

way, New York, offers berths at the lowest rates, provided that it is informed in time to write to the Home Office to obtain concessions.

The Hamburg-American Line, 35 and 37 Broadway, New York, offers berths as follows: On the *Moltke*, \$90 and up, on the *Hamburg*, \$85 and up, and on the *Prinz Oskar* and *Prinz Adalbert*, \$75 and up. They say that if a party should sail at a time when the steamers are not crowded: 'We shall be glad to give them better accommodations than the above rates call for.' Particulars of sailing can be obtained by addressing any of the offices above mentioned.

The organization of the society into sections is set forth in this JOURNAL for July and August, 1905, pages 66 and 72, respectively, of the proceedings.

Intending members may send their subscriptions, twenty francs, directly to Professor E. Paterno, or may send a check for four dollars (\$4) to the undersigned, who will forward the amount of the subscription to Rome.

American chemists intending to become members and send papers are urged to act without delay. Papers should be typewritten on thin paper and may be sent directly to the secretary or to the undersigned at Washington, who will undertake to forward them. The section before which the paper is to be read should be specified. It is suggested that the typewritten copy be carefully revised by the author to see that it is in form for printing, as the Italian authorities will follow the copies implicitly in printing the reports, and thus avoid all possible errors.

The Italian railways offer a reduction of sixty per cent. on first-class rates to all members of the congress who may wish to use the railways while in Italy.

Forty subscriptions have already been forwarded by the chairman of the committee, and many others have sent their subscriptions directly. At the present time it appears that fifty or sixty members of the American chemists have become members of the congress. It is to be hoped that a much larger number may be secured.

The chairman of the American committee urges upon intending members the desirability

of preparing papers for the congress, in order that American chemistry may be as well represented in this congress as it was at the last one in Berlin.

This will be the final notice published concerning the congress unless some additional instructions be received from the Italian committee.

H. W. WILEY,

Chairman of the American Committee.

SCIENTIFIC NOTES AND NEWS.

WE learn from the 'Year Book of the Carnegie Institution,' just published, that Mr. Alexander Agassiz has resigned as trustee of the institution and that Dr. R. S. Woodward, the president, has been elected a trustee to fill the vacancy. The vacancy in the board caused by the death of John Hay has not been filled. Dr. Charles D. Walcott has resigned the secretaryship of the board and is succeeded by Mr. Cleveland H. Dodge.

THE Nichols medal of the American Chemical Society for the year 1905 has been awarded to Professor Marston Taylor Bogert, of Columbia University, for his researches on the quinazolines. The medal will be formally presented at the meeting of the New York Section on February 9.

PROFESSOR A. PEDLER, F.R.S., director of public instruction in Bengal, has been knighted by King Edward.

DR. ADOLF LIEBEN, professor of chemistry at Vienna, has been awarded the Lavoisier medal of the Paris Academy of Sciences. He has also been elected a foreign member of the Accademia dei Lincei, Rome.

THE Lagrange prize of the Belgian Academy of Sciences has been awarded to Professor Hecker, of the Geodetic Institute at Potsdam.

DR. WALTHER NERNST, professor of physical chemistry at Berlin, has been elected a member of the Berlin Academy of Sciences.

DR. DANIEL OLIVER, F.R.S., emeritus professor of botany in the University of London, has been elected an honorary member of the Royal Society of New South Wales.

THE past and present house officers of the Johns Hopkins Hospital are to have a life-

size portrait painted of Dr. Henry M. Hurd, superintendent. It will be hung in the administration building.

THE fishery steamer *Albatross* will soon proceed on an extended cruise to the western Pacific for the purpose of conducting scientific and fishery investigations in the interest of the Bureau of Fisheries. The principal work will be done in the Japan seas. Dr. David Starr Jordan will be in immediate charge.

PROFESSOR HELE-SHAW has returned to England from South Africa, where for the past two years he has been engaged in organizing technical education.

THE State Bacteriological Laboratory, authorized by the Connecticut General Assembly, has been opened at Wesleyan University under the direction of Mr. James A. Newlands.

DR. WALTER REMSEN BRINCKERHOFF, assistant pathologist at the Harvard Medical School, has been appointed pathologist in charge of the new hospital and laboratory for the study of leprosy on the island of Molokai, Hawaii.

DR. JAMES H. HYSLOP, of New York City, has been offered the secretaryship of the American branch of the Society for Psychical Research, vacant by the death of Dr. Richard Hodgson.

PROFESSOR W. D. TAYLOR, professor of railway engineering in the University of Wisconsin, has resigned to become chief engineer of the Chicago and Alton Railroad.

