

ing love of beauty, broad humanity and loyalty and devotion to the best ideals of the physician and the student of man and of nature.

We desire to express our sympathy with Mrs. Herter and her children in their bereavement and that a copy of this minute be transmitted to them.

SCIENTIFIC NOTES AND NEWS

PROFESSOR ALFRED G. COMPTON, professor of physics at New York City College, with which institution he has been connected as instructor since his graduation in 1853, has at his request been retired on a pension.

SIR THOMAS CROSBY has been elected Lord Mayor of London. He is the first physician to occupy that office though he has had 723 predecessors.

PROFESSOR F. P. MCKIBBEN, head of the department of civil engineering at Lehigh University, has been appointed consulting engineer by the state committee which is investigating the causes of the disaster at the Austin dam.

THE Alvarenga prize, of the Philadelphia College of Physicians, valued at \$180, was awarded to Dr. Francis D. Patterson for his thesis on "Parathyroid Glandules."

W. H. BROWN, Ph.D. (Hopkins '10), has gone as botanist to the Bureau of Science in Manila.

DR. CHARLES SHEARD has retired from the chair of preventive medicine at the University of Toronto.

THE Geographical Society of France has entrusted to Mr. R. Jarry Desloges the erection of an observatory, more or less temporary, on the high plateaus of North Africa.

MR. ROY C. ANDREWS will leave during the last week of November on an expedition to the orient on behalf of the American Museum of Natural History. He will visit the whaling stations of southern Korea, then outfit at Seoul and travel into the mountains of north Korea, a region unknown zoologically.

DR. ALBRECHT KOSSEL, who has been giving the Herter lectures at the Johns Hopkins University, will return to Germany on October 24.

THE program of the Geological Conference of Harvard University on September 17 consisted of papers on the shoreline changes in northern and southern Sweden, by Professor D. W. Johnson, and on the landslide at St. Alban, Quebec, by Professor Charles Palache.

PROFESSOR WILLY KUKENTHAL, visiting professor at Harvard University, lectured to the Zoological Club on October 19 on his studies on whales.

THE Harveian oration before the Royal College of Physicians of London was delivered by Dr. C. Theodore Williams, on October 18.

THE *Journal* of the American Medical Association states that a committee consisting of Provost Edgar Fahs Smith, Ph.D., Dr. S. Weir Mitchell, Sir William Osler and Drs. William Pepper, Clarence Payne Franklin and Swithin Chandler, Philadelphia, has been formed to take up the project of erecting at Philadelphia a fitting monument to John Morgan, founder of the first medical school in the United States, and director general of the hospitals and physician-in-chief of the American Army during the revolutionary war.

WE learn from *Nature* that it is proposed to erect a memorial to Mungo Park and Richard Lander. A committee has been formed consisting of Lord Curzon, Sir George T. Goldie, Lord Scarbrough, Major Leonard Darwin, Sir Walter Egerton and Sir Hesketh Ball to take the necessary steps to secure funds for this purpose. Both explorers have been honored in their native towns of Selkirk and Truro, but no record of any kind exists in the land to which their lives were consecrated and sacrificed.

IN the issue of SCIENCE for October 6 the age of Mr. Edward Whympers is given as 61, while it should be 71, as he was born on April 27, 1840.

SIR HERBERT HOPE RISLEY, known for his anthropological studies in India, died on September 30, at the age of sixty years.

DR. WILHELM DILTHEY, formerly professor of philosophy in the University of Berlin, died on October 5 at the age of 77.

PROFESSOR OSKAR KELLNER, director of the Agricultural Experiment Station at Möckern, died on September 22, aged sixty years.

AMONG the positions that will be filled by a New York State Civil Service examination on November 11 is that of inspector in mathematics in the Education Department, at a salary of \$2,000.

ANNOUNCEMENT has been made by the board of trustees of Stanford University of a gift of \$10,000 made by Dr. Adolph Barkan, San Francisco, professor emeritus of the medical school, for the establishment of a special library dealing with diseases of the eye, ear, nose and throat. A gift of \$5,000 from Charles C. Stanford for medical library purposes was also announced.

THE fourth annual meeting of the Association of Official Seed Analysts will occur in connection with the other meetings for workers in agricultural science at Columbus, Ohio, November 17 and 18.

PROFESSOR ALBERT S. BICKMORE has given his personal library and almost unequalled collection of lantern slides to the American Museum of Natural History. The collection comprises more than 20,000 lantern slides, of which about 12,000 are colored.

THE American Institute of Mining Engineers held its 101st meeting in San Francisco beginning on October 10. After the meeting members had arranged to embark on the steamships *Manchuria* and *Siberia*, leaving San Francisco on October 17 and arriving in Yokohama on November 3. It is planned to spend eighteen days in Japan, leaving Yokohama on November 21, arriving in San Francisco on December 7. The excursion in Japan will include trips to the Tokio, Nikko and Chuzenji district, Kiota, Nara, Osaka, Kobe, Ikuno, silver mine, imperial steel works, etc.

