tion of the cerium oxid to 'resonance;' the vibrations of the thoria molecules are not synchronous with those of the Bunsen flame, but the presence of a small amount of ceria brings them in accord, as a bit of wax will bring into accord two tuning forks of slightly different pitch. This, Drossbach thinks, is the reason that the mantles for the Welsbach burner must contain ceria as well as thoria.

In the Ztsch. angewante Chemie, Lunge and Millberg add a fresh chapter to the controversy regarding the solubility of quartz powder in alkalies. They find that the solubility depends very largely on the fineness of the powder; if fine enough the quartz dissolves completely in both caustic soda and caustic potash on boiling, and the carbonates exercise a decided solvent action. Since clays and similar derived material contain crystallized silica in a state of extremely minute subdivision, there is hence no method now known of accurately determining the proportions of crystallized and amorphous silica present.

In January last at Hannover, after a period of cold weather, there fell on the rising temperature a snow in the form of compact balls. Many of these balls were simple and completely transparent, and consisted of single, simple, spherical crystals. These are described by F. Rinne in the Jahrbuch für Mineralogie. Apparently they were crystallized rain drops, but all efforts to make them artificially were without result. They resembled the chondrites of many meteorites, and these also Dr. Rinne finds it impossible to form artificially.

W. STELZER in the *Pharm. Centr.-Halle* records the examination of several solvents for ozone. Olive oil dissolves 100 volume per cent. of ozone, and this preparation is manufactured by Spranger, of Berlin, under the trade name of 'electron.' Codliver oil takes up 200 volume per cent. ozone,

and loses thereby its disagreeable taste and odor. Spranger's 'tincture of ozone' is a solution of ozone in terpene and is probably a chemical compound. One sample examined had lost little of its ozone in fifteen months. Fats and oils which contain no oleic acid and which do not absorb iodin, such as vaseline and other petroleum oils, do not dissolve ozone.

J. L. H.

## SCIENTIFIC NOTES AND NEWS.

THE prize established by the city of Moscow to be awarded at each International Medical Congress for the medical work of greatest benefit to mankind has been bestowed by the present Congress on M. Henri Dunant, the founder of the Red Cross Society.

Professor von Kölliker, of Würzburg, who recently celebrated his eightieth birthday and the fiftieth anniversary of his appointment as professor, has been awarded the gold Comenius medal of the Imperial Leopold-Carolina Academy of Halle.

It is proposed to erect a tablet in honor of Professor Giuseppi Sanarelli, the discoverer of the microbe of yellow fever, at the University of Sienna, of which he is an alumnus.

THE death is announced, at the age of sixtynine years, of Dr. Jules Bernard Luys, known for his researches on the brain and nervous system, and less favorably for his publications on hypnotism and telepathy.

WE regret also to record the death of Mr. Isaac N. Travis, taxidermist and naturalist in the American Museum of Natural History, New York.

Mr. W. W. Woolen proposes to present to the city of Indianapolis fifty-six acres of land for a botanical garden and an ornithological preserve.

THE late Marshall Harris bequeathed \$60,000 for a public library in Oshkosh, Wis., on condition that an equal amount be collected, and exSenator Sawyer, of Wisconsin, has subscribed \$25,000 towards the amount.

EMPEROR FRANCIS JOSEPH, of Austria, has given his consent to the union of the two great

imperial libraries at Vienna, the Hofbibliothek and the Private Imperial Library. The latter has not hitherto been opened to the public. It possesses a famous collection of portraits, said to exceed 200,000 in number.

As many of the fish brought to the New York Aquarium have died from the effects of injuries received in transit, it has been decided to establish a fish hatchery as one of the departments of the aquarium.

Mr. James Perry has brought suit against the American Museum of Natural History to recover a balance of \$400,612.75 with interest, which he alleges to be due him for an archæological and ethnological collection purchased by the Museum.

Dr. CHARRIN has been appointed director of a laboratory of experimental medicine which has just been established in the Collège de France.

A BACTERIOLOGICAL Institute has been established at Mons, Belgium, by the Provincial Council, which gives it a subsidy of 6,500 fr. 10,000 fr. have been given to the Institute by an anonymous donor.

THE ninth International Congress of Hygiene and Demography will be held at Madrid from the 10th to the 17th of April of next year.

THE Australasian Chamber of Mines in London are making arrangements for an International Mining Machinery and Metallurgical Exhibition to be held in London in 1899, in time for the exhibits to be forwarded to the Paris Exposition in 1900.

