

ment and for dismissal in the university should come through my office to your board. This is the procedure in any well-governed university. At that time, also, I asked explicitly that if at any time you should feel that you would be more comfortable with another man in my position, you express to me frankly that feeling; and I stated that I would, then, with good will, promptly retire. To this also you agreed.

I can not but regret that when the time came to act under this agreement, you did not do so, frankly and honorably. You had only to ask for my resignation to receive it at once. The course you adopted to accomplish the same object is unworthy of yourselves, unjust to me, and involves a still more serious injustice to another man whose case should have been considered on its merits after proper hearing and investigation, and not entirely subordinated, as I believe it was, to the evident desire to raise, quite needlessly, a personal issue between your board and myself.

It is not my purpose to dwell on this point, however. Interpreting your action as I have no doubt it was intended, and conforming on my own part to the understanding on which I came here, I willingly withdraw from a position which I accepted only at your earnest solicitation and which I have no desire to retain unless I can demand and receive your entire support. I do this with the less regret because as I recall the issues which have arisen between us and which have led to your present attitude, I am as firmly as ever convinced that the ideals and policies which I have held for the university during the past two and one half years have been right and educationally sound; that no single instance of personal politics or self-seeking on my own part has contributed to our differences; and that if you had chosen to give me a reasonable opportunity for working out these ideals and policies they would have justified themselves in ample measure by the results.

If it were possible that I have exaggerated the significance of your action in its relation to myself, my course would still be the same. No man can be held accountable for his responsibility unless his authority is respected, or for his policies unless he is given a free hand to carry them out. This principle is recognized in all well-governed colleges and universities, as it is in every well-organized business. The efficient government of this university on any other basis is impossible, and I could not be a party to so hopeless an experiment even if it were your desire that I should.

SCIENTIFIC NOTES AND NEWS

At the annual meeting of the National Academy of Sciences, to be held in Washington on April 21, 22 and 23, the William Ellery Hale Lectures will be inaugurated by two lectures on "The Constitution of Matter and the Evolution of the Elements," by Sir Ernest Rutherford, of the University of Manchester.

A SPECIAL convocation held at Oxford on March 24 conferred the degree of doctor of science on Surgeon General Gorgas.

THE Fothergill gold medal of the Medical Society of London for 1914 has been awarded to Dr. John George Adami, F.R.S., LL.D., Strathcona professor of pathology and bacteriology at McGill University, for his work on pathology and its application to practical medicine and surgery.

WE learn from *Nature* that the council of the University of Birmingham has appointed Professor Charles Lapworth emeritus professor of geology in recognition of his services during his occupation of the chair of geology. The senate recently signaled his retirement by the presentation of an address and a gift of plate, and on March 11 another presentation was made to him by a large number of his old students.

THE last number of the *Münchener medizinische Wochenschrift* is a special issue in honor of the sixtieth birthday of Professor Ehrlich, which occurred on March 14.

DR. LAWRENCE MARTIN, of the University of Wisconsin, has been elected a corresponding member of the International Committee on Glaciers.

MR. R. J. POCKOCK, of Queen's College, Oxford, has been appointed to direct the observatory of the Nizam of Hyderabad.

PROFESSOR F. KEEBLE, F.R.S., professor of botany, University College, Reading, has been appointed director of the Royal Horticultural Society's garden at Wisley.

DR. JOHN W. COLBERT, Albuquerque, has been asked by the Rockefeller Foundation to assume charge of its research work in a campaign to be inaugurated for the eradication

of hookworm disease in Central and South America.

MR. H. GLAUERT, of Trinity College, and Mr. H. Jeffreys, of St. John's College, have been elected to Isaac Newton studentships in the University of Cambridge.

THE Sarah Berliner Research Fellowship has been awarded for the year 1914-15 to Miss Ethel Nicholson Browne, Ph.D. (Columbia), now instructor in biology at Dana Hall, Wellesley, Mass. Miss Browne will spend the year at the University of Würzburg and at the Zoological Station at Naples, doing research work in cytology.

THE Kansas City Section of the American Chemical Society celebrated its one hundredth meeting on March 21. This section was chartered in 1900 and has been holding alternate meetings in Lawrence, Kansas, and in Kansas City, Missouri. At this meeting Dr. Wm. McPherson, of the Ohio State University, was the guest of honor and delivered an address illustrated with lantern slides upon "European Laboratories and Chemists."

