

method used by the authors consists in decomposing alloys of antimony with dilute acids, but in their experiments with the ordinarily used zinc-antimony alloy, the hydrogen evolved contains under the most favorable conditions, less than one per cent. of stibin. After experimenting with several alloys, that of antimony with magnesium proved to be by far the best. With such an alloy containing thirty-three per cent. of antimony, the gas given off on treatment with cold dilute hydrochloric acid contains upwards of fourteen per cent. of stibin, and nearly three fourths of the antimony used is obtained as the hydride. This is readily condensed by liquid air to a colorless solid, melting to a colorless liquid at -88° and boiling without decomposition at -17° . When the gas is perfectly pure it is fairly stable, but after some hours it begins to decompose with the deposition of metallic antimony. It decomposes rapidly at 150° .

Analyses of two specimens of early Egyptian remains have been recently published. The first is a vase of the fourth dynasty, and from the analysis Berthelot concludes that it was originally produced by baking a mixture of fine sand with litharge and common salt. The other specimen was a cold chisel dating from the Thébaines dynasty. This consisted of two parts cemented together, the outer portion being of an alloy containing 92.6 per cent. copper and 4.7 per cent. tin. The core was much richer in tin, having 84.6 per cent. copper and 13.3 per cent. tin.

J. L. H.

SCIENTIFIC NOTES AND NEWS.

DR. ALEXANDER AGASSIZ has been appointed a member of the Prussian order, 'pour le merite.'

THE committee of the fund raised to commemorate the eightieth birthday of Professor Virchow announces that it has handed over a sum of over \$12,000 to the Rudolf Virchow Foundation.

DR. CH. WARDELL STILES, zoologist of the Bureau of Animal Industry, U. S. Department of Agriculture since 1891, has been

transferred to the U. S. Treasury Department as 'chief of the Zoological Division, Public Health and Marine-Hospital Service of the United States,' with permanent headquarters at the Hygienic Laboratory in Washington, D. C. The Zoological Division is a new division recently authorized by congress for the purpose of investigating the practical relations of zoology to public health matters. It is made a part of the Hygienic Laboratory authorized by congress several years ago.

THE advisory committee appointed by King Edward in connection with the erection of a sanatorium for tuberculosis in England announces that 180 essays were sent in in competition for the three prizes. The first prize, of the value of £500, has been awarded to Dr. Arthur Latham.

THE Society of Arts has awarded the Shaw prize for industrial hygiene to Mr. James Tonge, Jr., of Westhoughton, Lancashire, for his hydraulic mining cartridge.

NESTOR PONCE DE LEON, M.D. (Columbia), has been appointed medical inspector for the port of Havana.

THE introductory address of the Medical Department of Owens College, Manchester, will be given by Sir Dyce Duckworth on October 1.

DR. GEORGE REISNER has returned from Egypt, where he has been making archeological collections for the Phoebe Hearst Museum in the University of California.

DR. W. F. HENDRICKSON, instructor in pathology in the University of Pennsylvania, died on August 21, at the age of twenty-six years.

MR. GEORGE M. HOPKINS, the author of works popularizing science and one of the editors of the *Scientific American*, died on August 17, at the age of sixty years.

DR. EMILE DUNANT, curator of the Archeological Museum at Geneva, was killed on August 22 while ascending Mount Pleureur.

THE death is announced of Dr. Leopold Schenk, formerly professor of embryology at the University of Vienna. It will be remembered that Dr. Schenk published a work on the

determination of sex which did not meet the approval of scientific men. It was claimed that it was used for advertising purposes, and he was retired from his chair at the University at the request of the faculty.

THE Civil Service Commission announces an examination on September 15 to fill positions of physiological chemist and chief of the drug laboratory in the Bureau of Chemistry of the Department of Agriculture. The salary of these positions is \$2,000. Applicants need not appear at any place for examination, the entire weight being laid on education, training, experience and scientific papers. On October 4 there will be held an examination for the position of chemist in the road-material laboratory of the Bureau of Chemistry at the same salary. Two examinations for positions in the Philippine service are also announced on September 30, one for the position of expert in animal industry with a salary of \$2,500, and one for the position of instrument maker in the government laboratory with a salary of \$1,200.

It is stated in *Nature* that Gilbert White's house at Selbourne is again for sale, and the suggestion is made by Mr. E. A. Martin, member of the council of the Selbourne Society, that it should be purchased as a permanent memorial of the father of British naturalists. The house, known as The Wakes, is situated in the main street of the village of Selbourne, and is in much the same condition as it was in White's time. The question of the existence of a portrait of Gilbert White is discussed by Hr. R. Holt-White in a letter to the August number of *Nature Notes*, with the result that there is no good reason to believe that any such picture is known.

