of the twenty-eight permanent buildings were presented by citizens of Chicago, and the number of donors is upwards of 3,000, most of them Chicagoans, he should realize on looking south toward the Chicago copy of the Magdalen Tower, the beautiful edifice whence soon will ring the chimes in memory of the gracious first Dean of Women, Alice Freeman Palmer, that a genuine appreciation of the men who make the connotation for the buildings possesses the singer of the university song:

> The City White hath fled the earth,
> But where the azure waters lie,
> A nobler city hath its birth,
> The City Gray that ne'er shall die.
> For decades and for centuries,
> Its battlemented tow'rs shall rise,
> Beneath the hope-filled western skies,
> 'Tis our dear Alma Mater.

DAVID A. ROBERTSON
UNIVERSITY OF CHICAGO.

LOCAL ARRANGEMENTS FOR THE CHICAGO MEETING

To those who intend attending the fifty-eighth meeting of the American Association for the Advancement of Science at Chicago, from December 30 to January 4, and have never been in the City-of-the-Lake, it may be well to mention that Chicago does not lie at the southern extremity of Lake Michigan, as many maps indicate, but on its western shore; and that therefore to become properly oriented in the city one should remember that the lake lies to the east, not to the north. To those who were so fortunate as to be able to visit the great world's fair it will be sufficient to state that the campus of the University of Chicago, the meeting place, lies on the north side of the Midway Plaisance at about the center of its extent. The Midway is now returned to its former estate, that of a broad parkway uniting Jackson Park, in which the fair was held, to Washington Park, a mile to the west.

It is the aim of the local committee of the association to locate the meeting places, both of the various sections of the association and of the affiliating societies, as contiguous as possible, in order that no time may be lost nor confusion occur. To this end the university has placed all its lecture halls in the various buildings at the disposal of the association, and provision has been made whereby those in attendance at the meeting may secure luncheon without leaving the compus.

While the Auditorium Annex will be the headquarters of the association, it may be suggested for the information of those who may wish hotel accommodation near the campus that the Del Prado Hotel, Fifty-ninth Street—Madison Avenue and the Midway (60th Street Station, Illinois Central R. R.)—adjoins the campus on its eastern end; the Windermere Hotel (57th Street Station, Illinois Central R. R.) is at the north end of Jackson Park within easy walking distance; and the Chicago Beach Hotel (50th Street Station, Illinois Central R. R.), while somewhat farther away on the lake shore north of Jackson Park, is still within fair distance of the university. Those who intend locating in the city itself will find hotels and rates detailed on page 15 of the Preliminary Announcement of the meeting. They will note that the readiest method of reaching the meeting place will be *viâ* the Illinois Central Suburban Railway from the station on the Lake Front nearly opposite the Auditorium and Annex Hotels, on Michigan Avenue. The trains are frequent, the expresses making the run south to Fifty-seventh Street in twelve minutes. On arriving at this station (the second stop of the express trains) the lake and the Field Museum of Natural History will be in view to the east and the tower of the university to the west. Leave the station in the direction the train continues and on reaching the exit turn to the right. A 'bus may be taken to the campus or the short distance walked in a few minutes. The main entrance to the tower arcade, directly beneath the tower itself, brings the visitor immediately to the registration desk, the information bureau and the general headquarters of the association, from which each of the halls of meeting may be readily reached.

SCIENTIFIC NOTES AND NEWS

IN accordance with the desire of the Royal Society, Lord Kelvin was buried in West-

minster Abbey on December 23. The last man of science buried in the abbey was Charles Darwin, who died in 1882.

Professor Simon Newcomb, of Washington, and Professor Emil Fischer, of Berlin, have been elected foreign members of the Göttingen Academy of Sciences.

The freedom of the city of Glasgow will be conferred on Lord Lister.

The Lavoisier medal of the Paris Academy of Sciences has been awarded to Professor Adolf von Baeyer, of Munich, eminent for his work in organic chemistry and especially for the synthetic production of indigo.

