THE University of Christiania has on the occasion of the centenary of the birth of Abel conferred honorary degrees on a number of mathematicians, including Professor Simon Newcomb and Professor J. Willard Gibbs.

DR. EMIL FISCHER, professor of chemistry at Berlin, and Dr. Carl von Voit, professor of physiology at Munich, have been elected corresponding members of the Vienna Academy of Sciences.

BRIGADIER-GENERAL ROBERT M. O'REILLY assumed the duties of surgeon-general of the army on September 8.

MAJOR RONALD Ross, of the Liverpool School of Tropical Medicine, expects to visit the United States to study malaria.

MR. ROBERT T. HILL, of the Geological Survey, who was recently sent to Martinique to investigate the eruption of Mt. Pelée, will be engaged this season in an investigation of the Trans-Pecos region of Texas, Arizona and New Mexico. Dr. G. H. Girty, paleontologist, will be associated with Mr. Hill in the work.

DR. LUDWIG BIRO, who has spent six years in making zoological and ethnographic studies in the Malay archipelago, especially in New Guinea, has returned to Buda Pesth.

M. BORIS FEDTSCHENKO has returned from a scientific expedition to the elevated Pamir desert with a collection of plants.

DR. LUKJANOFF, professor of pathology at the University of Warsaw, and director of the Institute of Experimental Medicine in St. Petersburg, has been appointed deputy minister of public instruction by the Russian Government.

M. DE GERLACHE, leader of the recent Belgian antarctic expedition, has been appointed curator in the Natural History Museum at Brussels.

DR. J. B. MESSERSCHMITT, of Hamburg, has been appointed observer in the electro-magnetical laboratory connected with the observatory at Munich.

DR. A. SLABY, professor of electro-mechanics in the Technical Institute at Charlottesburg, has received for his researches 20,000 Marks from the fund for German industry. Dr. K. von Linder, professor of thermodynamics at the Munich Technical School, has received 10,000 Marks from the same fund.

DR. ALEX. P. ANDERSON has resigned his position of curator of the herbarium of Columbia University to become an expert to the syndicate now engaged in developing the new method of treating starchy grains, etc., recently discovered by Dr. Anderson in the laboratories of the New York Botanical Garden. Dr. Anderson is fitting up a laboratory for the continuance of his work at Minneapolis.

A MEMORIAL has recently been erected by the German Association of Alienists over the grave of the anatomist, Reil. He was buried in his garden at Halle, which is now part of the Zoological Gardens of the city.

PROFESSOR RUDOLF VIRCHOW was given a public funeral by the city of Berlin on September 9. Services were held in the City Hall, addresses being made by representatives of the Reichstag and the Town Council, and by Dr. Wilhelm Waldeyer, professor of anatomy in the University of Berlin. The body was buried in St. Matthew's Cemetery, which is situated in a southwestern suburb of Berlin.

SIR FREDERICK ABEL, known for his important researches on explosives, died on September 8, at the age of seventy-six years. He was one of the most prominent British men of science, having been president of the British Association for the Advancement of Science, the Iron and Steel Institute, the Chemical Society, the Institute of Chemistry, the Society of Chemical Industry, and the Institute of Electrical Engineers, and chairman of the Society of Arts.

CABLEGRAMS to the daily papers state that the British Association for the Advancement of Science opened its seventy-second annual meeting at Belfast on September 10, when Professor James Dewar made his presidential address. The Association has been invited to meet in South Africa in 1905. It is said the colonial governments have offered to contribute \$35,000 towards treveling and other expenses.

THE Chillean Government has issued orders that all possible facilities be furnished to the expedition from the Lick Observatory, which will shortly begin its work in that country.

THE American Institute of Mining Engineers will hold its eighty-third meeting at New Haven, Conn., beginning on Tuesday, October 14, 1902.

THE English Arboricultural Society held its annual meeting in London on August 18. Mr. George Marshall, member of the Royal Forestry Commission, was elected president in succession to Dr. Somerville, of the Board of Agriculture.

THE annual conference on the improvement of the condition of the insane, which met recently at Antwerp, adopted the following resolutions: (1) That the confinement of the insane henceforth be abandoned except in the cases of those recognized as dangerous. (2) That the system of boarding insane persons with families be carried out whenever possible. (3) That it is expedient to renew the wish formulated at the Congress at Paris for the establishment of schools for special classes of the mentally weak under medical supervision. (4) That the manner of placing patients be entirely left to physicians. (5) That forcible restraint should be condemned.

A LARGE table, invented by Professor E. C. Pickering, has been constructed in the north building at the Harvard Observatory. It is made in two revolving sections, one above the other, and takes the place of six separate tables used before. In the upper section the annals of the observatory, magnifying glasses, and reference books are kept; in the lower, letters and files.

THE division of mining and mineral resources of the Geological Survey, under Dr. D. T. Day, has issued a chart showing the quantity and value of the mineral productions of the United States for the ten years ending with 1901. The value of the total output of metallic ores, such as iron, copper, gold, silver, etc., in 1901 was \$524,873,284, against \$307,936,189 in 1892; and the value of the nonmetallic products, including coal, petroleum, natural gas, building materials, etc., was \$566,351,096 in 1901, against \$339,958,-842 in 1892. From the arrangement of the metallic and nonmetallic resources on a single sheet, it is possible to follow the yearly change in the production of about sixty of the important mineral products of the country during the decade. The chart, to be had on application to the director of the United States Geological Survey, is issued in advance of the report, 'Mineral Resources of the United States, 1901,' which will be ready for distribution in the fall.

