

dent of the University of Texas, the present president of the Alumni Association, the president of the board of regents of the University of Texas, are hereby instructed to proceed, in their own way, to the selection of a permanent standing committee of nine of ways and means for the enlargement, expansion, and extension of the University plan, and that the first meeting of said committee, if possible, be convened in the city of Austin on the first Saturday in October, 1911. Be it further

Resolved, That the President of the University of Texas, the present president of the Alumni Association of Texas and the president of the board of regents of the University of Texas be requested to select and authorize some suitable individual who will undertake, without any remuneration or expense, to provide a fund of not less than \$25,000 per year nor more than \$50,000 per year during the period of five years, payable in advance, in five equal annual installments of not less than \$25,000 per year nor more than \$50,000 per year, on the first day of October, 1911, 1912, 1913, 1914 and 1915.

The objects of these resolutions are described as follows:

1. To stimulate thought and create and arouse aspiration for higher education in Texas.

2. To attract the best thought and attention of aspiring persons engaged in educational work throughout the United States and Europe.

3. To inform the people of Texas that the organization, through the committees, is going to investigate, deliberate upon and advise the people of Texas what the extent of the physical institution should be, and what adequate means of maintenance should be provided. This is the restricted office and purpose of the organization which will be accomplished by the application of modern business and scientific methods of inquiry, investigation and determination.

4. The conception and definition of a curriculum, thorough-going and modern in all its details, comprehending the various activities of a modern commonwealth organization.

The following awards are proposed:

1. The award of a cash prize of \$10,000 or more to architects for the best landscape and

building design which will be the physical expression of the state's aspiration for higher education, and a second prize or prizes of \$5,000 or more for the best thesis or theses on a properly assigned subject involved in the general educational design. It is probable that the competition in these classes will be limited to architects and professional educators of high reputation and that it will be closed for entry on or before January 1, 1913, all designs and theses to be filed on or before January 1, 1914. It is intended that such competitors shall have at least two years during which to prepare their designs and theses in this competition.

2. An annual prize of \$500 or more for the best thesis on a selected and assigned topic involved in the general design of the movement, competition to be limited to graduating students of the University of Texas, awards to be made in October each year of the five-year period.

3. An annual prize of \$500 or more, in the discretion of the committee, for the best thesis on a duly assigned topic involved in the general design, the competition to be limited to citizens of Texas other than graduating students of the university, awards to be made in October each year of the five-year period.

4. An annual prize of \$500 or more for the best thesis on an assigned subject involved in the general design of the movement, the competition to be limited to graduating students of ten accredited universities of other states of the United States, of two colleges in Canada, of two in England, of one in Scotland, of two in Germany and of one in France.

SCIENTIFIC NOTES AND NEWS

THE Astronomical and Astrophysical Society of America met at Ottawa, Canada, from August 23 to 25. The officers elected are: E. C. Pickering, *president*; E. B. Frost, *first vice-president*; W. W. Campbell, *second vice-president*; W. J. Hussey, *secretary*; C. L. Doolittle, *treasurer*; J. S. Plaskett and W. S. Eichelberger, *councillors*. The next annual meeting will be held at Allegheny Observatory in August, 1912. The society will also meet

at Washington in December, in connection with the meeting of the American Association for the Advancement of Science.

THE annual Herter lectures will be delivered at the Johns Hopkins University on October 4, 5 and 6, by Professor Dr. Albrecht Kossel, of the University of Heidelberg, who was awarded the Nobel prize last year for his discoveries in medical chemistry.

THE German emperor has conferred on Sir William Ramsay the order "Pour le Mérite."

DR. JACQUES LOEB, of the Rockefeller Institute for Medical Research, has been elected a member of the Academy of Science in Cracow. Dr. Loeb has sailed for Europe to make an address before the Congress of Monists to be held in Hamburg.

AT the July meeting of the Spanish Society of Physics and Chemistry of Madrid, Professor Alexander Smith, of Columbia University, was elected an honorary member of the society.

AT its last commencement, the State University of Iowa bestowed the degree of doctor of laws on Professor William H. Norton, professor of geology, Cornell College, Iowa.

PROFESSOR JOHN B. EKELEY, head of the department of chemistry at the University of Colorado, was recently appointed state chemist by the state board of health. In June the honorary degree of doctor of science was conferred on him by his alma mater, Colgate University.