DR. OTTO NORDENSKJÖLD spoke in the geological lecture room of Harvard University, on January 12, on the scientific results of the Swedish Antarctic expedition, 1901-1904, of which he was the leader, making special reference to the fossils of late Mesozoic and Tertiary formations from which large collections were secured. On the evening of January 13, Dr. Nordenskjöld was the guest of the Harvard Travelers Club at a house meeting in Boston, where he gave a general narrative of his Antarctic voyage.

ON February 21 there will be a civil service examination for the positions of plant pathol-

ogist and entomologist in the Experiment Station at Porto Rico, and also for the position of statistical expert in the Geological Survey. The salaries of these positions are \$1,200.

IN accordance with the recommendations of Professor John B. Smith, a bill has been introduced into the New Jersey legislature appropriating \$70,000 a year for five years for the extermination of mosquitoes.

THE Carnegie Museum has acquired by purchase the valuable and extensive collection of shells made by Dr. Victor Sterki, of New Philadelphia, Ohio. The collection contains a great many types and cotypes.

THE department of ethnology of the American Museum of Natural History has received as a gift from George S. Bowdoin, Esq., a member of the board of trustees, a valuable collection illustrating the culture of some of the tribes of Central Africa. The collection includes implements of warfare, idols, fetiches and masks, clothing, baskets and musical instruments, household utensils of bamboo, pottery and brass, bracelets, necklaces and household adornments of beads, shells and brass. A large gold bead weighing three ounces and seven carved ivory tusks from Ashantee are worthy of particular mention.

THE cornerstone of the High Altitude Laboratory, proposed by Professor Angelo Mosso, has been laid on the col d'Ollen, 3,000 meters above the level of the sea. The Italian, Belgian, German and Austrian governments have contributed towards the cost of erection. It is expected that the building will be completed in 1907, and will be open to men of science of all nations in 1908.

WE learn from the London *Times* that the Institute of Archeology of the University of Liverpool has despatched an expedition to make explorations and excavations in the vicinity of Esna, in Upper Egypt. The funds have been privately subscribed by Liverpool citizens. The excavations will be under the charge of the university reader in Egyptian archeology, Mr. J. Garstang, assisted by Mr. E. Harold Jones. A third member of the staff of the

same institute, Mr. Percy E. Newberry, is already at work in Egypt upon the history of the ancient civilization of that country, under the endowment of Sir John Brunner.

THE New York *Medical Record* states that according to recently published statistics, the number of medical students has been steadily decreasing in Germany. In the year 1902-3 the total number of aspirants for medical degrees in all the German universities was 6,232, which was the lowest figure noted in about twenty years. The maximum was reached in 1887-8, when 8,513 medical students were enrolled. In 1890-1 the number of medical students to 1,000 students in all departments was 296; in 1902-3 the proportion was only 178. In 1892-3 more students chose medicine than any other profession, but ten years later both philosophy and law were more popular.

THE highest recorded velocity of underground waters has been discovered by Mr. H. C. Wolff, of the department of mathematics of the University of Wisconsin, in the course of an investigation which he carried on in Arizona during the Christmas holidays. The rate of movement of underground water in gravels near Tucson he found to be 144 feet in twenty-four hours, while the highest previously rated by observers was only about 100 feet. Mr. Wolff was commissioned by the chief hydrographer of the United States Geological Survey to spend the Christmas recess giving instructions to the members of the engineering department of the University of Arizona in the methods of measuring the rate of movement of under-flow streams. The University of Arizona is carrying on this work for the purpose of developing the water resources for irrigation in the neighborhood of the city of Tucson.

THE inaugural address of the Manchester Literary and Philosophical Society was delivered, on October 17, by Sir William H. Bailey, the president of the society. The address, according to the abstract in *Nature*, took the form of an interesting historical account of the society since its foundation in 1781, and included appreciative references to the work

of many distinguished members whose names are to be found in early volumes of memoirs. The founders were the chief scientific men of Manchester. Among the honorary members were Erasmus Darwin, Dr. Franklin, Lavoisier, Dr. Priestley, William Roscoe, of Liverpool, the poet and grandfather of Sir Henry Roscoe, Dornier Ramsbottom, Josiah Wedgwood and others. The chief tools of the workshops of the world, not only those where steam engines, locomotives and steamships are built, but also of the textile factories of the world, were invented in Manchester or within thirty miles of it. The records of the society contain the names of many of these inventors who were members, for the men of Lancashire were the first to use steam power for spinning and weaving, and for punching, cutting and shaping metal. Prominent among the inventors was that genius Richard Roberts, who was always in the front rank in advocating technical education. His chief inventions were the slide lathe, planing machine and self-acting mule for spinning cotton. Then there was Nasmyth, the inventor of the steam-hammer, Sir William Fairbairn and Sir Joseph Whitworth. Finally, Sir William Bailey referred to the great work of the illustrious members' Dr. Dalton and Dr. Joule, whose effigies in marble are in the entrance to the Manchester Town Hall.