The Lalande prize of the Paris Academy has been awarded to Mr. Thomas Lewis, of the Royal Observatory, Greenwich, and secretary of the Royal Astronomical Society. *The Observatory* states that during the last twenty years there have been twenty-one recipients of this prize, of whom nine were American, nine French, one South American, one Italian and (the present award) one Englishman.

The Wilde medal of the Manchester Literary and Philosophical Society has been awarded to Professor J. Larmor, of Cambridge. Professor Larmor will deliver on March 3 the Wilde lecture on "The Physical Aspect of the Atomic Theory," and at that time the medal will be presented.

A portrait of Dr. Arthur J. Evans, keeper of the Ashmolean Museum, Oxford, has been presented to the university by a number of those interested in archeology, including fifty-five American subscribers. The portrait, which is the work of Sir William B. Richmond, R.A., depicts Dr. Evans in the ruins of the Palace of Knossos.

Among those who have promised to deliver addresses before the International Congress on Tuberculosis, to be held at Washington from September 21 to October 12, 1908, are Dr. R. W. Philip, of Edinburgh; Dr. Theodore Williams, of London; Dr. Newsholme, of Brighton; Dr. C. H. Spronck, of Utrecht; Dr. Karl Turban, of Davos Platz; Dr. Gotthold Tannwitz, of Charlottenburg; Professor von Behring, of Marburg, Professor Calmette, of Lille; Dr. Maurice Letulle, of Paris; and Professor Kitasato, of Tokyo.

Professor J. C. Kapteyn, of the University of Gröningen, will hereafter spend several months of each year at the Solar Observatory of the Carnegie Institution on Mount Wilson.

Dr. Strömgren, of Kiel University, has been appointed director of the Copenhagen Observatory, in succession to Professor Thiele, retired.

According to *The Observatory*, M. Stephan is about to retire from the directorship of the Observatory of Marseilles. The selection of the occupant of such posts is entrusted to the Academy of Sciences, which selects two candidates to be presented to the minister of public instruction, the name of them being indicated as preferable. The selected candidates for Marseilles are M. Bourget and M. Simonin (given in this order). The candidates similarly submitted for the directorship of the Algiers Observatory, vacant by the death of M. Trépied, are M. Gonnessiat and M. Fabry.

Theodore Whittelsey, Ph.D., associate professor of chemistry in Northwestern University, has been granted leave of absence to serve as chemist of the department of investigation of the Continental-Mexican Rubber Company, which is engaged in the manufacture of rubber from guayule. Dr. Whittelsey will make a chemical study of the industrial possibilities of the plant life on a tract of land covering 2,500,000 acres that this company has recently purchased. His address is Hacienda de Cedros, Mazapil, Zacatecas, Mexico.

Mr. Walter E. Collinge has resigned the professorship of economic zoology in Birmingham University to accept the directorship of the Cooper Research Laboratory, Berkhamsted.

Mr. R. J. D. Graham, M.A., B.Sc., Carnegie scholar in botany, St. Andrews University, has been appointed to the Agricultural Department in India.

The University of Vienna recently conferred the medical degree on Count Vetter von der Lilie after he had completed the usual course. He is now fifty years old and has been prominent in political life, having served as president of the lower house of the Austrian parliament.

MESSRS. L. J. DE G. DE MILHAU and J. W. Hastings, who accompanied the South American expedition from the Peabody Museum, Harvard University, in 1906–7 as ethnologists, have returned to this country after a successful trip to the region of the Madre de Dios. Dr. Farrabee and Dr. Horr will continue the work in the field.

A MISSION under the command of M. Félix Dubois, the French explorer, which left Southern Oran in November, 1906, is now reported to have reached Gao, on the Eastern Niger. Its object is to study the Algerian and Saharan oases.

DR. J. COSSAR EWART, F.R.S., is this year giving the Swiney lectures on geology at the British Museum of Natural History. His subject is "Horses in the Past and Present."

INAUGURAL lectures were delivered by the Martin White professors of sociology at the London School of Economics, on December 17, by Professor L. T. Hobhouse on "The Roots of Modern Sociology" and by Professor E. A. Westermarck on "Sociology as a University Study."

