4. The reduction in the standard of living, by extending the tendency already enforced to some extent, as in the gradual withdrawal of meat and other valuable food products from the daily diet, and adopting such standards as are common in China and Japan, where beef, butter and milk are practically unknown.

The greatest study of mankind is not man, but the application of principles upon which depends the preservation of man's prosperity and civilization; and this study must not only include the application of science to raise high the limitations of the production from the soil of necessary food supplies, but it must also include the application of sense in placing some just and necessary limitations upon the reproduction of the least fit of human kind. CYRIL G. HOPKINS

UNIVERSITY OF ILLINOIS

## ATTENDANCE OF STUDENTS AT FOREIGN UNIVERSITIES

The following table, which I have recently compiled, may be of interest to your readers.

These figures of attendance were furnished to the U.S. Commissioner of Education by the editor of *Minerva*, were printed by him in his annual report for 1908 (not summarized as here, but in detail for each institution, country by country), and are probably as complete as any which could be readily found or That these totals understate, compiled. rather than overstate, the attendance in some of the countries which have not taken the pains to prepare complete official statistics is highly probable; thus in SCIENCE, September 24, 1909, there are given figures quoted from Professor B. Menschutkin, writing in Nature, which claim a total attendance of students in the higher educational institutions of Russia for the years of 1908 and 1909, of 76,900, with the surmise of possibly 20,000 more in private higher colleges in different towns-a total of 96.900 as opposed to 54,208 given in the table for the year 1907 as a total of the figures furnished by the editor of *Minerva*.

I have not Nature at hand, but as quoted in SCIENCE Professor Menschutkin fails to state from what source his figures were drawn and I have therefore not been able to check them and, consequently, have not felt free to use them in this table in place of those having the sanction of "official" source. My own belief is that the total for Norway is considerably less than it should be if it represented complete results, but I have not, after due search, been able to find official supplementary figures. The same may be true in the case of some other countries, but the table is significant enough as it stands in the showing it makes of the widespread interest and participation in higher education.

Country	Population	Number of Students in Higher Educa- tional In- stitutions, 1906-7	Popula- tion per Student
United States	83,941,510 (Est. 1906)	283,3951	296
		212,956 <sup>2</sup>	394
Switzerland	3,463,609 (Cen. 1905)	10,511	330
France	39,252,267 (Cen. 1906)	50,935	771
Denmark	2,605,268 (Cen. 1906)	3,363	775
Germany	60,641,278 (Cen. 1905)	73,020 <sup>3</sup>	830
Austria-Hungary	46,973,359 (Est. 1906)	51,691	909
Greece	2,631,952 (Cen. 1907)	2,836	928
Italy	33,640,710 (Est. 1907)	33,174	1,014
Belgium	7,238,622 (Est. 1906)	7,139	1,014
Netherlands	5,672,237 (Cen. 1906)	5,435	1,044
United Kingdom	44,100,231 (Est. 1906)	41,3054	1,068
Spain	18,831,574 (Cen. 1900)	15,642	1,204
Roumania	6,585,534 (Est. 1907)	5,336	1,234
Sweden	5,337,055 (Cen. 1906)	4,032	1,324
Portugal	5,423,132 (Cen. 1900)	3,923	1,382
Norway	2,321,088 (Est. 1906)	1,500	1,547
Servia	2,676,989 (Est. 1904)	1,022	2,619
Russian Empire	149,299,300 (Est. 1906)	54,208	2,754
Bulgaria	4.035.620 (Cen. 1905)	1,324	3,048

Population from "Statesman's Year Book," 1908. Number of Students from "Report of U. S. Commissioner of Education," 1908, Vol. I.

GUIDO H. MARX

## ELECTIONS TO THE AMERICAN PHILO-SOPHICAL SOCIETY

At the annual elections for members of the American Philosophical Society on April 23, fifteen residents of the United States and five

- <sup>1</sup> Including normal schools.
- <sup>2</sup> Excluding normal schools.
- <sup>8</sup> Including hearers.
- \* Excluding 22,159 "evening students."

foreign residents were, according to the custom of the society, elected to membership, from among the forty-nine nominations. The members elected, together with the credentials presented by their proposers, are as follows:

Simeon Eben Baldwin, LL.D., New Haven. Professor of Constitutional and Private International Law in Yale University. Justice of the Supreme Court of Errors of Connecticut, 1893– 1906, and Chief Justice, 1906–1910. President of American Bar Association, 1890; of American Social Science Association, 1897; of International Law Association, 1899–1901; of American Historical Association, 1905; of Association of American Law Schools, 1902. Author of "Baldwin's Connecticut Digest"; "Cases of Railroad Law"; "Modern Political Institutions"; "American Railroad Law"; "American Judiciary."

