

some 246 miles to the southeast, apparently never had any marine connection. It was also a matter of interest that the fauna of Tanganyika was not only marine, but of a very peculiar and primitive type, and it was quite reasonable to suppose that the characteristics of the fauna were connected with the remote geological connection of the lake with the sea.

THE first census of the Russian Empire was completed on February 9th. The work has been in preparation for several years past, being carried out with the aid of the statistical committees and the Imperial Geographical Society. The inevitable difficulties, due to the vastness of the Empire and the diversified character of the people, have been increased by their ignorance and superstition. They are said to fear not only fresh taxes, but also a re-introduction of serfdom.

UNDER the title 'Magnetic Declination in the United States,' the United States Geological Survey has just published a compilation and discussion of magnetic declination, by Mr. Henry Gannett, which will be of value to surveyors throughout the country. The compilation is based upon magnetic observations made at about 22,000 stations. All data obtainable for the discussion of the secular variation in declination have been used, and the results are presented in the form of tables, showing the approximate reduction to a selected epoch—namely, the year 1900—at each tenth year prior to that time for the period during which it may be required. Finally, the declination data have been reduced to this epoch, 1900, and are presented in the table by counties, cities and towns. The calculated distribution of the magnetic declination for the United States in 1900 is graphically exhibited upon a map in a pocket in the cover. W. F. M.

WE have received from Dr. J. Milne an advance copy of a circular to be issued by the Seismological Investigation Committee of the British Association, asking cooperation in an endeavor to extend and systematize the observation of disturbances resulting from large earthquakes. The Committee recommend that similar instruments be used at all stations and are prepared to supply, for about £50, an in-

strument to those willing to forward to them notes of disturbances having an earthquake character, for analysis and comparison with the records from other stations. From time to time the results of these examinations would be forwarded to each observatory. The first object in view is to determine the velocity with which motion is propagated round or possibly *through* our earth. To attain this, all that is required from a given station are the times at which various phases of motion are recorded; for which purpose, for the present at least, an instrument recording a single component of horizontal motion is sufficient. Other results which may be obtained from the proposed observations are numerous. The foci of submarine disturbances, such, for example, as those which from time to time have interfered with telegraph cables, may possibly be determined, and new light thrown upon changes taking place in ocean beds. The records throw light upon certain classes of disturbances now and then noted in magnetometers and other instruments susceptible to slight movements, whilst local changes of level, some of which may have a diurnal character, may, under certain conditions, become apparent. Those willing to cooperate in this important investigation should address The Seismological Committee, British Association, Burlington House, London, W.

UNIVERSITY AND EDUCATIONAL NEWS.

THE faculty of Mt. Holyoke College announce the gift to the College of \$40,000 for a dormitory by Mr. John D. Rockefeller, of New York, and the receipt of a check 'from a friend' for \$2,250.

SOME months ago it was announced in SCIENCE (August 7, 1896) that the University of Texas, through the liberality of Hon. George W. Brackenridge, of San Antonio, a member of the Board of Regents, had come into the possession of the finest collection of recent shells west of the Mississippi. We now have the pleasure of recording a supplementary gift from the same generous donor consisting of the Galveston Deep Well Collection, numbering 102 species; a collection of Eocene, Miocene and Pliocene fossils from California, Texas and other Southern States, 106 species; a collection

of Texas Carboniferous and Cretaceous fossils, 58 species, and 157 specimens of Texas flints (implements). This material was brought together by Mr. J. A. Singley, the well-known collector, now a resident of Giddings. In the mean time the library of the law department has been increased by the addition of nearly two hundred volumes, presented by Ex-Governor O. M. Roberts. The gift from the first professor of law is greatly appreciated. The largest donation, however, is that announced on February 23d. On the day preceding the Palm library, consisting of 25,000 volumes, the largest private collection in Texas and probably in the Southwest, was formerly turned over to the University by its owner, Mr. Swante Palm, of Austin. It contains many rare and costly volumes brought together from the great book centers of the world. 'The collection,' it is said, 'embraces not only general literature, history, biography, travels, science and philosophy, but also a remarkable collection of art books, illustrating ancient, medieval and modern art, custom and manners.' Mr. Palm is a native of Sweden and a resident of Texas for over fifty years. In 1883 he was knighted by King Oscar. The University library now contains over 40,000 volumes.

FREDERIC W. SIMONDS.

THE will of the late Anson Chapell, of West Hartford, Conn., leaves \$3,000 to Washburn College, Topeka, Kans., and the same amount to the Hampton Normal and Agricultural Institute of Virginia.

AT the regular March meeting of the trustees of the New York University it was decided that the control of the University Medical College should be vested in the Council. The Medical College Laboratory, said to be worth \$400,000, is transferred to the Council, which body will hereafter be responsible for the appointment of professors. Chancellor MacCracken announced at the meeting that the Building Committee had made a contract for the construction of the new library building at University Heights. The material used in construction will be grayish yellow Roman brick and Indiana limestone. The building will have a depth of 200 feet and will be 100 feet wide.