MR. D. E. HUTCHINS, chief conservator of forests, British East Africa, after ten years' forest service in India, twenty-three in South Africa and four in equatorial Africa, has retired on a pension.

R. H. BAKER, Ph.D. (Pittsburgh, 1910), has been appointed director of the Laws Observatory, University of Missouri.

DR. JAMES R. WEIR, Ph.D. (Munich), has been appointed an expert in forest pathology in the Bureau of Plant Industry.

MR. J. ALLAN THOMSON has been appointed paleontologist to the Geological Survey of New Zealand.

DR. N. L. BRITTON and Mrs. Britton are for a month at the Royal Gardens, Kew, England, in continuation of their studies on the flora of the West Indies.

MR. S. H. BURBURY, F.R.S., distinguished by his work in mathematical physics, died on August 18, at eighty years of age.

NEXT year the American Geographical Society celebrates its jubilee, and in connection with this event a transcontinental excursion for the purpose of geographical study is planned, under the leadership of Professor W. M. Davis. The start from New York, by special train, will take place some time in August, and the excursion will conclude in October, its duration being six or seven weeks.

THE South Australian Cabinet has decided to contribute £5,000 towards the cost of the Mawson Antarctic Expedition.

LETTERS have been received from Messrs. Vilhjalmur Stefansson and Rudolph M. Anderson, the Arctic explorers sent out three years ago by the American Museum of Natural History. A letter from Mr. Stefansson tells of the hazardous journey he undertook east from Cape Parry to the Coppermine River region, as far as Coronation Gulf. He discovered a tribe of Eskimos with fair complexions, white hair and red beards—these may be, he thinks, the descendants of the lost Scandinavians, who disappeared several centuries ago. He found also a primitive people, using stone implements, who could not count above five, and wiped from the map the Le Ronciere River. A letter from Mr. Anderson records his observations, chiefly of Arctic birds and animals, on his trip westward to Langton Bay.

AT the 1909 meeting of the International Mathematical Congress, held at Rome, the subject of mathematical teaching was brought forward, as *Nature* reminds us, and upon the initiative of Professor D. E. Smith, U.S.A., it was decided to form an International Commission on the Teaching of Mathematics, this commission to report to the next triennial meeting of the congress, which will be held at Cambridge (England) in 1912. The commis-

sion will meet at Milan on September 18-20 of this year to take stock of the work done so far.

THE first all-Russian congress of women of academic education will be held in November of this year in St. Petersburg.

THE U. S. Public Health and Marine-Hospital Service has just issued a series of nine wall charts illustrating the anatomy and life-history of hookworms, the methods of their dissemination, methods of prevention and pictures of severely infected patients. These charts are intended for use in schools, colleges and in field work. They are now being used by some of the state boards of health in the campaign for the eradication of hookworm disease. The charts are printed on heavy paper mounted on linen with wooden hangers and are sold by the Superintendent of Documents, Government Printing Office, Washington, D. C.

THE State Geological Survey of Colorado, of which Professor Russell D. George, of the state university, is head, has three main parties in the field this summer. The first party, consisting of seven men, is under the direction of Assistant Professor Ralph D. Crawford, of the university. It is extending work begun in 1909 in the Monarch and Garfield area of Chaffee County to adjacent parts of Gunnison County. Professor Horace B. Patton, of the State School of Mines, heads a party at work about Alma, near Leadville. Under the direction of Professor F. F. Grout, of the University of Minnesota, a third party is doing rapid reconnaissance work in the Rabbit Ear Range in Routt and Grand counties. A study of the mineral and hot springs of the state is another activity of the survey. Mr. Roy M. Butters, of the university, and Mr. Frank Slattery, of the School of Mines, are visiting all the important springs.

For the first time the coal mines of the United States in 1910 were credited with an output exceeding half a billion short tons, the combined production of anthracite, bituminous coal and lignite having amounted to 501,576,895 short tons. This great output was attained in spite of the fact that most of the

mines in Illinois, Missouri, Kansas, Arkansas and Oklahoma were closed for nearly six months by one of the most bitterly contested strikes in the history of the industry. The heaviest tonnage mined in any year previous to 1910 was in 1907, when a total of 480,363,424 short tons was produced.

