

tific investigation, and their great professors attracted many students from all parts of the world in quest of higher education. But times are altered. Having myself been engaged in educational work as an American college professor for a good part of my manhood, I have naturally taken considerable interest in the life and work at the various institutions of learning in this country, and it is my impression that the facilities for higher education are improving in the United States much more rapidly than in Germany. Despite all our imperfections one can not but admire the great upward strides which the American system of education, from the humble district school up, has been making during the last few decades.

American educational institutions are the best equipped in the world. I know but one German university that can claim to be up to the times in this regard, and it stands third in the list of attendance. There is a steady progress all along the line of public instruction in the United States, and particularly in our higher class of universities.

The regular reports of German universities will continue to show the attendance of American students. Though their number may not increase materially, still they come. And it is well that they should, particularly those that have in view special studies and investigations in certain lines; for Germany is pre-eminently the land of specialists, and it must be admitted that German devotion to special work has added immensely to the sum of knowledge. Besides, a year or two spent abroad can not but prove to be a great blessing to the average American student, not because he needs it to prepare him for his life's work, but because travel and sojourn in this and other countries are in themselves a liberal education, and tend to broaden the mind, widen the horizon, remove petty prejudices, and supply an independent judgment of men and matters. A few semesters at a German university, bringing a young man in touch with the ideas and methods of the great scholars and scientists of this country, as well as with the spirit of the German student's life, is an advantage generally appreciated all through

life. But all this is rather a luxury than a necessity. No American need any longer come to this or go to any other country for higher education. In my judgment the United States offers to-day facilities for collegiate, academical and postgraduate studies equal in quantity and quality to those offered by any country in the Old World. HENRY W. DIEDERICH,

Consul.

BREMEN, GERMANY,

June 10, 1904.

SCIENTIFIC NOTES AND NEWS.

THE daily papers announce, we trust correctly, that Dr. Harry Tevis will establish in San Francisco an aquarium in honor of his father, the late Lloyd Tevis, which will be the finest institution of the kind in the world, the cost being \$3,000,000 to \$4,000,000. The aquarium will, it is said, be built in Golden Gate Park. Mr. John Galen Howard, supervising architect of the University of California, is preparing the plans.

SIR JOSEPH DALTON HOOKER, the great British botanist, celebrated on June 30 his eighty-seventh birthday.

DR. KUNO FISCHER, professor of philosophy at Heidelberg, celebrated on June 23 his eightieth birthday.

DR. ROBERT KOCH has been made honorary professor of the University of Berlin as well as a member of the Academy of Sciences in succession to Virchow. There are only two other similar positions at Berlin, the one held by Professor Auwers, the astronomer, the other by Professor Van't Hoff, the chemist.

THE Paris Academy of Sciences has elected as corresponding members M. Eugène Tisserand in the section of agriculture and Dr. E. Metschnikoff in the section of anatomy and zoology.

DR. PIETRO BLASERNA, professor of physics at Rome, has been elected president of the Accademia dei Lincei.

It is stated in *Nature* that a committee has been formed in the Victoria University of Manchester to procure a portrait of Professor Osborne Reynolds, F.R.S., the senior member of the teaching staff, as a memorial of the

long and distinguished services which he has rendered to the Owens College and of his many valuable original contributions to physical science and engineering.

DR. H. S. JENNINGS, assistant professor of zoology in the University of Pennsylvania, has returned from the Zoological Station at Naples, Italy, where he has spent the past year conducting investigations on the behavior of the lower organisms as a research assistant of the Carnegie Institution.

MR. ROBERT T. HILL, late of the U. S. Geological Survey, has just returned from an extensive exploration trip in Mexico, which country he has been studying for many years, in order to ascertain its geologic evolution and history and relations to the geographic features of the United States and Central American region. Mr. Hill's address will continue to be 1738 Q Street, Washington, D. C.

MR. FREDERICK V. COVILLE, botanist of the United States Department of Agriculture, and Mr. Albert F. Potter, grazing expert of the Bureau of Forestry, have gone to the southwest grazing districts with a view to studying the ranges.

THE Mackinnon studentships of the Royal Society have been filled by the election of Mr. Bryan Cookson for research in astronomy, especially for a new determination of the constant of aberration, and Mr. L. Doncaster for work on the subject of variation and natural selection in plants and animals.

A BANQUET was given to Mr. Chamberlin, the well-known British political leader, on June 30, by the Royal Institute of Public Health, in recognition of his services to preventive and tropical medicine.

At the second annual meeting of the British Academy, on June 29, Lord Reay was reelected president.

JEROME SONDERICKER, associate professor of applied mathematics at the Massachusetts Institute of Technology, died on July 22 at Wilmington, Vt.

DR. ISAAC ROBERTS, eminent for his work in astronomy, especially for his study of star

clusters and nebulae, has died at the age of seventy-five years.

THE death is also announced of Dr. L. Niemilowicz, professor of physiological chemistry at the University of Lemberg.

THE treasurers of the Institute of Medical Sciences Fund, London, have received the following additional donations: Lord Howard de Walden, £3,000; the Company of Fishmongers, 1,000 guineas; Dr. C. Theodore Williams £100.