Francis G. Benedict, Ph.D., Boston. Director of the Nutrition Laboratory of the Carnegie Institution; Professor of Chemistry at Wesleyan University, 1896–1905; Physiological Chemist of Nutrition Investigations of United States Department of Agriculture, 1895–1907. Author of extensive experimental investigations in nutrition, based largely on studies with the respiration calorimeter and of numerous contributions to organic and physiologic chemistry. Member of the American Chemical Society, American Physiol•gical Society, Deutsche Chemische Gesellschaft, etc.

Charles Francis Brush, Ph.D., LL.D., Cleveland, Ohio. Electrical Engineer. Designed the Brush Series of Arc Lighting Dynamo, and the Series Arc Lighting System. Has for many years devoted himself to scientific research. Decorated by the French Government in 1881 for achievements in electrical science. Received the Rumford medal of the American Academy of Arts and Sciences in 1899.

Douglas Houghton Campbell, Ph.D., Palo Alto, Cal. Professor of Botany at Leland Stanford University. The most prominent student of the structure and development of the higher cryptogams in this country, and has an expert knowledge of the embryology of higher plants. Author of valuable books and papers on the comparative morphology of plants, evolution of plants, structure and development of the mosses and ferns, and embryology of the simpler angiosperms.

William Ernest Castle, Ph.D., Payson Park, Belmont, Mass. Professor of Zoology at Harvard University; student of heredity by experimental methods. Author of works of importance on

heredity of sex, inheritance of characteristics in rabbits, mice and guinea pigs.

George Byron Gordon, Philadelphia. Assistant Professor of Anthropology and Director of the Museum of Archeology of the University of Pennsylvania. Author of various papers on American Archeology in the publications of the Peabody Museum, and of the Museum of Archeology of the University of Pennsylvania.

David Jayne Hill, LL.D., American Embassy, Berlin. Diplomatist, jurist and author. President of Bucknell University from 1879–1888, and of Rochester University from 1888–1896; Assistant Secretary of State, 1898–1903; United States Minister to the Netherlands, 1905–1907; Ambassador to Germany since 1907; Member of the Permanent Administrative Council of The Hague Tribunal. Author of a "Life of Washington Irving," "Elements of Rhetoric," "Life and Works of Grotius," "A History of Diplomacy."

Harry Clary Jones, Ph.D., Baltimore. Professor of Physical Chemistry in Johns Hopkins University. Brilliant investigator of problems connected with physical chemistry. Author of several works on that subject and contributor to American, German and French scientific journals on chemical and physical phenomena.

Leo Loeb, M.D., Philadelphia. Assistant Professor of Experimental Pathology in University of Pennsylvania. Research worker in animal pathology and general pathology. Author of papers on Regeneration and Transplantation of Tissues; Etiology and Growth of Tumors; Coagulation of the Blood and Thrombosis; Venom of Heloderma, etc. One of the Board of Editors of Folia Hæmatologica; Collaborator of the Biochemisches Centralblatt; Zeitschrift für Krebsforschung; and Jahresbericht über Immunitätsforschung.

James McCrea, Ardmore, Pa. Civil Engineer; President of the Pennsylvania Railroad.

Richard Cockburn Maclaurin, F.R.S., LL.D. (Cantab.), Boston, Mass. Formerly Professor of Mathematical Physics in University of Wellington, New Zealand, and of Applied Mathematics in Columbia University, New York. President of the Massachusetts Institute of Technology. Author of many scientific articles of high value. Distinguished for investigations in mathematical physics, especially physical optics, published chiefly in Proceedings of Royal Society.

