University. At the same meeting the title of president emeritus was conferred on Dr. Charles Russ Richards, whose resig-

nation as president became effective on August 31. Dr. Richards became president of the university in 1921, succeeding Dr. Henry S. Drinker, who also retired with the title of president emeritus after serving as president for fifteen years.

In connection with the sixth International Botanical Congress, which opened at Amsterdam on September 2, under the presidency of J. C. Schoute, professor of botany and director of the laboratory at Groningen, Dr. Elmer D. Merrill, retiring director of the New York Botanical Garden, now director of botanical work at Harvard University, and Dr. Donald Reddick, professor of plant pathology at the New York State College of Agriculture at Cornell University, were elected corresponding members of the Netherlands Botanical Association.