is six dollars or less through rate is made on the basis of fare and one third for the round trip to such gateways added to rate of one fare plus twenty-five cents for the round trip tendered therefrom, provided that where such one and one-third fare to Chicago is two dollars or less, fifty cents additional be added for return transfer. The Southwestern Excursion Bureau, which includes all of Texas, Missouri south of St. Louis, and a central strip through Illinois up to Chicago, offers one fare plus two dollars. The Trans-Continental Passenger Association, which includes the Pacific coast states, offers rate of approximately two cents per mile, or about one fare and a third for the round trip.

The purchasing dates are as follows: Trunk Line Association from Washington, December 26, 27, 28, 29; from other points, December 26, 27, 28. Central Passenger Association, December 26, 27, 28. Southeastern Passenger Association, December 27, 28, 29. Western Association, December 26, 27, 28.

The date of return is arranged so that ticket holders must reach original starting point not later than January 6 in all cases, except under the Trans-Continental Association.

SCIENTIFIC NOTES AND NEWS.

A CABLEGRAM to the daily papers states that the Nobel prize in medicine has been awarded to Professor Robert Koch, of Berlin, the prize in physics to Professor Philipp Lenard, of Kiel, and the prize in chemistry to Professor Adolf von Baeyer, of Munich.

Dr. Albrecht Penck, professor of geography in the University of Vienna, has been elected a member of the Vienna Academy of Sciences. Dr. Richard Hertwig, professor of zoology at Munich, has been elected a corresponding member of the same academy.

The Geological Society of London has elected Professor Louis Dollo, Brussels, and Professor A. Rothpletz, Munich, to be foreign members in the places of Baron F. von Richthofen and Professor Gustave Dewalque, both recently deceased.

Dr. WILHELM WUNDT, the eminent psychologist of the University of Leipzig, celebrated

the fiftieth anniversary of his doctorate on November 10.

Dr. E. Ehlers, professor of zoology at Göttingen, who celebrated his seventieth birthday on November 11, has been elected a corresponding member of the Senckenbergische Naturforschende Gesellschaft at Frankfurt.

The council of the Royal Meteorological Society has awarded the Symons gold medal to Lieutenant-General Sir Richard Strachey, G.C.S.I., F.R.S.

Professor C. S. Sherrington, F.R.S., and Professor R. Threlfall, F.R.S., have been elected honorary fellows at Gonville and Caius College, Cambridge.

Professor C. S. Sargent, of Harvard University, has sailed for Chili and the mountains of South America to obtain specimens for the Arnold Arboretum.

Professor Wilhelm Ostwald addressed the Washington Academy of Sciences on November 28, on 'The International Language.' The address was discussed by Professor Maurice Bloomfield, of the Johns Hopkins University, and by Professor M. Carroll, of the George Washington University.

Professor A. V. Stubenrouch, of the University of California agricultural department, has accepted a position in the division of pomology in the Bureau of Plant Industry of the United States Department of Agriculture.

Captain Admundsen, as the daily papers have fully reported, has succeeded in passing through the Northwest Passage, and making observations about the North Magnetic Pole.

SIR CLEMENTS MARKHAM lectured before the Royal Geographical Society on November 13, on 'The Next Great Arctic Discovery,' which he held to be exploration over the continental shelf of Beaufort Sea.

Professor Herbert C. Sadler, of the department of marine engineering at the University of Michigan, has returned from a trip in the east, where he attended a meeting of the Society of Naval Architects and Marine Engineers in New York City. During his absence he delivered a lecture before the marine engineering department of the Boston Polytechnic Institute on 'The Present Status

of the Turbine in Marine Work.' Since Dr. Sadler's return the big naval tank in the new engineering building has been filled with water and the long and tedious task of testing has begun. The tank is now being tested for leakage and evaporation and it is thought that the different tests necessary before the tank can be used will occupy nearly the whole year.

The funeral services of Sir John Scott Burdon-Sanderson, formerly regius professor of medicine, in the University of Oxford, took place at Magdalen College, Oxford, on November 8. Many members of the university and men of science were present.

Dr. W. J. McMurray, president of the Tennessee State Board of Health, died at Nashville, on December 4, aged sixty-three years.

Mr. J. S. Burcham, A.M. (Stanford, 03), was drowned in Alaska on November 12. He was in the employ of the United States Bureau of Fisheries, and was with the U. S. S. *Albatross* as an expert on salmon and other fishes.

THERE will be a civil service examination, on January 3, to fill the position of physical chemist in the Bureau of Weights and Measures, Manila, at a salary of \$2,250. The examination consists only of ratings on training, experience and publications. On the same day there will be an examination to fill the position of teacher of agriculture in the Chilocco School, Okla., at a salary of \$1,000.

The trustees of the British Museum have presented the trustees of the Carnegie Museum with a fine series of reproductions of some of the more striking and important paleontological specimens in their collection, and have also made a gift of all their publications to the museum. This act of courtesy is in recognition of the kindness displayed by Mr. Carnegie in placing in the British Museum a facsimile of the skeleton of the great reptile Diplodocus, which was installed at South Kensington last May.