DR. LUDWIG MOND has written to the vice-chancellor of Cambridge University: "I understand that a fund exists for the augmentation of the endowment of the Stokes and Cayley university lectureships in mathematics, and that the object of such fund is to set free the time of two distinguished resident mathematicians for the promotion of advanced mathematical science by public teaching and research. I further understand that the income of such fund will in about three years' time be reduced by £300 a year. I have the pleasure in enclosing herewith a check for £1,750, which I trust will enable the lectureships to be maintained by the university for a further period. I desire that this sum should be separately invested and the income thereof accumulated until the time when the

income of the said fund shall become reduced as above mentioned, and that from and after that time the investments representing the said sum and accumulations should from time to time be applied so far as they will extend in augmenting the income of the said fund to the extent of £300 a year. Further, that if from any cause the lectureships or either of them should cease to be maintained, the said investments or such part thereof as shall not have been then applied as aforesaid should be applied for the promotion of advanced mathematical science and research in the University of Cambridge as the vice-chancellor for the time being of such university shall in his absolute discretion determine."

UNIVERSITY AND EDUCATIONAL NEWS.

MRS. ISABELLA ELDER has bequeathed to the Glasgow and West of Scotland Technical College £5,000 to provide for a course of popular lectures on astronomy.

THE new entomological laboratories of the University of California, which are under the charge of Professor C. W. Woodworth, were dedicated in connection with the joint meeting of the State Teachers' Association and State Farmers' Institute, on December 27. The building is 38 x 44 feet and is three stories high, besides attic and basement. During the past year there have been over 400 students enrolled in the department.

THE annual report of the treasurer of Harvard University shows that the funds of the university, up to July 31, 1905, amount to \$18,036,025.71, which is an increase over last year of \$1,280,271.61. The largest item of the new funds is \$736,225.28, which is the amount of the teachers' endowment fund which had been turned over up to July 31, 1905. The amount of the fund is \$2,240,000, of which already \$1,800,000 has been paid in. The deficit in the university, college and library accounts for the year was \$30,743.06, or about \$5,000 less than last year. The deficit did not cause the incurrence of any debts as it was charged to the principal of the insurance and guaranty fund, thus reducing the amount of income yielding capital. There

will be a large measure of relief, however, from the new unrestricted funds and from the increased income from the new system of tuition charges. In the medical school there was a deficit of \$24,853.93, which reduced the credit balance to \$5,560.57. The accounts of the Arnold Arboretum show a surplus of \$9,855.39.

DR. JOSEPH ERLANGER, associate professor of physiology in the John Hopkins University, has been appointed professor of physiology in the University of Wisconsin. In the same institution Dr. E. A. Ross, of the University of Nebraska, has been made professor of sociology, and Dr. A. C. McLeod, of the University of Chicago, instructor in soils. Dr. W. S. Marshall has been appointed to an associate professorship of entomology.

DR. CASWELL GRAVE, Ph.D., has been appointed professor of biology and director of the Biological Laboratory of the Woman's College of Baltimore in place of Dr. Maynard M. Metcalf, resigned. Dr. Grave is a graduate of Earlham College (B.S.) and of the Johns Hopkins University (Ph.D.). At the latter university he has been scholar, fellow, Adam T. Bruce fellow, assistant demonstrator and is now associate in zoology. He was for one season on the staff of instruction of the Marine Biological Laboratory at Woods Hole and has for four seasons been director of the Bureau of Fisheries Laboratory at Beaufort, N. C.

DR. FLORENCE PEEBLES has resigned her position as associate professor of botany at the Woman's College of Baltimore, to give all her time to zoological research. Forrest Shreve, Ph.D., has been appointed in her place. Dr. Shreve is a graduate (A.B. and Ph.D.) of the Johns Hopkins University, where he was scholar and fellow and is now Adam T. Bruce fellow in botany. He is at present on leave of absence studying at the Cinchona Botanical Garden in Jamaica.

PROFESSOR ALBRECHT PENCK, of Vienna, has accepted the professorship of geography in the University of Berlin, vacant by the death of Professor von Richthofen.

DR. K. DIETRICH, of the Hanover Technological Institute, has been called to the chair of physics at Rostock.