A MEETING of the International Commission on Mathematical Teaching was held at Milan on September 18-21, Professor F. Klein presiding. It is stated in *Nature* that the main subjects discussed were: (1) The question of rigor in teaching mathematics, especially

geometry. It appears that of European countries Italy is the most wedded to rigorous methods, while Germany and Austria stand at the other end of the scale, and admit intuitive methods freely. France and England adopt a middle course, France inclining toward the Italian practise and England toward the German. It was agreed that Euclid does not satisfy modern standards of mathematical rigor. (2) The question of "fusion," *e. g.*, of geometry with algebra, of plane with solid geometry, of geometry with trigonometry, of solid geometry with descriptive geometry, of analytical with geometrical conics, of differential with integral calculus. (3) The provision of mathematical instruction for students of such subjects as chemistry, biology and economics. Such courses were at one time provided in French universities, but are now entrusted to the schools. In other countries there does not appear to be any systematic provision of this kind. The reports issued by the various national sub-commissions were presented; of these, the French reports are now complete; eight of the thirty-four English reports have been issued by the Board of Education (Wyman and Co.), and a large amount of literature has been issued by the German subcommittee, whose labors, however, will not be completed for two years more. Arrangements were made for the educational subsection at the International Mathematical Congress to be held at Cambridge (England) on August 22-28, 1913.

THE new session of the Royal Geographical Society, of which Lord Curzon is president, will be opened on November 6, when, as we learn from the *London Times*, Dr. Fridtjof Nansen will give a paper on the Norsemen in America. On November 20 Dr. Tempest Anderson will give a paper on Volcanic Craters and Explosions. At the next meeting, on December 4, Sir Alfred Sharpe, who has recently retired from the Governorship of Nyasaland, where he has been for many years, will deal with the geography and economic development of British Central Africa. On December 18 Dr. D. T. McDougal, of the

Carnegie Institute, who has been studying on the spot for a considerable time, along with Mr. Ellsworth Huntington, the desert conditions of Arizona, will give a paper on American Deserts. Sir William Willcocks, whose paper on Mesopotamia last session created so much interest, will deal with his further researches on the Garden of Eden and its restoration. Dr. Mackintosh Bell, late director of the Geological Survey of New Zealand, has promised a paper on an Unknown Corner of South Island. Mr. Douglas Carruthers, who has made extensive explorations in Central Asia during the last 18 months, will give a paper, probably in March, describing the results of those journeys. Mr. A. J. Sargent will deal with the Commercial Geography of the Tyne Basin, and Mr. P. A. Talbot with the journeys in the central Soudan along with Mrs. Talbot and Miss Olive MacLeod. In January or February a course of three lectures will be given in the afternoon on the Desert of North Africa, by Captain H. G. Lyons, R.E., F.R.S., formerly director of the Egyptian Survey. The Christmas lectures this session will be, on January 5, by Mr. Julian Grande, the subject being "Amongst the Alps"; on January 8, by Mr. W. Herbert Garrison, on "Our World Wide Empire"; and on January 11 "A Lady's Journeys in the Central Sudan," by Miss Olive MacLeod.

MANY glacial moraines contain particles of gold, yet the metal is very rarely so abundant as to make their treatment profitable. This is due to the fact that running water has not had opportunity to concentrate the precious metal scoured by the glacier from the decomposed surface of the mountains. In a short report, however, just issued by the United States Geological Survey, F. C. Schrader gives an interesting account of gold-bearing ground moraines at Kennedy Creek and Libby Creek, Montana. The Kennedy Creek deposit, says Mr. Schrader, is commonly known to mining men who have examined it as ancient lake gravel, but it seems plainly to be a subglacial or ice-laid deposit of till—a ground moraine. The material is evidently derived from the upland mountains on the northeast, whence it

was scoured off the surface by the ice sheet, shoved and dragged down the slopes, crushed, ground and finally compressed beneath the ponderous ice mass. The ice sheet probably covered the basin with a thickness of a thousand or more feet for a period of centuries. A most unusual feature is the fact that this glacial deposit does not seem to have been concentrated by later streams nor to have derived its gold from preexisting placers. If this view is correct there must occur in the mountains or uplands to the northeast, in the path of the ice that deposited the moraine, some rich gold-bearing vein or bedrock area as yet undiscovered. Tests made of the deposit in six different shafts fairly well distributed over about half a square mile in the southern part of the basin show the gold content of the deposits to range from 20 cents a cubic yard near the surface to about \$5 a cubic yard in the bottom foot of gravel next to bedrock, from which it is readily apparent that the deposits contain considerable gold. By some mining men the amount of gold present in the basin has been estimated at \$18,000,000. From the data obtained in the present tests, after reasonable allowance is made for boulders, which in the lower part of the section constitute about 10 per cent. of the material, the deposit in the southern part of the basin seems to contain on the average about 80 cents a cubic yard, including everything from the surface down to bedrock, or about \$4 a bedrock yard. This would amount to about \$17,360 an acre, or more than \$5,500,000 for the Kennedy placer portion of the area examined. The estimate does not include the neck of the deposit in the downstream outlet, which in places attains a thickness of 80 feet or more and is known to carry considerable gold. In the basin as a whole, if gravel of this grade is present throughout, there is probably more than \$11,000,000 worth of gold. The entire district of which Kennedy Creek is a portion is roughly estimated by Mr. Schrader to contain about \$100,000,000 worth of gold, much of which, he states, to judge from the attention the district is receiving, will probably be won in the near future.