quasi inheritance, remembered the accident, and naturally attributed the deformity to this cause. It has been probably a case of "post hoc" and not "propter hoc." I grieve that you should have expended so much time, trouble and great kindness in vain. As for myself I am well accustomed in my experimental work to get definite results but once in three or four times, and thus alone can science prosper. With my renewed thanks, I remain, Dear Sir,

Yours faithfully,

CHARLES DARWIN

The above publication did not give the dates of the letters; however, the first was in 1877 and the last in 1878.

F. A. SAMPSON

COLUMBIA, MO.

## LUDWIG RUDOLPH SOPHUS BERGH

LUDWIG RUDOLPH SOPHUS BERGH Was born in Copenhagen, October 15, 1824. His father was a military surgeon. Since his family was in moderate circumstances, he undertook at eighteen years of age to support himself during his student life, taking the medical course with zoology and general anatomy under the anatomist Ibsen and the distinguished malacologist Beck. His first paper, published in 1853, was a contribution toward a monograph of the Marseniidæ. In the same year, during the cholera epidemic at Copenhagen, he acted as one of the medical staff formed to combat the ravages of this disease. In 1860 he received his degree of doctor of medicine at the University of Copenhagen, and was appointed three years later head surgeon for dermatology and venerology in the General Hospital; in 1881 professor of these branches in the university, and in 1885 head surgeon in charge of the newly built Vestre Hospital, erected and fitted after his own plans. This responsible position he retained until 1903, when he retired for age; two years later he ceased his private practise, and soon after, by the failure of eyesight, was obliged to relinquish his microscopical researches. He died at Copenhagen, June 20, 1909, leaving a widow and one son, his namesake.

Dr. Bergh for many years stood at the head of the small group of malacological anatomists,

devoting himself especially to the Opisthobranchiata and particularly to the group of Nudibranchiata. His published works on these animals form a small library and a mine of detailed information. The chief results of this unremitting labor are summed up in a large quarto in which he gives a complete systematic arrangement for these animals. Beside this contribution to the knowledge of molluscan anatomy he published several valuable memoirs on other groups of mollusks, an especially notable instance being a fine memoir on the anatomy of the genus Conus. He was largely concerned with the publication of the great posthumous series of quartos detailing the results of the researches in eastern seas by Carl Semper, who was his intimate friend. In medicine also, his publications, based on the treatment of thousands of hospital patients, took a high rank. He was naturally a member of most European societies and academies concerned in medicine or zoology, and was elected Huxley's successor in the corresponding membership of the Institute of France.

Personally, Dr. Bergh was most genial and agreeable in manner, ever ready to help younger students, or serve as cicerone to foreign colleagues visiting his beloved Copenhagen. Hospitable and unpretentious, a staunch friend and untiring student, his death leaves a gap in the ranks of the veterans which we may hardly hope to see filled, and a memory which those who knew him will cherish long.

WM. H. DALL

## SCIENTIFIC NOTES AND NEWS

The American Astronomical and Astrophysical Society held its tenth annual meeting at the Yerkes Observatory, Williams Bay, Wisconsin, on August 19-21. Fifty members were present and forty-one papers were presented. The following are the officers for the ensuing year: President, E. C. Pickering; First Vice-president, George C. Comstock; Second Vice-president, W. W. Campbell; Secretary, W. J. Hussey; Treasurer, C. L. Doolittle; Members of the Council, W. J.

Humphreys, Frank Schlesinger, W. S. Eichelberger, E. B. Frost.

Dr. C. M. Gariel, professor of medical physics at Paris, has been elected president of the French Association for the Advancement of Science for the meeting to be held next year at Toulouse.

Among those who were given doctorates of philosophy at the recent Leipzig celebration are Sir Archibald Geikie, the geologist, and Dr. James Ward, professor of philosophy at Cambridge.

Dr. Harvey Cushing, of the Johns Hopkins University, gave the William Banks memorial lecture at the University of Liverpool on August 4. He treated the pathology and surgery of intracranial tumor.

THE German Association of Men of Science and Physicians has awarded the income (\$750) of the Trenkle Foundation to Dr. F. Harms, of Würzburg, for his work on the electromagnetic theory.

Mr. Edw. M. Ehrhorn, at present deputy horticultural commissioner of California, has accepted the appointment of superintendent of entomology of the Hawaiian Board of Agriculture beginning on October 1. Mr. Jacob Kotinsky resumes the post of assistant entomologist with the board.

Dr. Arnold Ruger, of Heidelberg, proposes to edit a year book of philosophy, and will be glad to receive copies of papers bearing on philosophy, psychology, logic, ethics and esthetics, which should be sent care of Weiss-'chen Universitäts Buchhandlung, Heidelberg.