The fifth meeting of the California Branch of the American Folk-Lore Society was held in Berkeley, on December 7. Professor William Frederic Badè, of the Pacific Theological Seminary, gave a lecture on 'Hebrew Folk-Lore.'

An organization to be known as the Conference of New England Professors of Education was formed at a meeting held at Harvard University, on December 1. Discussion on The aims, scope, means and methods of the work of the department of education in colleges and universities was led by Professor W. B. Jacobs, of Brown University, and President Hall, of Clark University. Professor P. H. Hanus, of Harvard, was elected president, and W. B. Jacobs, secretary. The next meeting will be held on the Friday following Thanksgiving next year.

The yacht Galilee, engaged in the magnetic survey of the North Pacific Ocean under the auspices of the Department Terrestrial Magnetism of the Carnegie Institution of Washington, arrived at San Diego, on December 9, having completed a successful series of magnetic observations embracing the regions between San Francisco, San Diego, Honolulu, Fanning Island and the magnetic equator.

For the best essay on 'Moral Training in Public Schools' a prize of five hundred dollars is offered, and for the second best, three hundred dollars. The conditions are: (1) Length of essay to be not less than 6,000 nor more than 12,000 words; (2) each essay must be submitted typewritten; (3) all essays must be in the hands of the committee not later than June 1, 1906. These prizes are offered by a citizen of California who desires his name withheld. He has appointed Rev. Chas. R. Brown, of Oakland, California; President David Starr Jordan, of Stanford University, and Professor F. B. Dresslar, of the University of California, Berkeley, 'trustees of the fund and sole judges of the merits of the essays submitted.' The two prize essays shall become the property of the trustees, to be by them 'published and circulated as widely as possible' from the fund at their disposal 'within the limits of the United States.' Any essay not awarded a prize will be returned to the writer upon request, accompanied by postage.

THE Mercers' Company has made a grant of £250 to the Middlesex Hospital Cancer Charity; £150 is to be allotted to the Cancer Research Fund, of which £50 is to be awarded

to one of the workers of the cancer research laboratories, and styled 'The Mercers' Prize.'

The Royal Scottish Geographical Society celebrated its twenty-first anniversary at Edinburgh on November 27, with the president, Professor James Geikie, in the chair.

THE Wisconsin Archeological Society has now a total membership of 500. securing the custodianship, for school purposes, of the last group of mounds remaining in Milwaukee. In the spring there will be held a joint meeting of the Wisconsin Landmarks Committees and of the Wisconsin Archeological Society, under the auspices of This meeting will be held among the latter. the mounds preserved on the campus of Carroll College, Waukosha. They will soon have completed the details of the preservation of the celebrated 'man' mound at Baraboo.

A NATIONAL society for the preservation of the American bison was organized on December 8 at the office of Mr. William T. Hornaday, director of the New York Zoological Park. President Roosevelt has consented to hold office in the society.

UNIVERSITY AND EDUCATIONAL NEWS.

Through the will of the late Dr. A. F. Elliott, of California, the University of California will receive \$200,000 for the erection of a public hospital.

Dr. Albert Goldspohn has given \$25,000 for the erection of a science hall at the Northwestern College, Naperville, Ill.

The faculty of the University of Wisconsin at its last meeting discussed the present status of intercollegiate athletics, and decided to appoint a committee of seven of its members to consider the problem of intercollegiate sports as now conducted and to report to the university faculty the results of its deliberations. President Van Hise has appointed the following members to this committee: Dean E. A. Birge, of the College of Letters and Science, Dean F. E. Turneaure, of the College of Engineering, Professors D. C. Jackson, D. C. Munroe, C. S. Slichter, A. Trowbridge and F. J. Turner.

Plans being completed by Professor D. C. Munroe, director of the University of Wisconsin summer session, provide for the appointment of a number of non-resident professors to take the place of those members of the faculty who do not desire to give instruction in the summer session. The appointments already made include Professor Albert Perry Brigham, head of the department of geology of Colgate University, who will give courses in the principles of physiography and the He will physiography of the United States. also conduct excursions to points of geologic and physiographic interest about Madison, including Devil's Lake, the Dells of the Wisconsin River, Blue Mounds, which have been such an important feature of the summer work in geology.

Professor P. H. Rolfs, at present in charge of the subtropical laboratory of the U. S. Department of Agriculture, at Miami, Florida, has been elected director and horticulturist of the Florida Experiment Station. He was connected with that institution for several years previous to entering the service of the Department of Agriculture.

Theodore de Leo de Laguna, A.B. (California), Ph.D. (Cornell), has been made assistant professor of education in the University of Michigan, to fill the place left vacant by the resignation of Professor Alger.

Dr. H. R. Moody, of Hobart College, has been appointed assistant professor of chemistry at the College of the City of New York.

THE following changes have taken place in the faculty of the Colorado School of Mines this year: W. G. Haldane has been advanced from instructor to assistant professor of metallurgy; W. F. Allison from instructor in surveying to assistant professor of civil engineering; C. E. Smith has been appointed instructor in geology to take the place of J. W. Eggleston, who resigned to accept an instructorship in Harvard University, and A. J. Hoskins, formerly with the Leyden Coal Company, was appointed assistant professor of mining engineering. Under the new administration the laboratory equipment, especially in ore dressing, is rapidly increasing.