FROM May 5 to June 23 a course of eight lectures on the rate of the blood-flow in man in health and disease will be given in the physiological laboratory of London University, by Dr. G. N. Stewart, professor of experimental medicine, Western Reserve University.

It is stated in *Nature* that the Faraday Society arranged a general discussion on optical rotatory power, to be held in the afternoon and evening of Friday, March 27, in the rooms of the Chemical Society, Burlington House, Professor H. E. Armstrong and Professor Percy F. Frankland, presiding. Papers on various aspects of the subject were to be read by Professor Hans Rupe (Basle), Professor H. Grossmann (Berlin), Professor Leo Tschugaëff (St. Petersburg), Dr. Darmon (Paris), Dr. T. M. Lowry, Mr. T. W. Dickson, Mr. H. H. Abram, Dr. R. H. Pickard, Mr. J. Kenyon and Dr. T. S. Patterson.

DR. HARRY BURROWS, lecturer in chemistry in the Sir John Cass Technical Institute, Lon-

don, died on March 15, at the age of forty-two years.

PROFESSOR JOACHIMSTHAL, director of the University Hospital at Berlin for the surgical treatment of cripples, died on February 28, aged fifty-two years.

DR. ADELBERT VON WALDENHOFEN, emeritus professor of applied physics in the Vienna Technological School, has died at the age of eighty-six years.

THE House committee has favorably reported the bill providing that the historic botanic garden, located for many years at the foot of Capitol Hill, be removed to Rock Creek park, in the far northwest section of the city. The bill also provides that the garden is to pass from the direct control of congress to that of the department of agriculture.

MR. JOHN LAMBERT CADWALADER left \$195,000 to public institutions with which he was associated, and gave valuable works of art to the Metropolitan Museum, and books to the New York Public Library. The public institutions which received legacies are the New York Public Library, \$100,000; the Metropolitan Museum of Art and Princeton University, \$25,000 each; Harvard University Law School and the New York Zoological Society, \$20,000 each, and the Alumni Association of the Harvard Law School, \$5,000.

A MATHEMATICS CLUB is in process of organization at the Ohio State University. Professors and students will have an equal share in discussing mathematical literature and some of the newer developments in the science. At the first meeting of the club, Professor R. D. Bohannon, head of the department of mathematics, will speak on the spirit of the old mathematics as related to the new, showing the quality of research, and of critical investigation which has taken the place of former unthinking respect for authority.

THROUGH the generosity of M. Spendiaroff of St. Petersburg, the International Geological Congress presents at each session a prize amounting to about 450 roubles for the best

work in some specified field of geology. The next prize will be awarded at the session in Belgium in 1917 for the best work in petrography giving new light on the general problems of the science. Two copies, at least, of any work presented for the competition must be sent to the general secretary of the last congress, R. W. Brock, deputy minister of mines, Ottawa, Canada, at least one year before the next session.

THE Christiania correspondent of the London *Times* states that according to interviews in the Norwegian papers, it looks doubtful whether Captain Amundsen's expedition can start in 1914. The *Fram* appears to be delayed and must be at San Francisco at latest at the beginning of July. If delayed Captain Amundsen will use the time in order to practice his aviators and scientific staff. The *Fram* will take three aeroplanes. The German Antarctic explorer Captain Filchner has been engaged to act as observer and photographer. Dr. Nansen will next summer undertake an oceanographic expedition with the Azores as a central point.

A JOINT meeting of the Association of American Geographers and the American Geographical Society is being held on Friday and Saturday, April 3 and 4. The program is as follows:

THE EVENING LECTURE (ENGINEER'S HALL)

L. A. Bauer: "The General Magnetic Survey of the Earth."

FRIDAY MORNING SESSION (AMERICAN GEOGRAPHICAL SOCIETY'S BUILDING)

W. H. Hobbs: "Land Sculpturing in Arid Lands with Observations from Northeastern Africa."

FRIDAY AFTERNOON SESSION (AMERICAN GEOGRAPHICAL SOCIETY'S BUILDING)

T. Wayland Vaughan: "The Platforms of Barrier Coral Reefs."

D. W. Johnson: "Botanical Phenomena and the Problem of Coastal Subsidence."

E. W. Shaw: "Characteristics of the Mississippi Delta in the Light of Comparative Studies of Some Old-World Deltas."

Oliver L. Fassig: "The Period of Safe Plant Growth in Maryland and Delaware."