MR. CHARLES LOUIS POLLARD, curator-inchief of the Museum of the Staten Island Association of Arts and Sciences, and Mr. George P. Engelhardt, assistant curator in the Children's Museum of the Brooklyn Institute of Arts and Sciences, have returned from a field trip in North Carolina. They explored Roanoke Island and Smith's Island and also paid a brief visit to the mountains in the vicinity of Blowing Rock and Linville Falls. A large collection of insects and some reptiles and batrachians were obtained.

On August 17, Mr. Carl E. Akeley, formerly of the Field Museum of Natural History, and

Mrs. Akeley sailed en route for British East Africa. This is the third trip in the interest of science, the two former ones being for the Field Museum and the present one for the American Museum of Natural History. The expedition will require two years and besides obtaining a group of elephants to be mounted amid a reproduction of their natural habitat in the American Museum, much time will be spent in making a very complete photographic record of the people, fauna and flora. A moving picture camera is being taken and pictures of army ants on the march and other movements of animals will be attempted. Mr. Akeley has just completed the new elephant group at the Field Museum and was the creator of the well-known deer group also in the Chicago institution.

UNDER the presidency of the United States ambassador, Professor Osler will deliver the inaugural address of the winter session of the London School of Tropical Medicine on October 26.

Dr. Earl Lothrop has been elected president, and Dr. Harry R. Trick, secretary, of the Buffalo Academy of Medicine.

The Wesley M. Carpenter lecture for 1909 before the New York Academy of Medicine will be delivered on October 21 by Dr. H. T. Ricketts, professor of pathology in the University of Chicago, on "Some Aspects of Rocky Mountain Spotted (Tick) Fever, as shown by Recent Investigations." The anniversary address, on November 18, will be made by Dr. Louis Livingston Seaman, late major and surgeon, U. S. Engineer Corps, on "Personal Observations on the Sleeping Sickness in Central Africa."

Dr. William Brode, biologist of the Provincial Museum of Toronto, who had made valuable entomological and other biological collections, died on August 6, at the age of seventy-eight years.

Professor Emil Hansen, the eminent physiological botanist, known especially for his work on microorganisms and alcoholic ferments, died on August 27, at the age of sixty-seven years.

MR. WILLIAM FORD STANLEY, the maker of scientific instruments and author of contributions to physical and astronomical science, died on August 14, at the age of eighty-one years. Mr. Stanley built and endowed the Stanley Technical Trade Schools at Norwood.

Dr. Viktor Kremser, chief of division of the Meteorological Institute of Berlin, has died at the age of fifty-one years.

MRS. NELSON MORRIS has endowed with \$250,000 an institution in Chicago to be called the Nelson Morris Memorial Institute of Medical Research. It will be connected with the Michael Reese Hospital, of which Dr. John Hormsby is the superintendent and Dr. James W. Jobling chief pathologist. Dr. Jobling will direct the scientific work of the institute.

THE Dallas (Texas) Medical and Surgical Building Association has been organized to erect an office building to be devoted to professional men entirely and to cost \$500,000.

THE Public Health and Marine-Hospital Service has taken steps looking to the establishment of a branch of its Federal Laboratory on the Pacific coast in the zone of squirrel plague infection.

THE general assembly of Georgia has through the initiative of Dr. A. M. Soule, president of the State Agricultural College, appropriated \$10,000 for educational work at farmers' institutes throughout the state.

The fourth International Congress of Aeronautics will be held from September 18 to 24 at Nancy. Proceedings will be divided into three main sections: (1) aerostation, (2) aviation, (3) legislation and general subjects.

A TELEGRAM has been received at the Harvard College Observatory from Professor H. Kobold of Kiel, stating that Perrine's comet was observed by Kopff August 12.42.99 G.M.T. in R.A. 0<sup>h</sup> 17<sup>m</sup> 8<sup>s</sup> Dec. + 35° 32′. The object is visible in a large telescope.

It appears from the daily papers that at the meeting of the Association of State and National Food and Dairy Departments, at Denver on August 26, a vote of 57 to 42 was passed in favor of the following resolution:

Resolved, That this association hereby indorses the report of the Referee Board of Consulting Scientific Experts, appointed by Secretary of Agriculture Wilson at the direction of President Roosevelt upon the use of benzoate of soda in food products.

According to press despatches, valuable deposits of radium-bearing pitchblende have been discovered on the McCloud River, Cal. It is also reported that pitchblende has been discovered in Cripple Creek district of Colorado.

PRESIDENT TAFT has issued a proclamation setting aside the Oregon caves in the Siskiyou National Forest in the state of Oregon as a national monument. The area of the reservation is about four hundred and eighty acres.