The partial cessation of the plague at Bombay has been followed by an epidemic of cholera, which seems not to have attracted much attention. During the last week for which advices have been received there were 220 deaths from cholera. There were still during that week 18 deaths from the plague.

THE British Medical Association held its sixty-fifth annual meeting at Montreal last week, following the program which has been already published in this JOURNAL. At the first session, on the afternoon of Tuesday, August 31st, addresses of welcome were made by Mr. Wilson Smith, mayor of the city; by Mr.

Adolphus Chapleau, Lieutenant-General of the Province of Quebec, and by the Earl of Aberdeen, Governor-General of Canada, and Dr. T. G. Roddick delivered the President's address. Dr. Roddick, after welcoming the members and guests, referred to the history of the Association from its foundation at the initiative of Sir Charles Hastings in 1832, and then considered especially the Canadian climatic conditions and health resorts, and concluded with a review of medical education and medical legislation in Canada. On the following afternoons, Wednesday, Thursday and Friday, the general addresses were given. The address in medicine was given by Professor William Osler, of Johns Hopkins University, who, it appears, is still a Canadian citizen. His address was entitled 'British Medicine in Greater Britain,' and took a wide survey, including a comparison of the Greek and British races and the influence of the former on the latter. The address in surgery was by Dr. W. Mitchell Banks, Liverpool, who confined his address to the work accomplished by military surgeons. The address on public medicine, given on Friday afternoon, was by Dr. H. M. Biggs. A general address was given by Professor Charles Richet, who chose as his subject 'The work of Pasteur and the Modern Conception of Medicine.' During the mornings sessions of the Sections were held. The Proceedings, to be published in the British Medical Journal, will bear witness to many important addresses, papers and discussions. At a special session of convocation McGill University conferred the honorary degree of LL.D. on Lord Lister, Sir W. Turner and Drs. Broadbent, Gaskill, McAllister, Watson Cheyne, Henry Barnes and A. G. Wheelhouse.

THE continuity of national associations for the advancement of science is exemplified by the fact that the German Association, which meets in Brunswick in September, has been invited to make an excursion to Pyrmont, where its seventeenth meeting was held in 1839.

EIGHT hundred geologists were in attendance at the recent International Geological Congress, of whom about two hundred and fifty were Russians. No reports of the meetings have been cabled to the daily papers, but we hope to publish shortly an article on the work of the Congress.

THE American Social Science Association held its general meeting in Saratoga last week. Mr. Frank B. Sanborn, who for more than twenty years has been Secretary of the Association, on resigning, presented a report tracing the history of the Association, which he thought was not accomplishing as much as it should. A number of interesting papers were, however, presented at the Saratoga meeting. Judge Simeon E. Baldwin, New Haven, was elected President and Mr. F. Stanley Root, New Haven, Secretary.

THE French government proposes to send an official expedition to Egypt, starting from Marseilles on October 28, 1897, and returning in the month of December. The expedition will be under the direction of Professor Révillont. Volunteers willing to pay their own expenses will be allowed to join. The arrangements are in the charge of M. Maurice Junot, of Rue de Rome, Paris.

WE learn from Natural Science that Mr. George Murray and Mr. V. H. Blackman have returned from their trip to Panama, after a successful and profitable voyage. They have obtained a large quantity of plankton containing many new specimens, which will shortly be worked out, and have made numerous interesting observations on living forms. They spent two or three days in Jamaica on the way.

PROFESSOR KOCH, so it is reported, is about to return to South Africa to carry out further experiments in relation to rinderpest.

Professor Charles S. Prosser, of Union College, has been engaged during the past summer in mapping and describing the Upper Devonian formations of southeastern New York for the New York Geological Survey.

THE Botanical Gazette states that Drs. Farlow and Coulter will make, during the winter, a further examination in the West Indies with a view to finding a suitable site for a botanical tropical laboratory.

An illustrated monthly of popular botany, The Plant World, will be published by Willard

N. Clute & Co., Binghamton, N. Y., beginning October 1st. The editor is Dr. F. H. Knowlton, United States National Museum.

ON September 3rd Professor Nef gave a public address at the University of Chicago on 'The Problems of Organic Chemistry,' and on September 7th and 8th Professor Lester F. Ward was announced to give two lectures, one on 'The Founder of Sociology, Auguste Comte,' the other on 'Nature and Nurture.'

PROFESSOR SKLAREK, Halle, calls our attention to the fact that among the publications of the late W. Preyer, given on page 252 above, 'The Five Senses of Man' was included. The book is by Professor J. Bernstein, of Halle.