Benjamin O. Peirce, Ph.D., Cambridge, Mass. Professor of Mathematics and Natural Philosophy in Harvard University. Eminent authority on mathematical physics and magnetism. Author of "Theory of the Newtonian Potential Function"; "Experiments in Magnetism," and of numerous scientific papers on physics and mathematics. Fellow of the American Academy of Arts and Sciences; Member of the National Academy of Sciences; American Mathematical Society; American Physical Society; Astronomical, and Astrophysical Societies of America, etc.

Harry Fielding Reid, Ph.D., Baltimore. Professor of Geological Physics in Johns Hopkins University, Baltimore. Special agent in charge of earthquake records in U. S. Geological Survey. Professor of Mathematics (1886–89) and of Physics (1889–94) in Case School of Applied Science, Cleveland, Ohio. Author of "Reports on the Highways of Maryland," and of article on glaciers.

James Ford Rhodes, LL.D., Boston, Mass. Historian. Author of "History of the United States from the Compromise of 1850," in seven volumes (1850-77). Recipient of the Loubet Prize of the Berlin Academy of Sciences.

Owen Willams Richardson, M.A. (Cantab.), D.Sc. (Lond.), Princeton, N. J. Professor of Physics in Princeton University. Has published since 1901 important papers on the radioactive discharges from hot bodies. These researches have recently led to the experimental verification of Maxwell's law of distribution, and are still in active progress. His papers have appeared in the Philosophical Transactions and in the London, Edinburgh and Dublin Philosophical Magazine.

## FOREIGN RESIDENTS

Adolf von Baeyer, Ph.D., M.D., F.R.S., Münich. Professor of Chemistry in University of Münich since 1875. Fellow of the Royal Society; Member of the National Academy of Sciences, and of the Academies of Berlin, St. Petersburg, Vienna and Rome, and of the Institute of France. Distinguished for his investigations in the field of organic chemistry. Recipient of the Nobel prize in chemistry in 1905 and was awarded the Davy Medal by the Royal Society in 1881 for his researches on indigo.

Madame S. Curie, Paris. Chemist; Discoverer of Polonium, Radium, etc.

Sir David Gill, K.C.B., Sc.D., LL.D., F.R.S., London. H. M. Astronomer at Cape of Good Hope, 1879-1907. President of the Royal Astronomical Society; Past-president of the British Association for the Advancement of Science; Member of the Academies of St. Petersburg, Ber-

lin, Rome, of the Institute of France and of the National Academy of Sciences. In 1877 proposed and carried out an expedition to Ascension Island to determine the solar parallax by observations of Mars. Author of report of this expedition; of Heliometer Determinations of Stellar Parallax in Southern Hemisphere; Determination of the Solar Parallax and Mass of the Moon from Heliometer Observations of Victoria and Sappho; Gold Medallist of the National Academy of Sciences; of the Astronomical Society of the Pacific; and of the Royal Society.

Edward Meyer, Ph.D., LL.D., Berlin. Professor of Ancient History in the University of Berlin. Leading authority on ancient oriental history. Author of "Geschichte des Altertums"; "Forschungen zu Alter Geschichte"; "Die Israeliten und ihre Nachbarstämme"; and of numerous papers and monographs. German Exchange Professor at Harvard University (1909–10).

Charles Emile Picard, Paris. Vice-president of Academy of Sciences of Paris; Professor of Analyse Supérieure in the University of Paris, and of General Mechanics at l'Ecole Centrale des Arts et Manufactures. Member of the Academies of Berlin, St. Petersburg, Rome, Copenhagen, Turin, Bologna, Boston and Washington; Member of the Royal Societies of Göttingen, Upsala and Helsingfors. Author of Traité d'Analyse; Théorie des functions Algébriques de deux Variables and of numerous memoirs upon mathematics.

## THE GEORGE WASHINGTON MEMORIAL BUILDING

THE council of the American Association for the Advancement of Science, at its meeting in Boston in December, gave its approval to the general plan of the George Washington Memorial Association to erect in the city of Washington a building to serve as a home and gathering place for national, patriotic, scientific, educational, literary and art organizations, including the American Association for the Advancement of Science, and authorized the appointment of a committee of five to assist in the effort.

President Michelson appointed as this committee Dr. C. D. Walcott, secretary of the Smithsonian Institution, Dr. Ira Remsen, president of Johns Hopkins University, Dr. William H. Welch, of the Rockefeller Institute, Dr. George M. Kober, of the George-