THE department of plant pathology of the New York State College of Agriculture at Cornell University, Ithaca, N. Y., announces the establishment of a temporary industrial fellowship by the Niagara Sprayer Company of Middleport, N. Y. The purpose of this fellowship is to investigate the value of commercial lime-sulphur mixtures as fungicides. The fellowship is established for two years at a salary of \$1,000 a year, and with a maximum sum of \$500 annually, for the carrying on of the investigations. By the terms of the fellowship the College of Agriculture is left perfectly free to carry on the investigations in any way it may see fit, and to freely publish all the results at any time. Mr. Errett Wallace (Cornell, B.S.A. '08, M.S.A. '09) has been elected to the fellowship. The investigations will be conducted in field laboratories, situated somewhere in the state of New York. The work for the present season is being conducted on the fruit farm of Mr. L. B. Frear, near Ithaca, N. Y. The chief problem for investigation at present is to determine the efficiency of the commercial lime-sulphur mixtures as a summer spray for the control of peach and apple diseases.

It is reported by cable that the debt incurred by Lieutenant E. H. Shackleton and the members of the family for his Antarctic expedition is to be liquidated by the government. Premier Asquith has announced in the House of Commons that he would ask the house to vote \$100,000 for that purpose. Previously Mr. Shackleton had issued a statement in which he said:

When, after great difficulty, I had secured sufficient promises of support to enable me to announce the expedition on February 12, 1907, I proceeded to make my preparations with a view to leaving England in July of that year. My supporters were various relatives and friends in this country-not in the United States as has been declared-but, owing to the American financial crisis and the resulting financial stringency in this country, some of the money promised to me did not become available. When I found that the promises of support could not be carried out, I went to several rich men, and they very generously guaranteed me at the bank to the extent of £20,000, on the understanding that the guarantees were to be paid off by me not later than July, 1910. The arrangement was that the bank should advance the money on the guarantees and that I should pay interest. I can not thank too warmly those who had faith in me when comparatively unknown. When I arrived in Australia on my way south, I made application to the Commonwealth government for assistance, and I was at once given a sum of £5,000 for the purposes of the expedition. The New Zealand government further gave me £1,000, paid half the cost of towing the Nimrod to the Antarctic, and assisted me in various other directions. This sum of £6,000 enabled me to increase my staff and to secure additional stores and scientific equipment. The position now is that the guarantees to the extent of £20,000 have to be released, and this, I hope, will be done by the sale of my book and by my lectures and the money that my wife's relatives and myself and friends have contributed. Apart from this, of course, the cost of the expedition was far in excess of £20,000. I should like it clearly understood that since my return I have not approached his majesty's government in the matter and it can not justly be said, therefore, that they have declined to contribute.

## UNIVERSITY AND EDUCATIONAL NEWS

ILLINOIS WESLEYAN UNIVERSITY has received \$30,000 from Mr. Andrew Carnegie for a new science building.

MR. NEIL MACNEIL, of Boston, has presented to St. Francis Xavier's College, Nova

Scotia, for the use of its professors, a seaside resort—a block of land with a completely equipped summer home—at Mahanny's Beach, on the shore of Bay St. George.

MRS. ELIZABETH MURDOCK, the widow of a Liverpool shipowner, has bequeathed £2,000 to the University of Liverpool to found engineering scholarships.

The College of Physicians and Surgeons of Los Angeles has consolidated with the College of Medicine of the University of Southern California. The name of the consolidated school will be College of Physicians and Surgeons, Medical Department of the University of Southern California.

THE Hong-kong and Shanghai Bank has made a donation of £4,500 for the Hong-kong University.

The governor of Madras opened on July 14 a new agricultural college and research institute at Coimbatore. Rooms are provided for chemistry, physics, botany, entomology and mycology.

Edinburgh University has decided to send its scholarship men to the Iowa State College to pursue graduate work in animal husbandry. Two of these men are now on their way from Scotland.

Dr. J. H. Kastle, chief of the division of chemistry of the Hygienic Laboratory of the U. S. Public Health and Marine Hospital Service, will at the opening of the academic year assume the duties of professor of chemistry at the University of Virginia. Dr. J. W. Mallet, professor of chemistry since 1885, who will celebrate his seventy-seventh birthday on October 10, has been made professor emeritus under the Carnegie Foundation.

MR. MELVIN E. SHERWIN, instructor in astronomy in the University of California, has been appointed assistant professor of astronomy in the University of Maine.

Mr. W. H. Hadow, fellow and tutor of Worcester College, Oxford, has been appointed principal of Armstrong College of Durham University at Newcastle-on-Tyne, in succession to Sir Isambard Owen, who has accepted the vice-chancellorship of Bristol University.