PROFESSOR D. W. JOHNSON is giving a course of fifteen lectures on "The Physical Geography of the Lands," under the direction of the Teachers' School of Science, Boston. The lectures are given on Saturday afternoons, and are followed by laboratory exercises on the subjects discussed. The class at present numbers 156, of whom all but twelve are teachers in the schools of Boston and neighboring cities.

FREE illustrated lectures on legal holidays are to be delivered at the American Museum of Natural History, New York City, as follows:

Christmas Day, "Hiawatha's People," by Harlan I. Smith.

New Year's Day, "An Ornithologist's Travels in the West," by Frank M. Chapman.

Washington's Birthday, "Mines, Quarries and 'Steel Construction,'" by Louis P. Gratacap.

WITH the assistance of Yale University, and at the initiative of the Connecticut Academy of Arts and Sciences, the publication is planned of a volume of several hundred pages illustrating the collection of prehistoric relics obtained by the late Professor O. C. Marsh, and gathered in the province of Chiriqui, Panama. There will be some seven hundred illustrations, on which draughtsmen from New York are already at work, besides a set of chromolithographs made in Germany. George Grant MacCurdy, Curator of the anthropological section of Peabody Museum, will prepare the volume.

PROFESSOR ALFONSO SELLA, who held the chair of experimental physics in the University of Rome, died on November 25, at the age of forty years. He was known for his work on the Röntgen rays and radioactivity and as one of the principal leaders establishing the Italian Association for the Advancement of Science, which held its first meeting at Parma last September. A marble bust of Professor Sella will be erected in the Physical Laboratory at Rome.

THE east wing of the Museum of the Brooklyn Institute was formally opened to the public on Saturday, December 14. This wing completes the north front of the building, which has a length of a little more than 500 feet. The first and third floors of the east wing are devoted to art. The ground floor contains work rooms. The basement will contain the library, map collections, herbarium and some offices. The second floor will be used for the display of minerals and invertebrates. Owing to lack of cases this floor is at present only partially filled; its contents include a portion of the Ward collection of sponges and corals, the collections illustrating the difference between the faunas of temperate and tropical seas and a part of the collection of insects. There is sufficient material now in storage or in the hall to fill the entire second floor as soon as cases are provided.

IT is announced that Mr. Emile Berliner, of Washington, one of the perfectors of the telephone and the inventor of the gramophone, has given $12,500 as endowment of a research fellowship for women who have demonstrated their ability to carry on research work in physics, chemistry or biology. The foundation, which is in honor of the donor's mother,

will be known as the Sarah Berliner Research Fellowship for Women. The award will be made by a committee of women, of which Mrs. Christine Ladd Franklin, of Baltimore, is to be the chairman.

English exchanges state that the annual meeting of the British Science Guild will be held at the Mansion-house, January 15. The Lord Mayor has consented to preside and to become one of the vice-presidents of the guild. It is hoped that Mr. Haldane, the president of the guild, and others will address the meeting. Steps are being taken by the guild to bring the proposals for legislation for the prevention of the pollution of rivers before many societies and local bodies.

A chemical laboratory has recently been established at Tananarivo in Madagascar. Besides purely scientific researches, it is intended for the analysis of foodstuffs and other purposes of practical importance.

The Journal of the American Medical Association states that the International Medical Association of Mexico, which was to have met at Monterey in November for its third annual congress, has been postponed until January 23–25, on account of the prevalence of dengue fever at Monterey. This association combines English-speaking and Spanish-speaking physicians on an equal footing, the programs and summaries being printed in both languages, the speakers using their mother tongue. Dr. J. S. Steele of Monterey, is the secretary of the congress, and he states that unusual interest has been manifested in the meeting this year.

At a meeting of the commonwealth cabinet at Melbourne, on December 2, the postmaster general announced his decision to call for tenders for wireless telegraphy installations at some half dozen places round Australia, including King Island, Tasmania, Rottnest Island, some convenient center on the northern coast, Port Moresby, and Yorke Peninsula. Tenderers are to sell their Australian rights to the commonwealth. Parliament has decided not to allow directly or indirectly the establishment of a private monopoly. The installations will be capable of receiving messages from passing steamers equipped with any of the recognized systems.