WE are glad to receive the information that 'The Louisiana Society of Naturalists' was organized on July 22d. The Society will not only undertake to encourage and advance the study of natural science, but will also establish a library and a museum, and will publish its proceedings. The Society is to be incorporated and starts with about 45 members, nearly all of whom are workers in some branch of natural science. The first officers are:

President, Professor J. H. Dillard, Tulane University; Vice-Presidents, Mr. G. R. Westfeldt, Professor H. A. Morgan, Louisiana State University, Rev. A. B. Langlois; Secretary-Treasurer, Mr. E. Foster; Executive Committee, Professor J. H. Dillard, Professor G. E. Beyer, Mr. G. R. Westfeld, Dr. O. Joachim, Professor H. A. Morgan, Mr. J. C. Smith, Rev. A. B. Langlois, Mr. E. Foster.

Mr. H. C. Fairbanks, of Sibley College, while reconstructing a gas-engine, observed a singular though probably not exceptional phenomenon which, so far as known, has not been previously described. The machine exhibited a great loss of heater-efficiency, which was unaccounted for and was not affected by any changes made in the process of general repair. Finally it was suspected that the conductivity of the metal of the cast iron 'fire-pot' had been impaired by oxidation or otherwise, and it was replaced by a new one. The engine at once started off at full power and regained its original efficiency.

AT the request of the daughters of George Bond, Professor Holden, Director of the Lick Observatory, has undertaken to arrange the manuscript material in their hands in an orderly form. The work will be entitled 'Memorials of William Cranch Bond, Director of the Harvard College Observatory, 1840-59, and of his Son, George Phillips Bond, Director of the Harvard College Observatory, 1859-65,' and will be sold for two dollars by C. A. Murdock &. Co., 532 Clay Street, San Francisco, and by Lemcke & Büchner, 812 Broadway, New York City. The contents are: Chapter I., Life of W. C. Bond, 1789-1859; II., Life of G. P. Bond, 1824-1865; III., Selections from the Diaries of George Bond; IV., Selections from the Correspondence of George Bond; V., Account of the Scientific Work of the Bonds; Appendices, giving a complete list of their published writings; and Index of Proper Names. book will be well illustrated. It is hoped by the kindness of Professor E. C. Pickering, Director of the Harvard College Observatory, to reproduce two fine steel engravings of the Great Comet of 1858 and of the nebula of Orion, from the plates of the Annals H. C. O.

THE British Museum (Natural History) has acquired, says Natural Science, the Savin collection of vertebrate remains from the Norfolk forest-bed and other deposits of that coast. A collection of gault fossils from the 300-feet level of the shaft of the Dover coal-fields has also been received, and it is understood that the whole of the remains from this very interesting and important shaft will be preserved for the national collections, as a typical reference series for the underground geology of the southeast of England.

## UNIVERSITY AND EDUCATIONAL NEWS.

At the meeting of the corporation of Brown University on September 1st statements were presented by the Conference Committee and by President Andrews. He states that he has been reticent and careful in expressing views on the free coinage of silver by the United States; that he would discountenance any proposal which, in his judgment, bids fair to place

the country's finances on a monetary basis of silver alone; that he has always insisted that the principal and interest of our public debt should be paid in gold, and that he had only publicly advocated that form of bimetallism which was a part of the Republican platform in the last election. He states further that his resignation was made on account of his desire to regard the University's interests and that the publication of the Committee's minutes did not proceed from his motion. As President Andrews simply cleared himself from the charges made by the Conference Committee and did not attempt to defend reasonable freedom of speech, we are especially glad that the corporation, in asking him to withdraw his resignation, stated that they did this "especially desiring to avoid, in the conduct of the University, the imputation even of the consideration of party questions, or of the dominance of any class, but that in the language of its charter, 'In this liberal and catholic institution all members whereof shall enjoy full, free, absolute and uninterrupted liberty of conscience, which includes freedom of thought and expression, it cannot feel that the divergence of views upon the 'silver question' and of its effects upon the University between you and the members of the corporation is an adequate cause of separation between us." President Andrews has not yet made a reply to the letter from the corporation, but it is understood that he will not withdraw his resignation.

The executor of the will of the late Mrs. Lucy Fayerweather has brought suit in the United States Courts with a view to setting aside the decision of the State Courts awarding the estate of the late Daniel B. Fayerweather to the colleges to which it was bequeathed. The heirs-at-law are also contesting the will of the late William Lampson, who left most of his estate to Yale University, alleging that he was of unsound mind. We wish that the moral insanity which leads people to make these contests disqualified them at law from inheriting any money.

Dr. D. K. Pearson has presented Beloit college with a dormitory costing \$30,000.

YALE University receives \$5,000 by the will