SATURDAY MORNING SESSION (AMERICAN GEOGRAPHICAL BUILDING)

Frederick J. Turner: "Geographic Influences in American Political History."

J. Russell Smith: "The Tree as a Factor in Man's Adjustment to Hilly and Rocky Land."

W. W. Atwood: "Over the San Juan Mountains to the Ancient Cliff Dwellings of the Mesa Verde."

Collier Cobb: "The Forest of Sunburst: A Study in Anthro-geography."

SPRUCE, abundant in the New England and Lake States and in Canada, has heretofore been the standard wood for making news print paper and as long as there was a supply sufficient to meet the needs of the paper industry there was no reason to seek substitutes. But heavy inroads have been made on the spruce forests of the western part of the United States in this day of great circulations and large editions, especially of Sunday papers with their many parts. On a rough estimate, a newspaper with an average circulation of sixty thousand copies and an average edition of twenty pages, uses each day the product of about four acres of forest. When this figure is multiplied by the great number of newspapers published in the United States, many of them with much larger editions, and when this is further multiplied by 365, because many papers are issued every day of the year, it can be seen that the drain upon the forests is enormous. Foresters say that even under the most approved methods known to their profession, it could scarcely be expected that spruce would be able to hold its own, but would need supplementing by other material. It is but natural, therefore, that paper manufacturers are looking for new sources of supply which will furnish an abundance of wood pulp, at a price which will not be prohibitive. Poplar and a few other woods are used, but they do not go very far. In the national forests there are many woods considered inferior by lumbermen. Yet they are available for purchase at low rates and many of the timber stands are readily accessible. The forest service, in its desire to utilize to the best advantage all of the resources of the federal timber holdings,

has been seeking proper uses for these trees and has experimented in making pulp from them at its pulp laboratory at Wausau, Wisconsin, an auxiliary of the forest products laboratory at Madison. The Wausau laboratory is equipped with standard machinery and all experiments are carried out under conditions which duplicate commercial practise. As a final test of the value of some of these new woods under practical conditions, arrangements were made between the forest service and the *Herald* to print some part of its edition on paper made from various woods that showed promise as substitutes for spruce. These woods were ground at the Wausau laboratory; the product was then mixed with the usual proportion of chemical pulp and made into news print paper, rolls of which were sent to New York for the experimental run.

SETTLERS in western Kansas are cutting and marketing soap weed, or Spanish bayonet, to supply the demands of soap manufacturers, according to a report recently received from officers of the Kansas national forest. There are various plants in the southwest locally known as soap weed, called amole by the Mexicans, but the one gathered by the Kansas farmers, technically known as *Yucca bacata*, a species with exceptionally large fruits, is the most used. The soap manufacturers, however, utilize the tops or the roots. Manufacturers are paying \$8 a ton for the plant at the railway stations, while the estimated cost of cutting, drying, baling and hauling ranges from \$5 to \$6, depending upon the distance to the railroad. Since a man can ordinarily get out a ton a day, the gathering of the soap weed affords an opportunity to secure a fair day's wages at a time when other ranch activities are not pressing. After cutting, the soap weed is allowed to dry from 60 to 90 days and then is baled up in the ordinary broom-corn baling machine. For a long time this weed has been made into a soapy decoction which the Indian and Mexican women have used, particularly for washing their hair, for which purpose it is considered especially suited, since it contains no alkali. Present-day soap manufacturers use it for toilet and wool soaps. Its qualities have been known for a long time, but the har-

vesting of soap weed is just now becoming commercially important. The industry is now operating on lands adjacent to the Kansas national forest and it is expected that the demand will soon spread to that forest, some portions of which bear an abundant supply of the plant. There is a plentiful supply of it throughout southern Colorado, Arizona, New Mexico and Texas. Forest officers have considered this weed a nuisance, since it is the nature of the plant to spread over extensive areas and kill off other vegetation. It is particularly a pest on stock ranges. In line with its policy of range improvement, the government is anxious to rid the forage areas of all such injurious plants, and it is the hope of the forest officers that the commercial demand for soap weed will soon reach such proportions that it will not only take an otherwise useless product, but also will eradicate it from areas which could be utilized to better advantage for the supplying of forage to cattle and sheep.