In the reorganization of the Bureau of Forestry, Philippine Islands, Major George P. Ahern, director, the work of the field force has been placed in two divisions, viz., the Division of Forest Administration, in charge of Forester H. D. Everett, and the Division of Forest Investigation, in charge of Forester H. N. Whitford. As the name implies, the Division of Forest Administration is in charge of all administrative work of the bureau, such as granting licenses, inspection of cuttings, applications for homesteads, etc. Practically all of the timber land of the Philippine Islands is government property, of which this division is the guardian. The work of the Division of Forest Investigation is to discover the forest resources of the islands, and to bring this information to the notice of the public. A detailed system of mapping has been inaugurated, which shows areas of commercial and non-commercial forest, grass and agricultural lands. Considerable portions of the islands have already been mapped, and the work is being pushed as rapidly as possible. Special tracts of land are being studied in detail for working plans, and botanical collections, including both herbarium and wood specimens are being made. Herbarium sheets show altogether 1,109 tree species in the islands. It is probable that with further investigation, this number will be increased to 1,600 or 1,800. The museum now contains about 3,500 wood specimens, representing nearly 350 different species, and including all of the principal timbers. It is hoped that within a few years the bureau will be able to show by maps the different types of vegetation of the islands; to locate the different tracts of timber, with an estimate of the stand, etc.; to know the silvicultural habits of the principal timber trees (nearly 100); and to increase the knowledge in general of the tropical forests of the Philippine Islands.

Sir William Ramsay gave the Aldred lecture before the Society of Arts on December 11, his subject being "The Emanation given off by Radium." According to the abstract

given in the London *Times* he said that the emanation, whether a compound or not, was certainly endothermic; if left alone, it changed and presumably decomposed with an almost incredible evolution of heat. A ton of it would boil away 200 pounds of water in an hour, and would serve as efficient fuel to warm a house, do all the cooking, and provide hot baths for a large family, not only during their own lives, but for about twenty generations, without much falling off. If the emanation were dissolved in water it produced another effect, also involving a loss of energy—it decomposed the water into oxygen and hydrogen. But in this way there was always produced a small excess of hydrogen over that required to combine with the oxygen. One hypothesis to account for this excess was that hydrogen, too, was one of the products of the decay of the emanation, though on the whole that was unlikely. At the same time, there was formed a trace of dioxide of hydrogen, though not enough, so far as he could judge, to account for the excess entirely. Further, on removing the oxygen and hydrogen, there was left neon, another of the inactive atmospheric gases discovered by himself and Dr. Travers in 1898. With the hope of accounting for the excess of hydrogen, he exposed a solution of sulphate of copper to the action of the emanation; the gases evolved contained argon, but no recognizable helium or neon. Some of the copper, too, appeared to have changed, for the residue of the liquid, after removing all copper from it, contained a small trace of the element lithium, a member of the sodium group, which was easily recognized by its spectrum. It was probable, though not yet proved, that the element sodium was also a transmutation-product of copper, because the residue, obtained by evaporating the copper-solution, deprived of copper, which had been treated with emanation, was more than twice as heavy as that obtained from untreated copper sulphate. It must be explained that these solutions were contained in glass bulbs, and that glass contained silicate of sodium; experiments were now in progress in which glass was excluded, the bulb used being constructed of silica, free from sodium. Now these results corroborated each other, in a certain fashion, and admitted of a provisional theory. The emanation was a very inactive gas, unattacked by any reagents. Now this was the characteristic of the argon group alone—namely, helium, neon, argon, krypton and xenon. Again, we knew a similar series, though a longer one, the first member of which was lithium and the second sodium, to which copper, silver and gold also belonged. It appeared possible, to say the least, that the emanation degraded, split, was transformed, or transmuted itself into helium, neon or argon, all members of the same natural group, according to circumstances; and that, similarly, copper might turn, under the enormous influx of energy brought to bear on its atoms, into lithium, sodium and potassium, all of which had smaller atomic weights than copper and all of which were usually classified in the same chemical group.