REUTER'S AGENCY reports that the Prince of Monaco has presented a quantity of deep-sea apparatus to Mr. W. S. Bruce for the Scottish Antarctic Expedition, including trawls, nets, water-bottles for obtaining samples of water from great depths for physical examination, thermometers and other similar apparatus.

WE learn from the *British Medical Journal* that the Pasteur Institute of Warsaw, founded 15 years ago, has during that period performed

some 500,000 antirabic inoculations. Recently an accident occurred of which there had been no previous example. Of 40 persons inoculated on November 29th, 1901, 22 were attacked with illness. Of these 6 were children, 4 of whom died with symptoms resembling those of scarlatina. The other persons presented only local manifestations. The Institute was closed and disinfected, and the performance of inoculation was not resumed till December 20th, when fresh spinal cords procured from St. Petersburg and Cracow were employed. Dr. Palmciski, the director of the institute, is investigating the cause of the outbreak, which is believed to be due to secondary infection, and on completion of the inquiry the results will be made public.

WE learn from the *Botanical Gazette* that in connection with the Royal Botanical Gardens at Peradeniya an experiment station has recently been established for trying on a large scale new products not yet staples. The purchased estate contains 550 acres.

At a meeting held at the Apothecaries' Hall, says the *British Medical Journal*, it was resolved to call the new society for investigating drugs and their uses the 'Therapeutical Society,' and to include treatment by natural forces and by surgical appliances as well as by drugs in the subjects to be discussed.

AN International Congress on the care of the insane is to be held at Antwerp this year from September 1 to 7. The Belgian Minister of Justice is the honorary president of the congress, and the acting-president is Dr. Peters, of Gheel.

THE newspapers report that news has been received of the Nordenskjöld Antarctic expedition. The vessel is imprisoned in the ice, according to these advices, and preparations have begun to proceed in dog sledges. The health of the members of the party was excellent.

NEWS has been received at Yokohama that the small island of Tori Shima, between the Bonin Islands and Hondo, the main island of Japan, was overwhelmed by a volcanic eruption between the 13th and 15th of the month.

All the houses have been demolished and the 150 inhabitants killed.

THE Berlin correspondent of the *Times* says that the scientific commission sent by the German Sea Fisheries League to ascertain the value of deep sea fishing in the Baltic has not yet published its report. It is known, however, that large fishing grounds were not found and that trawl fishing as practiced in the North Sea would not pay.

AN industrial exhibition is being planned for Johannesburg, South Africa. It will embrace mining and agricultural machinery, motive powers, tramways and various industries. The arts and sciences will be included in the scope of the exhibition.

THE *Botanical Gazette* states that the serial publication known as 'Contributions to the U. S. National Herbarium' was transferred from the Department of Agriculture to the National Museum with a special appropriation of \$7,000. This provides for an editorial assistant and an artist, and will enable the museum to republish certain numbers which are out of print and in demand.

FROM a letter dated Kechatno River, June 28, from Mr. A. H. Brooks, geologist in charge of the Alaskan work of the Geological Survey, the latest information is received regarding the progress of exploration in that territory. Mr. Brooks is at present leading an exploring party which started late in May from near the head of Cook Inlet, on the southern coast, to explore the unknown region of the western Alaska Range and to reach Circle City, on the Upper Yukon, before the arrival of cold weather. The distance is about 600 miles, 100 of which had been traversed at the date of the letter. The route taken from Cook Inlet was northward, partly along the beach and partly by Indian trail parallel to the shore of the inlet. Beluga River, a formidable stream over which it was necessary to swim the horses by means of boats, was successfully crossed. Thence northwestward a well-forested foothill region with abundance of grass was traversed to the Skwentna River, which was crossed with difficulty owing to its low temperature and rapid current. A portion of the outfit was

then sent by boat to the Kechatno River, while the rest of the party went overland to meet it through a region of extensive swamps where it was necessary to cut the trail for almost 30 miles. From Kechatno River the route lies across the Alaska Range, partly by the trail used by Captain Herron in 1899, thence to the Tanana River and northeastward to Circle City. If the season is found to be too far advanced on reaching the Tanana, the river will be descended to the Yukon, and passage will be taken on one of the boats going down the latter river. In spite of the difficulties of travel experienced to this point, the party is reported to be in excellent health and spirits. The topographer of the expedition is Mr. D. L. Reaburn, and the assistant geologist is Mr. L. M. Prindle, who has already made a valuable collection of plants.