THE British Medical Association is holding its seventy-second annual meeting at Oxford this week. Dr. G. D. Griffiths is the retiring president and Dr. W. Collier, the president-elect. The address in medicine is by Sir William S. Church and the address in surgery by Sir William Macewen.

THE Optical Society of London, of which Dr. R. T. Glazebrook is president, proposes holding an optical convention in London next year.

Nature states that a large deputation has waited on Lord Londonderry, president of the Board of Education, to urge the compulsory teaching of hygiene in elementary and secondary schools. The deputation was in support of a petition which has been signed by nearly fifteen thousand medical practitioners. The petitioners urged the central educational authorities of the United Kingdom to consider 'whether it would not be possible to include in the curricula of the public elementary schools, and to encourage in the secondary schools, such teaching as may, without developing any tendency to dwell on what is unwholesome, lead all the children to appreciate at their true value healthful bodily conditions as regards cleanliness, pure air, food, drink, etc.' The petitioners remark that a widespread ignorance prevails concerning not only the nature and properties of alcohol, but also its effects on the body and the mind. Central education authorities are therefore asked to include in the simple hygienic teaching desired elementary instruction at an early age on the nature and effects of alcohol. Dr. Farquharson, M.P., introduced the deputation, and short speeches in support of its objects were made by Sir W. Broadbent, Dr. D. Griffiths, Sir T.

Barlow, Sir Lauder Brunton, Sir Victor Horsley, Dr. Mary Scharlieb, Dr. Hutchinson and Professor Sims Woodhead. Lord Londonderry, in reply, said the proposals made by the deputation had his sincerest sympathy, and he only wished it was in the power of the board of education to carry them out. He was as anxious as any one to see increased instruction being given in the laws of health, but at the present time the necessary teachers did not exist, and he should be the last to wish anybody to act as instructor in such important subjects who had not received instruction in them. The board was at the present moment devoting itself to the training of teachers and instructing them properly in the whole question of hygiene. He trusted that as time went on its efforts in that direction would bring about the desired results.

THE appropriation of \$1,500 recently made by the New York State legislature for cooperative hydrographic work with the U. S. Geological Survey will be used in maintaining records of the rise and fall, the ordinary outflow, floods and droughts of many streams in the state. By means of these records it is possible to determine in specific cases the water supply available for canals, public water systems and water power. The condition of streams in more than fifty places in the state is regularly reported. The work has gradually grown until there is at present hardly a section of the state in which some river is not systematically measured. The list includes Chemung, Allegheny, Susquehanna, Chenango, Catskill, Delaware, Hudson, Mohawk, Saranac, Oswegatchie, Genesee, Oneida, Seneca, Oswego and Black rivers and their most important branches. The developed water power of these streams amounts to nearly 300,000 horse power, and they afford an almost unlimited amount of undeveloped power. Mr. Robert E. Horton, hydrographer, of Utica, N. Y., has charge of the work.

WE learn from *Nature* that the Imperial Academy of Sciences of Vienna announces the following grants: To the Vienna Society for Solar Observation, 1,600 Krone for observations on climatic changes in the Goldberg

glacier, and to Professor Ritter Beck von Managetta (Prague) 600 Krone for studies of plant distribution in the Julian Alps. From the Wedl bequest, to Drs. Obermayer and Pick (Vienna) 600 Krone for the chemistry of immune substances, to Dr. Moritz Probst 800 Krone for continuation of work on the brain, to Dr. Karl Camillo Schneider 400 Krone for a zoological expedition to Grado, to Professor Julius Tandler 1,000 Krone for studies in the development of birds. The committee of the Treitel legacy awards the following grants: To Professor Hans Skraup (Graz) 1,500 Krone for studies on albumens, to Dr. Franz Werner 6,000 Krone for a zoological expedition to the Egyptian Soudan, to Professor Julius Wiesner 4,000 Krone for effects of light on plant life in the Yellowstone district, to the Austrian Meteorological Society 4,000 Krone for investigations of the upper atmosphere, and to the Earthquake Commission 5,465 Krone 39 heller.

UNIVERSITY AND EDUCATIONAL NEWS.

DR. ALBERT FRÄNKEL, one of the leading German clinicians, who has been for twenty-seven years docent in the University of Berlin, has resigned. It is believed that his promotion to a professorship was withheld owing to the fact that he is a Jew. Dr. Hermann Oppenheim recently resigned under similar circumstances. He was unanimously recommended by the faculty for promotion, but the recommendation was not confirmed by the ministry.

DR. HENRY L. WOODWARD has been appointed assistant to the chair of physiology in the Medical College of Ohio, medical department of the University of Cincinnati.

At the University of Leeds, Dr. J. B. Cohen and Mr. Percy F. Kendall have been appointed professors of organic chemistry and of geology, respectively.

DR. DÖRING has been appointed professor of analytical and applied chemistry at the University of Freiberg.

DR. KARL SCHEEL has been made professor and member of the German Reichsanstalt.