

dent of Stevens Institute of Technology; past president, American Gas Institute.

"The Generation and Distribution of Electricity with Special Reference to Lighting" (two lectures), John B. Whitehead, Ph.D., professor of applied electricity, The Johns Hopkins University.

"The Manufacture and Distribution of Gas, with Special Reference to Lighting" (two lectures), (1) Mr. E. G. Cowdery, vice-president of the People's Gas, Light and Coke Co., Chicago. (2) Mr. Walter R. Addicks, vice-president of Consolidated Gas Co., New York.

"Photometric Units and Standards" (one lecture), Edward B. Rosa, Ph.D., physicist, National Bureau of Standards.

"The Measurement of Light" (two lectures), Clayton H. Sharp, Ph.D., test officer, Electrical Testing Laboratory, New York City; past president, Illuminating Engineering Society.

"The Architectural Aspects of Illuminating Engineering" (two lectures), Walter Cook, A.M., vice-president, American Institute of Architects; past president, Society of Beaux Arts Architects.

"The Decorative Aspects of Illuminating Engineering" (one lecture), Mr. Louis C. Tiffany, president of the Tiffany Studios, New York.

"The Physiological Aspects of Illuminating Engineering" (two lectures), P. W. Cobb, B.S., M.D., physiologist of the Physical Laboratory of the National Electric Lamp Association.

"The Psychological Aspects of Illuminating Engineering" (one lecture), Dr. R. M. Yerkes, assistant professor of comparative psychology, Harvard University.

"The Principles and Design of Interior Illumination" (six lectures), (1) L. B. Marks, B.S., M.M.E., consulting engineer, New York City; past president, Illuminating Engineering Society. (2) Mr. Norman Macbeth, illuminating engineer, The Welsbach Co. (3) Professor W. E. Barrows, assistant professor of illuminating engineering, Armour Institute.

"The Principles and Design of Exterior Illumination" (three lectures), (1) Louis Bell, Ph.D., consulting engineer, Boston, Mass.; past president, Illuminating Engineering Society. (2) E. N. Wrightington, A.B., Boston Consolidated Gas Co.

"Shades, Reflectors and Diffusing Media" (one lecture), Van Rensselaer Lansingh, B.S., general manager of Holophane Co.

"Lighting Fixtures" (one lecture), Mr. Edward F. Caldwell, senior member of firm and designer, Edward F. Caldwell & Co., New York.

"The Commercial Aspects of Electric Lighting" (one lecture), John W. Lieb, Jr., M.E., third vice-

president of New York Edison Co.; past president, American Institute of Electrical Engineers.

"The Commercial Aspects of Gas Lighting" (one lecture), Walton Clarke, M.E., president of The Franklin Institute, Philadelphia; third vice-president, United Gas Improvement Co., Philadelphia.

The laboratory demonstrations will be under the direction of: Charles O. Bond, manager of Photometric Laboratory, United Gas Improvement Company; Philadelphia; Herbert E. Ives, Ph.D., physicist, Physical Laboratory, National Electric Lamp Association, and Preston S. Millar, Electrical Testing Laboratories, New York, and general secretary, Illuminating Engineering Society.

#### SCIENTIFIC NOTES AND NEWS

THE Academy of Sciences at Turin has elected as foreign members Professor Maximilian Noetcher, of Erlangen; Professor Adolf von Baeyer, of Munich; Professor Fr. Ed. Suess, of Vienna, and Professor J. J. Thomson, of Cambridge.

DR. HANS CHIARI, professor of pathological anatomy at Strasburg, is the lecturer this year on the Herter foundation of the Johns Hopkins University. He lectures on October 5 and 7.

PROFESSOR ARTHUR A. NOYES, director of the Research Laboratory of Physical Chemistry in the Massachusetts Institute of Technology, has been appointed non-resident university lecturer on chemical research in Clark University. Professor Arthur Michael will deliver before the university chemical students at Clark an informal lecture on some experiences in his organic researches.

THE Warren triennial prize for 1910 of the Massachusetts General Hospital, Boston, has been awarded to Dr. George H. Whipple, assistant professor of pathology in Johns Hopkins University and resident pathologist in Johns Hopkins Hospital, for an essay on "The Pathogenesis of Icterus."

DR. M. P. RAVENEL, professor of bacteriology at the University of Wisconsin, is in Europe, where he will represent the University of Wisconsin at the centennial celebra-

tion of the University of Berlin, October 10-13.

DR. H. D. GEDDINGS, of the U. S. Public Health and Marine Hospital Service, represents the United States at the International Congress on Cancer, which opened at Paris, on October 1.

PROFESSOR C. K. LEITH, of the University of Wisconsin, sailed from New York on July 6, by way of England, for South America, where he was engaged in professional work for several months. Mr. E. C. Harder, of the U. S. Geological Survey, accompanied him as assistant.

DR. A. HRDLICKA, of the U. S. National Museum, has returned from a six months' expedition to Argentine and other parts of the South. The principal objects of the expedition, carried on under the auspices of the Smithsonian Institution, were a study of man's antiquity in Argentina, in which he was associated with Mr. Bailey Willis, of the U. S. Geological Survey, and of the coast people of Peru.

C. W. WRIGHT, who is managing mines in Sardinia, has been in Washington, completing a report on the Kasaan Peninsula, Alaska, for the U. S. Geological Survey.

DR. HEINRICH HASSELBRING, of the Bureau of Plant Industry, U. S. Department of Agriculture, will be in residence at the department of botany in the University of Chicago during the winter quarter (January-March) of the present academic year. He will give a course in plant pathology and will direct special work dealing with parasitic fungi. It is the purpose to establish in the department work in plant pathology on a physiological basis.