WE learn from *Nature* that the text of the draft scheme of organized research on cancer, adopted by the Royal College of Physicians on March 24 and approved by the Royal College of Surgeons on April 10, has now been published. The scheme states that in order to promote investigations into all matters connected with, or bearing on, the causes, prevention and treatment of cancer and malignant disease, steps are to be taken, (1) to provide, extend, equip and maintain laboratories to be devoted exclusively to cancer research; (2) to encourage researches on the subject of cancer within the United Kingdom or in the British dominions beyond the seas; (3) to assist in the development of cancer-research departments in various hospitals and institutions approved by the executive committee; (4) and generally to provide means for systematic investigation in various other directions into the causes, prevention and treatment of cancer. Should the object of the fund be attained by the discovery of the cause and nature of cancer, and of an effective method of treatment, the Royal Colleges, with the consent of the trustees, are to be empowered to utilize the fund either (a) for equipping with the necessities for such treatment such hospitals as they may select, or (b) for forwarding research into other diseases. The fund is to be administered by a president, vice-presidents, trustees, honorary treasurer,

general committee, and executive committee consisting of twelve members, one to be nominated by the Royal Society.

BULLETIN No. 35, entitled 'Eucalypts Cultivated in the United States,' by Professor A. J. McClatchie, agriculturist and horticulturist of the Arizona Experiment Station, will be ready for distribution by August 15, 1902. Forty species of Australian Eucalypts, which have been successfully grown in the southwestern part of the United States for timber, for wind-breaks or for ornament, are fully described and illustrated in this bulletin. The little-known distinguishing characteristics of the seedling and older growth of these trees have received special attention and illustration; as have their requirements for soil, climate and culture. The phenomenally rapid growth of the Eucalypts renders them of very great economic importance in suitable climates; and tree planters and others who desire information concerning the character, culture and economic uses of these trees and their wood will find in this bulletin a useful guide.

THE *Electrical World* describes the progress toward establishing a John Fritz medal. As we have already stated, representative members of the four national engineering societies have organized for the purpose of celebrating suitably the eightieth birthday of John Fritz, the celebrated American ironmaster and inventor. Under discussion the plan developed until it was decided to establish a John Fritz medal, to be awarded every year 'to the originators of the most useful scientific or industrial achievements, in perpetual honor of John Fritz and to the glory of engineering.' In order that the subscribers to the fund should be numerous, it was decided to permit each one to contribute \$10. Enough has now been subscribed to insure the success of the project, but there is still an opportunity for those who wish to be enrolled. Several thousand dollars have been received. The purpose is that this medal shall be awarded by a perpetual committee of 16, to be appointed or chosen in equal numbers from the American Society of Civil Engineers, the American Institute of Mining Engineers, the American Society of Mechan-

ical Engineers and the American Institute of Electrical Engineers. Rules for the award of this medal have been prepared. The committee may select any person of any nationality. No award shall be made until after at least one year of consideration, and it must have the affirmative vote of at least three fourths of the board. The hope and belief is that this medal will be a distinction not second to the Bessemer gold medal, awarded by the Iron and Steel Institute of Great Britain. The public celebration of Mr. Fritz's eightieth birthday and of the foundation of this memorial will be held in New York City, October 31. This celebration will take the form of a dinner at the Waldorf-Astoria, in which the subscribers to the fund will have the first opportunity to participate. Those who may wish to be enrolled among the subscribers to the medal fund should write for particulars to Mr. John Thomson, treasurer, 253 Broadway, New York City.

UNIVERSITY AND EDUCATIONAL NEWS.

PRESIDENT PRITCHETT, of the Massachusetts Institute of Technology, has declined the presidency of the University of Wisconsin.

THE trustees of the University of Chicago have again postponed the decision as to the segregation of the sexes at the University. It is said that a majority of them do not favor the plan recommended by President Harper.

DR. J. H. BEAL, a chemist, has been elected president of Scio College, at Scio, Ohio.

WILLIAM STUART, B.S. (Vermont, '94), M.Sc. (Purdue, '96), associate horticulturist of the Indiana Experiment Station, has resigned to accept the professorship of horticulture in the University of Vermont.

THE Council of University College, Liverpool, has elected Dr. Benjamin Moore, now lecturer in physiology in the Charing Cross Medical School, to the chair of bio-chemistry, recently founded in the college by Mr. William Johnston.

PROFESSOR HANS STRAHL, director of the Anatomical Laboratory at Giessen, has been called to Tübingen.