semi-savage peoples. Their songs and stories are carried in the memory by strings of objects each of which corresponds to a heading or line. These songs take us into the arcanum of the savage mind and present a strange picture of its psychology. The volume is illustrated and forms a welcome addition to the series published by the Society.

D. G. BRINTON.

UNIVERSITY OF PENNSYLVANIA.

SCIENTIFIC NOTES AND NEWS.

The United States Fish Commission steamer Fish Hawk left Porto Rico for the United States on February 23d, having completed her work in the waters about the island and having visited all the principal ports. No details of the expedition have yet been received, but the most interesting results are expected from the operations on the sandy submarine plateau which extends to the eastward of the island.

THE French Geographical Society has awarded its medals, the two chief gold medals being given, respectively, to General Galliéni for his work in Madagascar and to M. E. Gentil for his explorations in Africa. The Félix Fournier prize has been awarded to M. Henri Brenier for commercial explorations in China.

Mr. W. H. Preece, C.B., F.R.S., having attained his sixty-fifth birthday, has retired from the position of Engineer in Chief and Electrician to the English Post Office, but it is hoped that his services will be retained by the Postmaster-General as consulting engineer.

PROFESSOR ALBERT F. BRIGHAM, of Colgate University, sailed on February 21st for Europe for ten months. He is now enjoying a sabbatical year, and will spend the time in geographical study in England and Switzerland, and in literary work for several months at Oxford. He will probably make arrangements to be with Professor Davis for a trip in the summer through parts of the Alps.

PROFESSOR R. VON WEITSTEIN, of Prague, has been appointed Director of the Botanical Gardens of Vienna and professor in the University.

PROFESSOR WALTER WISLICENUS, of the University of Strassburg, is intending, with the as-

sistance of the German Astronomical Society, to prepare a yearbook of astronomy, giving abstracts of the papers appearing during each year, beginning with 1899.

THE death is announced of The Rev. William Colenso, F.R.S., at the age of 87 years. Mr. Colenso began life as a printer, and when the Church Missionary Society established a press in New Zealand, in 1833, he was given charge of this and became both printer and missionary. He was one of the chief authorities on Maori antiquities and rites, and on the natural history of New Zealand.

WE regret also to record the following deaths: Mr. John Kreusi, a mechanical engineer and inventor, at Schenectady, N. Y., on January 22d, aged 56 years; Mr. Thomas Cook, a well-known teacher of anatomy and writer on the subject, in London, on February 8th; Dr. L. A. Veitmeyer, a civil engineer at Berlin, and Dr. Carl Schoenlein, of the Zoological Station at Naples, at the age of 40 years.

THE New York Academy of Sciences proposes to hold its sixth annual exhibition in the American Museum of Natural History on April 11th and 12th. The first evening is reserved for members of the Academy and the second for the Scientific Alliance and friends of science in general. The afternoon of the 12th will offer an opportunity for students and those who cannot attend in the evening. The exhibition will illustrate the advances during the last year Any worker in the field of science who may have material which he believes of interest to the scientific world should communicate immediately with the chairman of the committee, Professor William Hallock, Columbia University, New York City. The exhibition is not limited to the work of members of the Academy, but the committee has final authority as to what material will be accepted. The departments represented are: Anatomy, astronomy, botany, chemistry, electricity, anthropology, ethnology, experimental psychology, geology, mineralogy, paleontology, photography, physics, physiography, physiology and zoology.

THE National Educational Association will meet next year in Chicago. Mr. A. B. Down-

ing, Superintendent of Normal Schools, New York City, has been elected President.

Officers for the International Association for Promoting the Study of Quaternions and Allied Systems of Mathematics for the years 1889 and 1900 have been elected as follows: President, Sir Robert Ball, of Cambridge University; General Secretary, Dr. Alexander Macfarlane, lecturer on mathematical physics in Lehigh University. The Secretary of the United States is Professor Arthur S. Hathaway, of the Rose Polytechnic Institute.

THE Association of Polish Men of Science and Physicians will meet at Cracow in 1900. It will be remembered that the meeting in Posen last year was forbidden by the Prussian government for political reasons which scarcely appeared to be sufficient.

THE British Board of Agriculture have appointed a Departmental Committee to inquire into and report upon the working of the Diseases of Animal Acts in so far as they relate to glanders, and to consider whether any more effective measures can, with advantage, be taken to prevent the spread of that disease. Lord Stanley is chairman of the committee.

A MEETING of the Fellows of the Royal Botanic Society was held on February 11th, at the Gardens, Regent's-park, Mr. C. Brinsley Marlay presiding. Mrs. Ernest Hart exhibited a collection of Japanese dwarfed plants grown under certain secret methods much in vogue in the cultivation of trees in Japan. Each specimen was said to be upwards of one hundred years old, and the tallest was less than 18 in. in height, although possessing all the characteristics of perfect plants in miniature. They were pronounced to be the finest specimens of this peculiar art ever seen in England. was also shown a seed incubator in action intended for use in connection with the 'Seed Control' lectures now being given in these Gardens every Monday.