OF the nineteen mines producing quicksilver in the United States in 1910, fifteen are located in California, two in Nevada and two in Texas, according to H. D. McCaskey, of the United States Geological Survey. The production in 1910, as obtained from confidential returns to the Geological Survey by every producer in the country, was 20,601 flasks of 75 pounds each. At the average domestic price at San Francisco, \$46.51 a flask, the value was \$958,153. As compared with the production of 1909, which was 21,075 flasks, valued at \$957,859, this shows a decrease in quantity of 474 flasks but an increase in value of \$294. Although the production of California increased in 1910, the output from Oregon decreased to nothing, as that of Arizona did in 1909, the small Nevada production fell off considerably, and the output from Texas decreased. In no state, except possibly Nevada, can an increased output be expected for 1911, the present outlook being for a total production for the United States not exceeding 20,000 flasks. A good domestic demand for quicksilver was noted throughout 1910. The principal uses are for gold milling and placer mining, for the manufacture of vermilion, fulminates, physical instruments, and drugs, and for lighting. The use of quicksilver in making the fulminate of percussion caps for igniting powder is increasing in importance probably more than any other use. The imports of quicksilver for domestic use are now nominal, having been in 1910 only 667 pounds, valued at \$381, although the values of the imports in the preceding three years varied from \$6,000 to \$8,000. The exports of quicksilver in 1910 were 144,237 pounds, valued at \$91,077, against 510,141 pounds, valued at \$266,243, in 1909. The chief market is now Canada, followed by Mexico. The world's production of quicksilver in 1910 was 3,399

metric tons of 2,204.6 pounds each, against 3,304 tons in 1909, 3,296 tons in 1908 and 3,307 tons in 1907. Spain is the largest producer, furnishing nearly a third of the total world's supply from the famous Almaden mines. The United States, Austria-Hungary and Italy have in turn held second place, this country ranking third in 1910.

THE *Geographical Journal* states that Mr. Egon F. Kirschstein—a Russian by birth though living in Berlin—who accompanied the Duke of Mecklenburg on his journey across Africa in 1907-08, and did good work there by his investigation of the Virunga volcanoes, is about to undertake a new expedition to Central Africa, this time on his own account. His route will be through Portuguese East Africa to Lake Nyasa, and thence to Tanganyika and northwards along the frontier of the Belgian Congo to the Nile, thus touching in part his old area of investigation near Lake Kivu. The duration of the new expedition will probably be between one and two years. A considerable stay will be made in the district between Lakes Nyasa and Tanganyika, which it is proposed to traverse in all directions. Among other items, the ascent and geological investigation of the little-known Konde volcanoes near Lake Nyasa, as well as a visit to the Rukwa valley, are planned. The scientific collections are destined for the museums in Berlin, Brussels and St. Petersburg.

THE *Journal of the American Medical Association* supplies the following figures regarding the number of medical college graduates in the United States.

Year	Regular	Homeopathic	Electric	Physio-Med.	Nondescript	Total
1880	2,673	380	188	3,241
1890	3,853	380	221	4,454
1900	4,715	413	86	5,214
1901	4,879	387	148	18	12	5,444
1902	4,508	336	138	16	11	5,009
1903	5,088	420	149	24	17	5,698
1904	5,190	371	146	20	20	5,747
1905	5,126	276	153	22	23	5,600
1906	4,841	286	186	22	29	5,364
1907	4,591	225	121	11	32	4,980
1908	4,370	215	116	12	28	4,741
1909	4,163	209	84	15	44	4,515
1910	4,113	183	114	16	14	4,440
1911	4,006	152	110	5	...	4,273

CAPTAIN PÉRIQUET has returned to France after completing his surveys in French Equatorial Africa along the line of a possible railway from the coast to the interior. According to the *Geographical Journal* he professes himself convinced of the value and feasibility of such a line, which would tap a rich region of virgin forest abounding in rubber-yielding plants. Besides fixing fifty-four new positions, Captain Périquet and his coadjutors carried out route-surveys totalling some 3,000 miles, paying much attention also to the determination of levels. The traveler was much impressed by the intelligence and general character of the western Pahuins (Fans), who are said to be the most interesting people of the territory, fully equalling the Senegalese in their adaptability to civilization.