DR. HJÖRT will lecture before the Royal Geographical Society in January on the Michael Sars expedition for exploration in the Atlantic Ocean. Sir John Murray was associated with Dr. Hjört in the conduct of the expedition.

MR. R. T. A. INNES, director of the Transvaal Government Observatory, has just issued to its contributing observers a comparative table showing the average rainfall over the

Transvaal for the six seasons 1904-05 to 1909-10, inclusive. This has been arrived at by dividing the Transvaal Province into a large number of areas, finding the average rainfall of each area, and taking the mean per unit area. In considering the result it should be borne in mind that the rainfall in different areas of the province varies from between 15 and 20 inches in the southwest, to between 70 and 80 or even more in the northeast. The six seasons' results and the average of six seasons are:

1909-10	.....	28.8 inches on 67 days.
1908-09	.....	40.6 inches on 83 days.
1907-08	.....	22.3 inches on 65 days.
1906-07	.....	38.6 inches on 84 days.
1905-06	.....	23.2 inches on 64 days.
1904-05	.....	23.4 inches on 76 days.
Average	.....	29.5 inches on 73 days.

THREE counties have been completed in detail by the state soil survey field parties now operating under the cooperative supervision of the soils department of the College of Agriculture of the University of Wisconsin, the State Geological and Natural History Survey and the U. S. Bureau of Soils. The completed counties are Waukesha, Iowa and Waushara. Only the field work is done, however, and a large amount of mapping and soil analysis remains to be completed so that reports will not be issued until a year or more later. Detailed surveys are in progress in three other counties, Fond du Lac, Juneau and La Crosse and the field parties will push the work as long this fall as the weather conditions will permit. Preliminary surveys are in progress in northern Ashland, Bayfield and Douglas counties. Such preliminary surveys were completed in the block of counties including Polk, Barron, Rusk, southern Price, Lincoln, St. Croix, Dunn, Chippewa, Taylor, Marathon, Pierce, Pepin, Eau Claire, Clark, Wood, Portage and the western part of Langlade as well as Marinette county. This first survey was mostly done by the geological and natural history survey, previous to the beginning of the state soil survey. The chemical analyses are being completed by the present survey. The U. S. Bureau of Soils is cooperating in the detail surveys but not in the preliminary

work. Previous to the beginning of the state survey the U. S. bureau had conducted surveys in the Viroqua area, the Janesville district, Racine county, the Portage district, and the Superior district. The field work and the soil analyses are under the direction of Professor A. R. Whitson, chief of the soils department of the College of Agriculture, Madison.

#### UNIVERSITY AND EDUCATIONAL NEWS

At Yale University the salaries of professors and assistant professors have been increased by \$49,000 from the alumni fund. The salaries of full professors are to be \$4,000 to \$4,500 and \$5,000, based mainly on length of service, but modified somewhat by university responsibility and personal distinction. In the case of assistant professors the maximum salary is increased to \$3,000.

THE newspapers have contained various inaccurate statements in regard to the Wyman bequest to the Graduate College of Princeton University, it having been at first exaggerated and recently underestimated. The amount of the bequest is, as originally stated in this JOURNAL, between \$2,000,000 and \$3,000,000. All contests of the will have been withdrawn or overruled.

DR. GEORGE BLUMER has been elected dean of the medical school of Yale University, to succeed Dr. Herbert E. Smith.

THE following members of the faculty at the University of Chicago have been promoted from associate professorships, heretofore held by them, to the rank of professor: Leonard Eugene Dickson (mathematics) and Robert Andrews Millikan (physics). The following have been promoted from assistant professors to be associate professors: W. W. Atwood (geology), H. H. Barrows (geography), J. Paul Goode (geography). A. C. Lunn (mathematics), has been promoted to an assistant professorship.

In the School of Mines of Pennsylvania State College the following appointments have been made: Mr. H. D. Pallister, M.E.

(Case), formerly mining engineer with the Chisos Mining Co., Terlingua, Texas, and later instructor in mathematics, Case School, has been appointed instructor in metallurgy and Mr. Victor Ziegler, B.A. (Iowa), M.A. (Columbia), instructor in geology and mineralogy.

APPOINTMENTS in Swarthmore College have been made as follows: George William Lewis, assistant professor of mechanical engineering; Scott B. Lilly, assistant professor of civil engineering; Howard C. Potter, instructor in engineering; Herman Pritchard and John Pitman, assistants in mathematics.

DR. GUY H. SHADINGER has been appointed professor of chemistry at Dickinson College.

ROBERT H. BAKER, A.B. (Amherst), Ph.D. (Pittsburgh), has been appointed acting assistant professor of astronomy at Brown University.

DR. BIRD THOMAS BALDWIN, lecturer on education at the University of Chicago, has been appointed associate professor in education and head of the School of Practise Teaching at the University of Texas.

EDITH M. TWISS, Ph.D. (Chicago), has been appointed assistant professor of botany in Washburn College, Topeka, Kan.

DR. FRITZ PREGL, of Graz, has been appointed full professor of chemistry at Innsbruck.

#### DISCUSSION AND CORRESPONDENCE

##### A COMPARISON OF METHODS FOR ESTIMATING FAME

SEVERAL communications have appeared recently in SCIENCE regarding various methods of rating men in position of eminence. Liming, the latest contributor,<sup>1</sup> dwells particularly upon the value of the space and adjective methods, considering these to be best in point of efficiency. In the present article I wish to mention several other possible methods for determining the relative positions of men in point of renown.

Since there is no fixed standard by which degree of renown can be measured, "historiometry" so called can never aspire to the

<sup>1</sup> SCIENCE, N. S., XXXII., 157.