The first ordinary meeting of the British Society of Engineers for the present year was held on February 6th. Mr. W. W. Beaumont, the President for 1898, occupied the chair and presented the premiums awarded for papers read during the year, viz., the President's gold medal

to Mr. W. Fox, the Bessemer premium to Mr. S. O. Cowper-Coles, the Rawlinson premium to Dr. J. C. Thresh and a Society's premium to Mr. G. Thudichum. Mr. Beaumont introduced the President for the ensuing year. Mr. John Corry Fell, who delivered his inaugural ad-He said, as reported in the London dress. Times, that the financial position of the Society was very satisfactory, and it had increased its numbers during 1898. During the past year they had lost six of their honorary members-Sir William Anderson, Sir Henry Bessemer, Sir James N. Douglas, Sir John Fowler, Lord Playfair and Sir Robert Rawlinson. The vacancies thus created had been filled by Sir J. Wolfe Barry, Sir A. J. Durston, Sir David L. Salomons, Professor A. B. W. Kennedy, Mr. W. H. Preece and Mr. A. Siemens. It was a curious fact that civil engineers availed themselves less than any other members of the profession of the privileges accorded to inventors by patent, designs or copyright protection. It had been said that the British nation was less inventive than the American, and prior to 1883 that view appeared to be supported by the number of patent applicants in the United States as compared with those in Great Britain, but upon a reduction of the fees in 1883 the applications had reached over 30,000 per annum, and Great Britain now took a foremost place in the inventive world. With regard to successful invention the conditions should be the result of analysis or synthesis, not mere chance dashes into an unknown field. Mr. Fell pointed out the necessity of having a special Court for the trial of patent actions. He had for long past been of opinion that such a Court should be established, and of late the Lord Chancellor and other Judges had expressed the same views. They had publicly attributed the block in the Law Courts to the increasing number of patent cases and the inordinate time many of them occupied. The President then gave a short summary of the advances made of late years in various departments of engineering. A hearty vote of thanks was accorded to Mr. Fell.

The annual meeting of the British Institution of Mechanical Engineers was held on February 9th at the new building in Storey's-gate, St. James's-park. Mr. S. W. Johnson, the re-

tiring President, being in the chair. Mr. Edgar Worthington, the Secretary, presented the 52d annual report, which showed that the membership in all classes had reached 2,684, representing a net gain of 191 on the previous year. The receipts for the year were £8,452, and the expenditure £7,588, leaving a balance of £863. The total investments and other assets amounted to £66.462. References were made to the experiments carried on by Professor Beare at University College as to the value of the steamjackets, and to those of Sir William C. Roberts-Austen, who had carried to a successful conclusion a long series of experiments made at the Royal Mint on the behavior of steels during cooling. Congratulatory allusion was made to the summer meeting held at Derby, and it was stated that the next summer meeting would be held at Plymouth. The report was adopted, after which Mr. Johnson vacated the chair in favor of the President-elect, Sir. W. H. White. The fifth report of the Alloys Research Committee on Steel, drawn up by Sir William Roberts-Austen, was afterwards read.

A HYGIENIC institute is to be erected in Posen, Prussia. According to the British Medical Journal it will contain a hygienico-bacteriological and a pathologico-anatomical department, with the usual staff of directors and assistants. Their sphere of work is to comprise supervision and improvement of water supplies, of drainage works and the bestowal of refuse; soil and subsoil examination; hygienic supervision of works, factories, warehouses, etc.; prevention of the spread of infectious diseases; post-mortem examinations; courses of lectures, some popular, on subjects connected with hygiene, bacteriology and pathological anatomy. It is hoped that the scientifically conducted efforts of the institute will be successful in arresting epidemics, such as cholera, smallpox, typhus, etc., which frequently have come into Prussia from across the Russian frontier.

THE Times states that at the South Foreland lighthouse, in the presence of representatives from the Councils of Dover, Ramsgate, Margate, Broadstairs, Sandgate, etc., trials have been made, under the supervision of Signor Marconi,

of his system of telegraphing without wires, between the East Goodwin lightship, twelve miles out at sea, and the lighthouse. The system acted well, the messages being received and recorded on the tape with absolute accuracy. Signor Marconi had with him two assistants at the lighthouse, Messrs. Kemp and Cohen, and one on the lightship, Mr. Richards, but several of the messages were sent by men on the vessel who had been instructed in the work. The height of the pole used for transmission was 130 feet, and Signor Marconi considered that by this a message could be sent to the French coast. The receiving wire on the lightship was run 80 feet up the mast. During the recent severe weather the system has worked perfectly, and the men on the ship have sent messages that have been transmitted to Ramsgate. All present were impressed with the demonstration, and promises of support to a resolution urging the Board of Trade and the Admiralty to take up the system were given.

A LAW was recently passed in Norway, says the New York Medical Record, prohibiting the sale of tobacco to any boy under sixteen years of age without a signed order from an adult relative or employer. Even tourists who offer cigarettes to boys render themselves liable to prosecution. The police are instructed to confiscate the pipes, cigars and cigarettes of lads who smoke in the public streets. A fine for the offence is also imposed, which may be as much as twenty-five dollars.

$UNIVERSITY\ AND\ EDUCATIONAL\ NEWS.$

MR. AGASSIZ AND HARVARD UNIVERSITY.

THE following minute on the Corporation records of Harvard University concerning the services and gifts of Mr. Alexander Agassiz are given in the Annual Report of President Eliot:

Voted, That in accepting from Mr. Alexander Agassiz the deed of gift which has been read, and which will be entered in full on the record of this date, the Corporation wish to enter on their records a statement of Mr. Agassiz's services and gifts to the Museum of Comparative Zoology:

From 1860 to 1865 Mr. Agassiz was Agent of the Museum and Assistant in charge of Worms, Echinoderms and Acalephs.