THE U. S. Geological Survey has made public figures prepared by Mr. J. P. Dunlop, showing the recovery of "secondary" copper, lead, zinc, tin and antimony in 1910. The total amount of secondary copper recovered, on the assumption that the brass remelted had an average copper content of 70 per cent., was 91,500 tons, of which 15,500 tons was recovered by regular refining plants and the remainder by plants treating only secondary material. At least 30,000 tons was recovered from clean scrap made in the course of manufacture of copper and brass ware, so that only 61,500 tons was obtained from ashes and cinders and from material that had entered the trade in manufactured form and been discarded. The survey inquiry was extended so as to include the railway companies' figures for old metals reused by themselves, and to these is attributed a large proportion of the increase in the figures for copper. The production from secondary sources in 1910 was equal to about 17 per cent. of the domestic consumption of new copper. The secondary lead was equal to 11.5 per cent. of the refined lead produced in the United States. The secondary zinc equaled 23.2 per cent. of the total production of primary spelter in the United States. The secondary antimony shows a large increase, and, as the production from domestic antimonial and antimonial lead ores

was comparatively small, the secondary recoveries are the only important domestic source of supply. The production of tin from ore mined in the United States is negligible, so that the secondary recoveries constitute practically the sole domestic supply. The use of old tin cans as a source of tin was not extended. The cost of collecting, transportation charges and inability to dispose of the old black plate from which the tin is wholly or partly removed are the principal reasons given why more old tin cans are not utilized.

UNIVERSITY AND EDUCATIONAL NEWS

THE daily papers state that there will be established at Ragland, Ala., an industrial school for white children by the Southern Board of Education with funds amounting to \$5,000,000 to be given by Mr. John D. Rockefeller, the Russell Sage Foundation, Mrs. E. H. Harriman and others. Ragland offered 5,000 acres for the site, 200 lots in town, water power and other considerations.

DR. S. N. KOLACEOSKIJ, who died recently, bequeathed all his property, estimated at 40,000,000 rubles, for the establishment, in southern Russia, of an agricultural academy.

CONCRETE foundations have been completed for Rand Hall, the new Sibley shop building, of Cornell University, and steel for the framework is arriving on the premises.

As previously announced, the inauguration of Dr. Guy Potter Benton as president of the University of Vermont will take place on the fifth and sixth of October. Following the general plan already given, the formal inauguration exercises will take place on the second day. The first day will be given to a conference between colleges and secondary schools on the subject, "College Requirements and the Secondary Curriculum."

CARBON GILLASPIE, M.D. (Colorado), has been appointed professor of anatomy in the University of Colorado. Since 1909 Dr. Gillaspie has been instructor in this department. He will give all his time to teaching.

MR. WILLIAM J. MCCAUGHEY, mineralogist and petrographer of the U. S. Bureau of Soils,

has been appointed as assistant professor in metallurgy and mineralogy in the Ohio State University.

P. F. GAJEHR, Ph.D. (Cornell), formerly of Robert College, Constantinople, has been appointed professor of physics at Wells College, Aurora, N. Y.

ADDITIONS to the faculty of the Agricultural College of Utah for the year 1911-12 are as follows: E. G. Titus, Sc.D. (Harvard), professor of entomology; F. L. West, Ph.D. (Chicago), professor of physics; Elmer G. Peterson, A.M., Ph.D. (Cornell), professor of bacteriology; F. S. Harris, Ph.D. (Cornell), professor of agronomy; C. N. Jensen, M.S.A. (Cornell), professor of botany and plant pathology; J. E. Greaves, Ph.D. (California), associate professor of chemistry; and W. E. Carroll, M.S. (Illinois), assistant professor of animal husbandry. J. C. Hogenson has been transferred from college work to the extension division as agronomist. The extension division has been enlarged further by employing Miss Hazel Love Dunford for work in home economics.

DR. A. N. WHITEHEAD, F.R.S., fellow of Trinity College, Cambridge, has been appointed to succeed Mr. E. Cunningham, as lecturer in the department of applied mathematics and mechanics in the University College, London.

DISCUSSION AND CORRESPONDENCE

MOISTURE AND OUT-OF-DOORS

TO THE EDITOR OF SCIENCE: This being the deadest time of the year, when nobody reads SCIENCE, and the post-office refuses to send it after one, I am emboldened to take my pen in hand. The two very clear letters by Messrs. Mott-Smith and Wilson, in answer to Dr. L. H. Gulick's query regarding moisture in the air, together with those of Messrs. Kent, Crowell and Jones in the issue of March 31, leave little or nothing to be said on the subject. What I wish to emphasize is the feeling of shock that I experienced when a medical man of the standing of Dr. Gulick could ask such questions in good faith, when, as has been said, the answers to them can be