IN 1906, for the second time, the total value of the mineral production of the United States exceeded the enormous sum of $1,500,000,000. The exact figures for 1906 are $1,902,505,206 as compared with $1,623,928,720 in 1905, a gain of $278,576,486, or 17.15 per cent. This great increase in the total value of our mineral production is due to gains in both metallic and nonmetallic products, the metallic products showing an increase in value from $702,453,101 in 1905 to $886,110,856 in 1906, a gain of $183,657,755, and the nonmetallic products showing an increase from $921,075,619 in 1905 to $1,016,194,350 in 1906, a gain of $95,118,731. To these products should be added estimated unspecified products, including molybdenum, bismuth and other minerals, valued at $200,000. As heretofore, iron and coal are our most important mineral products, the value of the iron in 1906 being $505,700,000, and that of the coal $513,079,809. The fuels increased from $602,257,548 in 1905 to $652,398,476 in 1906, a gain of $50,148,298. The values of the mineral products of the United States in 1905 and 1906 are summarized by Dr. William Taylor Thom, of the United States Geological Survey, in an advance chapter from "Mineral Resources of the United States, Calendar Year 1906," which

will soon be ready for distribution by the survey. This summary includes two tabular statements that differ radically. Both give the value of the mineral products of the country in the years 1905 and 1906; but the products of the whole country in their first one gives the net value of the mineral marketable form, excluding all unnecessary duplication. The manufactured coke product, for instance, amounting in 1906 to 36,401,217 short tons, is excluded, as it is represented in the quantity and value of the coal used in its manufacture, which are included in the coal statistics. Similarly white lead, red lead, sublimed lead, zinc lead, litharge and orange mineral, whose average aggregate value for the last ten years has greatly exceeded $10,000,000, are not given in the table, the base from which they are made being included in the output of pig lead. The second table, however, under the heading of "Output and Value by States and Territories," gives the value of both the raw material produced in the region and of certain derivatives in their first marketable condition.

The Faculty of Medicine of Harvard University offers a course of free public lectures, to be given at the new buildings of the Medical School, Longwood Ave., Boston, Saturday at 8 P.M., and Sunday at 4 P.M., beginning January 4, and ending April 26, 1908. No tickets are required. Following is a list of the lecturers and their subjects, with dates:

January 4—"Some Recent Discoveries in the Physiology of Digestion" (illustrated by lantern slides and zoetrope demonstrations), by Dr. Walter B. Cannon.

January 5—"Human Gait" (illustrated by lantern slides), by Dr. Edward H. Bradford.

January 11—"The Modern Crusade against Typhoid Fever," by Dr. Elliott P. Joslin.

January 12—"Common Salt," by Dr. Lawrence J. Henderson.

January 18—"The Causes of Nervous and Mental Disease," by Dr. Philip Coombs Knapp.

January 19—"Fatigue: Its Effects and its Treatment," by Dr. George A. Waterman.

January 25—"Nervous Disorders of Children," by Dr. William N. Bullard.

January 26—"Nervous Breakdown during Adolescence and Adult Life," by Dr. James J. Putnam.

February 1—"Some of the Nervous Disorders of Adult Life, with Especial Reference to 'Habits,'" by Dr. Edward W. Taylor.

February 2—"Popular Fallacies regarding Insanity and the Treatment of the Insane," by Dr. Henry R. Stedman.

February 8—"Alcoholism and Insanity," by Dr. Charles P. Bancroft.

February 9—"The Ear and the Telephone," by Dr. Clarence J. Blake.

February 15—"The Interest of the Public in Surgical Progress," by Dr. James G. Mumford.

February 16—"The Sick Child," by Dr. Thomas Morgan Rotch.

February 22—"The Causes of Disease in Infants and Children," by Dr. Charles Hunter Dunn.

February 23—"Rational Infant Feeding," by Dr. John Lovett Morse.

February 29—"Syphilis: Its Nature and Dangers," by Dr. James C. White.