It is generally recognized that boric acid in considerable quantities is an original constituent in the waters and gases given off with volcanic emanations. In fact, the Tuscan fumaroles, in Italy, have been an important commercial source of boric acid for a long time, and in the past, possibly even to the present time, almost all the boric acid brought into the European market has been derived from this source. There is abundant evidence of the presence of boric acid in volcanic emanations in many parts of the world. On the other hand, boron is so rare a constituent of rock-forming minerals that it forms an almost inappreciably small percentage of the earth's rock mass as a whole. A short study of the borate deposits in Ventura County, Cal., supplemented by more cursory examinations of similar deposits in the vicinity of Death Valley, has been made by Hoyt S. Gale, of the United States Geological Survey, and a new theory of the origin of the deposits of colemanite, or borate of lime, in these regions has been advanced by Mr. Gale in Professional Paper 85, Part A, recently published by the Survey. While this theory has not yet been entirely proved, there is much in its favor and it affords suggestions and a working basis

for further observation. The supposition of a desiccated saline lake to explain the origin of the colemanite has little to support it beyond rather general assumptions. The character of the deposits themselves indicates rather a vein type of formation. Other salines which would naturally be expected in desiccation deposits resulting from natural saline solutions are not found in association with the colemanite. Those who have supported the desiccation theory have offered no explanation of the cause which might produce colemanite in such massive deposits as a product of water evaporation, while, on the contrary, its formation from limestone in veins by replacement of carbonic acid with boric acid is a natural hypothesis that deserves further investigation. The relations of the deposits to basalt lava flows indicate the probable origin of the boric acid at the time of the extrusion of these lavas, although it may be assumed that this acid continued to find its way into solution of the circulating ground waters long after the period of the extrusions.

UNIVERSITY AND EDUCATIONAL NEWS

PROVISIONS for the creation of a trust fund said to be approximately \$500,000 for the maintenance of male graduates of the Williamsport, Pa., high school at Cornell University are made by the will of Albert Dubois Hermance.

MR. EDGAR PALMER, a Princeton graduate of the class of 1903, has offered to build and present to Princeton University a stadium costing \$300,000. Mr. Palmer is a son of the late Stephen S. Palmer, who was for many years a trustee of Princeton University and gave large sums to the university, including the Palmer Physical Laboratory.

THROUGH the cooperation of the estate of the late Dr. C. Annette Buckel, of Oakland, a research fellowship for the study of feeble-minded children has been established at Stanford University. The department of education, under the direction of its head, Professor E. P. Cubberly, will have the appointment of the fellow, who will work in cooperation with Professor Lewis M. Terman. Dr. Buckel was

an Oakland physician known for her charitable work in Oakland and for her interest in feeble-minded, backward and delinquent children. On her death her estate was left in trust to Miss Charlotte S. Playter, of Piedmont, to be used to advance the condition of backward and feeble-minded children. Miss Playter has turned the money over to Stanford. The income amounts to about \$500 a year, and the board of trustees of the university have added an additional \$500 to the fellowship.

WORK has begun on a temporary recitation and administration building for Wellesley College. It will be a wooden structure, one story high, of the simplest possible construction. It is contracted to be finished by May 1. Classes will begin on April 7, the regular date for the opening of the spring term. There are no plans as yet to replace the geological, physical, psychological and zoological laboratories which were destroyed by the burning of College Hall.

THE recent disastrous fire at Wellesley College wiped out the entire equipment of the department of physics. This department, organized in 1878, was one of the first in the country to offer laboratory practise for undergraduates and possessed much apparatus of value. Within the last few years extensive additions had rendered the equipment thoroughly modern and up to date. The library of nearly three thousand volumes contained complete files of most of the leading periodicals, English, French and German, including the *Annalen der Physik*, the *Philosophical Magazine*, and the *Philosophical Transactions* since 1800. The loss is total.

YALE UNIVERSITY and the University of California will exchange professors next year. Professor John Wurts, of the Yale Law School, will lecture at California, and Professor G. H. Boker, of the School of Jurisprudence at California, will lecture at Yale.

DR. THOMAS H. MACBRIDE, professor of botany, has been appointed acting president of the State University of Iowa.

DR. NATHANIEL E. LOOMIS, assistant professor of chemistry at Bowdoin College, has