IT is reported that the investigation of the University of Wisconsin by a Legislative committee shows that the University has overdrawn its account at the State treasury to the amount of \$145,944.76.

THE syndicate of the University of Cambridge appointed to consider the question of granting degrees to women has reported in favor of conferring the degrees of B.A. and M.A. under certain conditions, but against admitting women to membership in the University.

WE recently gave the percentages of hours devoted to different departments at Harvard and Yale Universities. The Boston *Transcript* has now published similar figures for Cornell University and the New York *Post* for Princeton University. While we cannot vouch for the accuracy of these figures they seem sufficiently interesting to deserve repetition.

	Harvard.	Cornell.	Yale.	Princeton.
Classics	8.7	8.0	24.2	22.6
European languages..	22.8	18.8	14.5	12.4
English.....	16.8	16.3	10.9	11.3
Political science.....	9.9	6.5	11.2	9.6
History	14.3	8.2	10.4	
Mathematics.....	4.4	6.6	9.6	19.4
Philosophy	6.1	7.7	8.9	8.6
Natural science.....	10.2	23.5	8.1	8.8

It thus appears that Yale and Princeton agree somewhat closely in the distribution of studies, except for the excess in mathematics at Princeton. Harvard and Cornell also agree to a considerable extent, but Cornell devotes one-fourth of the entire time (the figures refer to the academic department) to science. It is noteworthy that in the Senior year at Princeton, when the studies become elective, only 3.8 per cent. of the time is given to the classical languages, and 15.1 per cent. to natural and physical sciences. The classical languages evidently only hold their position at Yale and Princeton through compulsion. European languages tend to take their place in large measure with some gains by English and the sciences.

It is stated in the London *Times* that at a meeting of Edinburgh University Court it was reported that, in addition to the sum of £5,000, less legacy duty, bequeathed to the University in 1893 by the late Mr. A. L. Bruce, Edinburgh, towards the founding of a chair of pub-

lic health, a further donation of £1,063 for the same object had been intimated from Mrs. Bruce and other members of the family. It was also reported that an offer of £5,000 towards the same object had been received since last meeting of the Court from a gentleman whose name, at his own request, is not to be made known for the present. The Court, considering that the amount of donations approximates the sum which they think to be necessary for the endowment of the proposed chair, resolved to request the Universities' Commission to frame a draft ordinance instituting a separate chair of public health in the University.

DR. OTTO FISCHER, professor of chemistry at the University at Erlangen, has been called to Kiel; Dr. W. Felix has been promoted to an associate professorship of anatomy at the University of Zurich. Dr. August Pauly has been made associate professor of comparative zoology at the University of Munich and director of the division of zoology at the forestry experiment station. Professor Pasquele Baccarini has been appointed professor of botany at the University of Catania and Dr. Oswald Kruch professor at the agricultural experiment station in Perugia.

DISCUSSION AND CORRESPONDENCE.

OPPORTUNITIES FOR TRAINING IN PHYSIOLOGY.

THE department of physiology in the Harvard Medical School offers to four qualified men positions in which training in physiology may be obtained.

It is expected that these men will give the mornings of the collegiate year to research and the afternoons to the direction of undergraduate students in experimental physiology, under the supervision of a professor in the department. Every effort will be made to instruct the holders of these positions in the ways of framing problems for investigation, in the principles of criticism, in the technical methods of research, and in the manner in which the results of an investigation should be put together for publication. Instruction will be given also in methods of teaching, including the arrangement of lectures, the division of subject-matter between the systematic course covering the entire field and the advanced special lectures,

the physiological conference, the Journal Club, the use of the projection lantern in physiological demonstration, and the demonstration of physiological experiments to large and small classes.

The direction of laboratory work will be an important part of the training. The first year class in the Harvard Medical School is divided into sections of thirty-two. Each section works twenty-four afternoons in experimental physiology, making more than one hundred experiments, such as the influence of temperature on the form of the muscle curve, the phenomena of electrotonus, the compensatory pause of the heart, the use of the artificial eye, the ophthalmoscope, laryngoscope, sphygmograph, etc. etc. The repetition of fundamental experiments in this course, and the great variety afforded by so many experimenters working at the same time, secure to the directors of the work a thoroughness and a breadth of training in elementary physiology scarcely attainable in other ways.

The administration of a large department will be carefully explained. Attention will be given to the cost of apparatus for instruction and research, the problems of construction and maintenance of plant, the care of storage batteries, the making of lantern slides, the cataloguing of physiological literature, the importation of apparatus, and many other details essential to the successful operation of a physiological laboratory. Men intending to devote themselves to clinical medicine, will, of course, give less time to these things and will concern themselves chiefly with matters bearing directly on their chosen work.

It is evident that these appointments will afford an admirable training to those intending to make physiology or any other of the biological sciences a profession. To the physician they offer a training not less valuable in the opinion of those who believe that research in the fundamental sciences is the best introduction to the higher walks of medicine.

Applicants for these positions should possess an elementary knowledge of physiology and a sufficient training in one or more of the biological sciences to enable them to profit by the instruction offered. Successful applicants are