March 1—"Smallpox and Vaccination," by Dr. John Hildreth McCollom.

March 7—"The Problem of the 'Nervous Temperament' in Children," by Dr. George A. Craigin.

March 8—"Florence Nightingale and the Beginning of Surgical Nursing," by Dr. J. Bapst Blake.

March 14—"Modern Methods for the Care of the Insane" (illustrated), by Dr. Owen Copp.

March 15—"The Relation of the Hospital to the Community," by Dr. Abner Post.

March 21—"Mental Hygiene and the Prevention of Insanity," by Dr. George T. Tuttle.

March 22—"Psychic Treatment of Disease: Its Limitations and Uses," by Dr. Richard C. Cabot.

March 28—"What the People should know about Tumors. Prospects of Cure of Malignant Disease in the Light of Our Present Knowledge. Importance of Early Cooperation on the Part of the Laity," by Dr. Howard A. Lothrop.

March 29—"The Development and Maintenance of Good Teeth," by Dr. Charles A. Brackett.

April 4—"The Inflammations due to the Commoner Pus Germs: their Local and General Effects. Blood-poisoning," by Dr. Charles A. Porter.

April 5—"Certain Dangerous Popular Delusions concerning Grave Surgical Diseases," by Dr. Maurice H. Richardson.

April 11—"Foods in Health and Disease," by Dr. Maurice Vejux Tyrode.

April 12—"The Development of the Microscope," by Dr. Harold C. Ernst.

April 18—"Some Preventable Diseases of the Skin," by Dr. Charles J. White.

April 19—"The Relation of Animal Life to Human Diseases," by Dr. Theobald Smith.

April 25—"The Cocaine Evil," by Dr. Charles Harrington.

April 26—"Tumors," by Dr. William T. Councilman.

PROFESSOR ERASMUS HAWORTH, professor of geology in the University of Kansas, was elected president of the Kansas Academy of Sciences at its annual meeting held at Emporia on November 29 and 30. The academy will meet next year at Topeka.

PROFESSOR ARTHUR W. GOODSPEED, professor of physics in the University of Pennsylvania, is giving a series of lectures on scientific subjects in middle western cities.

PROFESSOR JOHN CRAIG, professor of horticulture at Cornell University, has been granted a leave of absence, and will spend several months in Europe.

THE *Yale Alumni Weekly* states that the senior class of the Forest School this year, as in the past four years, will spend the spring term in practical field work on a large tract of forest land. The classes of 1904 and 1905 were at Milford, Pa.; the class of 1906 was at Waterville, N. H., on the land of the International Paper Company, and last year the seniors spent three months in the Ozark Mountains near Grandin, Mo., on the J. B. White Lumber Company tract. The forest map and estimates which the class of 1907 made for this company proved so valuable that this year several lumber companies have applied to Professor Graves to have the senior class come and camp on their land. From among these offers the tract of the Caul Lumber Company in Coosa County, central Alabama, has been chosen as the location of the camp for the spring of 1908. This region is midway between the coastal plains and the mountains, in a rolling country where the forests of long-leaf pine and many other trees make a delightful field for forestry work. The students will live in a camp located at an elevation of about 800 feet above the sea, 25 miles from Hollins, Ala., and near a spur of the logging railroad. The work will be similar to that done last spring, including the making of a topographic map of the whole tract and estimating and describing all the stands of timber. There will also be abundant opportunity to study in detail methods of logging and railroad construction, and an interesting part of the work will be to devise a practical plan by which the tract can be managed with financial profit in such a way that reproduction of the most valuable species of trees can be secured, the young timber protected from fire, and a future yield attained. Part of the term will be spent in the mill and lumber yards at the town of Hollins, Ala., where the senior foresters will be instructed in saw-mill operations, grading and handling lumber and office management.