FOREIGN papers report that the vessel Antarctic, of the Swedish South Polar expedition, with five scientific members, left Port Stanley, in the Falkland Islands, on April 11 for South Georgia. The expedition stayed in South Georgia from April 22 to June 15, and during this time a detailed survey was made of Cumberland Bay, one of the largest bays in South Georgia. Investigations into the natural history of Cumberland Bay were carried on, and zoological collections brought home from depths as great as 2,700 meters. Soundings have given depths up to 5,997 meters northwest from South Georgia. The expedition returned to Port Stanley on July 4, and will up to the end of September carry on work around the Falkland Islands and in Tierra del Fuego. In October the Antarctic will start for Graham Land, in the Antarctic Ocean.

THE English journals announce that the following prizes have been awarded for essays on subjects connected with tropical diseases:—(1) A prize of the value of 10l, entitled the Sivewright prize, presented by Sir James Sivewright for the best article on 'The Duration of the Latency of Malaria after Primary Infection, as proved by Tertian or Quartan Periodicity or Demonstration of the Parasite in the Blood,' awarded to Dr. Attilio Caccini, assistant physician, Hospital of Santo Spirito in Sassia, Rome. (2) A prize of the value of 101., entitled the Belilios prize, presented by the Hon. E. R. Beililios, C.M.G., for the best article on 'The Spread of Plague from Rat to Rat, and from Rat to Man by the Rat-flea,' awarded to Dr. Bruno GalliValerio, professor in the University of Lausanne, Switzerland. The prize of the value of 10*l*. entitled the Lady Macgregor prize, presented by Lady Macgregor for the best article on 'The best Method of the Administration of Quinine as a Preventative of Malaria Fever,' was not awarded. The judges were Surgeon-General Roe Hooper, president Medical Board, India Office, Colonel Kenneth Mac-Leod and Mr. Patrick Manson, F.R.S.

MR. CUYLER REYNOLDS, curator of the Albany Institute and Historical and Art Society, and chairman of the committee to collect funds for a meorial to Joseph Henry, has sent the *Electrical World* the following resolution:

That this committee favors a memorial wherein the sciences shall be taught, in connection with the Albany Academy where he taught as a member of the faculty, and within which building he performed the experiment that demonstrated the correctness of his principle of the electric telegraph, believing that it will be more practical than any other type; and thereby holding in cherished remembrance the views and character of the one who has been long recognized as the leading American scientist, and who donated his discoveries to the advancement of knowledge and the world's industries.

Considering the inestimable advantage that the inventions of Joseph Henry have been to the world, inasmuch as the sum of \$4,000,000,000 is invested in this country alone in enterprises that his study and free gift made possible, which industries give employment to more than a million persons, and appreciating the honor of his labors in connection with the work of this organization, we take this step with a feeling that even when the efforts shall be crowned with success it will be but a slight token of the sincere esteem of the country.

UNIVERSITY AND EDUCATIONAL NEWS.

THE University of Montana is erecting a woman's hall, to accommodate about 70 students, and to cost about \$35,000. The building will be ready for use by the first of January, 1903. That portion of Science Hall recently destroyed by fire has been rebuilt, with additional space for a school of pharmacy, not yet organized. The foundation is laid for a gymnasium to cost \$10,000. VASSAR COLLEGE receives \$10,000 by the will of the late Adolph Sutro, of San Francisco.

THE Wilson endowment fund of \$100,000 for Washington and Lee University being made up, Mr. Herbert Welsh, of Philadelphia, who was largely instrumental in raising it, recommends that a fund of \$500,000 be collected to endow a scientific and technical school for the university.

THE four hundredth anniversary of the foundation of the University of Halle, formerly at Wittemburg, will be celebrated on November 1, when a new auditorium building will be dedicated.

A PARLIAMENTARY committee has made a report of the finances of Melbourne University, from which it appears that the university has lost about \$120,000 through the frauds of an accountant. As the defalcation was in part due to the carelessness of the government auditors, the committee recommends that the loss be made good by the government.

DR. H. J. WHEELER, director of the Rhode Island Agricultural Experimental Station and professor of geography and geology in the college, has been appointed acting president. President Nichols, of the Kansas Agricultural College, at first accepted and then declined the presidency.

HENRY FARNHAM PERKINS, Ph.D. (Johns Hopkins), has been appointed assistant professor of biology in the University of Vermont.

THE following changes have been made in the department of physics of the University of Nebraska: Mr. Chas. M. Heck, A.M. (Columbia, 1901), has been appointed fellow in physics vice Mr. W. B. Cortmel, who has resigned to accept appointment with U. S. Bureau of Standards, Washington.—Mr. John Mills (Chicago, 1901), fellow in physics vice Mr. S. B. Tuckerman, has been appointed instructor in physics, University of Ohio.—Mr. S. R. Cook, former fellow in physics, has been appointed instructor in physics in the Case School of Science, Cleveland.

DR. GEORGE T. PATTON has been elected professor of moral philosophy at Princeton University.