THE London *Times* notes that till within the last few years the African elephant was represented in British museums by very few specimens of small size. Of these the most noted was perhaps that sent home to Saffron Walden in the thirties of the nineteenth century by John Dunn, and mounted in amateur fashion by local naturalists. This was brought up to the Great Exhibition of 1851, and used to display the magnificent howdah and trappings presented to Queen Victoria by some Indian princes. Recently, however, matters have changed for the better. In fulfilment of a commission, Mr. Rowland Ward obtained and mounted the very fine Rhodesian animal, standing nearly 11 feet 6 inches high, and without doubt the largest museum specimen in existence, for the British Museum (Natural History), where it forms the most striking object in the Great Hall. The same naturalist has just forwarded to the Royal Scottish Museum, Edinburgh, an equally fine specimen, a little under that measurement, the tape giving 11 feet 3 inches, and it has already proved a great attraction, the attendance having increased considerably since it has been on view. Both these elephants were obtained by Englishmen expressly for museum purposes. With regard to the question of height it may be noted that both exceed that of the famous Jumbo, and probably approach

the maximum limits. A famous hunter expressed his disbelief in twelve-foot elephants, and he claimed to know more about the subject that those who maintained that such a measurement had been reached. In the character of the ears, which Mr. Lydekker recently made the criterion for distinguishing the different races of the African elephant, the Edinburgh specimen, obtained by Major Powell-Cotton in the Lado enclave, approaches one shot near Lake Rudolf by Mr. Cavendish, and named in his honor. Of quite a different type is the Orleans elephant of North Somaliland, with a lobe or lappet at the lower part of the ear. The head of the type-specimen adorns the walls of the Duke of Orleans's private museum at Wood Norton, the whole of which was arranged by Rowland Ward, who also mounted the trophies, the groups being set up from the duke's notes, photographs and sketches, under the royal owner's personal direction.

UNIVERSITY AND EDUCATIONAL NEWS

Bowdoin College has received a gift of $50,000 from Mr. Andrew Carnegie, to endow a chair of physical science, history and political science in memory of the late Thomas B. Reed. The college has now received $150,000 of the $200,000 required by the General Education Board to make available its gift of $50,000.

Professor Thomas Barker, from 1865 to 1885 professor of mathematics at Owen's College, now Victoria University, Manchester, who died on November 20, has bequeathed most of his estate to the university to establish a professorship of cryptogamic botany and to found scholarships in mathematics and botany. The bequest will amount to about $200,000. Professor Barker also left his microscopes, apparatus, botanical books and herbarium, and his mathematical and general scientific books to the university.

By the will of the late Mrs. Annie E. Fulton, the University College of South Wales and Monmouthshire receives a bequest amounting to about $45,000.

The Educational Times states that Macdonald College, Quebec, established and endowed by Sir William Macdonald, of Montreal, was opened to students on November 7. The college property comprises 561 acres, and has been divided into the campus of 74 acres, where the buildings are located, with demonstration plots for grasses and flowers; a farm of 100 acres for horticulture and poultry keeping; and a live stock and grain farm of 387 acres. The buildings have been planned in accordance with the most modern scientific principles. The cost of the buildings and equipment exceeds £300,000, and in addition Sir William Macdonald has provided a permanent endowment of £400,000. The college is incorporated with McGill University, and Dr. James W. Robertson, C.M.G., is the principal. The college includes a school for teachers, a school of household science, and a school of agriculture. Tuition is free to residents in the Province of Quebec.

The daily press states that Professor Albert Ross Hill, of Cornell University, formerly dean of the Teachers College of the University of Missouri, is soon to succeed Dr. Richard H. Jesse as president of the university.

At the Pennsylvania State College, Professor J. P. Jackson has been appointed dean of the School of Engineering, and Professor Hugo Diemer, dean of the mechanical department.

Mr. W. Bateson, F.R.S., fellow of St. John's College, Cambridge, since 1885, who recently came to this country to give the Silliman lectures at Yale University and to attend the meeting of the International Zoological Congress, has been appointed reader in zoology at Cambridge University.

Dr. J. G. Frazer, of Trinity College, Cambridge, has accepted the new chair of social anthropology in the University of Liverpool.

Correction: In Mr. Bateson's address, Science, November 15, 1907, p. 655, col. 1, par. 4, for 41:7:7:9 read 177:15:15:49.