C. H. Spronck, of Utrecht, at Boston, October 7. "Tuberculosis of the Heart, Blood and Lymph Vessels": Andres Martinez Vargas, of Barcelona, at New York, October 9.

"The Evolution of the Treatment of Pulmonary Tuberculosis": Theodore Williams, of London, at Philadelphia, September 25.

"La Lutte Contra la tuberculose dans les grandes villes par l'Habitation; methodes scientifiques modernes pour sa Construction" (joint lecture): Dr. Maurice Letulle and M. Augustin Rey, at Washington, September 30.

Dr. L. Landouzy, of Paris, at Baltimore, October 5

"Biology of the Bacillus": Dr. A. A. Wladimiroff, of St. Petersburg, at Washington, September 28.

"Collateral Tuberculosis Inflammation": Professor N. Ph. Tendeloo, of Leiden.

## THE INTERNATIONAL FISHERIES CONGRESS

A FURTHER announcement of the congress, to be held from September 22 to 26, states that at 9:30 A.M. on September 22 the foreign delegates will be received by the secretary of state in the Diplomatic Reception Hall of the State Department. The initial meeting of the congress will be held at 10 o'clock in the hall of the National Geographic Society, where addresses of welcome on behalf of the United States will be delivered by Hon. Oscar S. Straus, secretary of commerce and labor, on behalf of the District of Columbia by Hon. Henry L. West, commissioner of the district, and on behalf of the American Fisheries Society by Dr. H. M. Smith, president of the society. The meeting of organization will be held in the banquet hall of the New Willard Hotel, Pennsylvania Avenue and Fourteenth Street, on the afternoon of September 22, at an hour to be announced. The regular sessions of the congress will be held daily, morning and afternoon, at times to be announced, at the New Willard Hotel. The president of the United States will receive the members of the congress at the White House. The secretary of commerce and labor will give an evening reception. Luncheons will be tendered by the American Fisheries Society, the Blue Ridge Rod and Gun Club and the Alaska Packers Association, respectively, and there will be a subscription banquet at which the official representatives of foreign governments will be the guests of the congress. Visits to places of interest and other entertainment have been arranged for by the local reception committee. Arrangements have been made to permit members who so desire to inspect the important fisheries of New England. An attractive itinerary has been arranged embracing the entire week following the sessions of the congress and including visits to New York City, Narragansett Bay, Woods Hole, Boston and Gloucester, at each of which places local committees and individual residents will provide demonstrations of fishery methods and incidental entertainment. The methods of oyster culture employed on the great New England beds, the pound-net fishery, the purseseine fishery, inspection of fish markets and vessels, the methods of deep-sea research, and other matters relating to the fisheries will be Special itineraries will be arranged for members who may desire to visit other fisheries and hatcheries, and letters of introduction will be furnished.

## SCIENTIFIC NOTES AND NEWS

Mr. F. J. Seaver, assistant botanist of the North Dakota Agricultural College, has been appointed director of laboratories in the New York Botanical Garden.

Dr. W. H. Welch, of the Johns Hopkins Medical School, will deliver, on November 20, the principal address on the occasion of the dedication of the new building devoted to experimental medicine of the Medical College of Western Reserve University.

SIR GEORGE HOWARD DARWIN, professor of astronomy at Cambridge, has been elected a corresponding member of the Berlin Academy of Sciences.

The Royal Astronomical Society, London, has elected corresponding members as follows: Dr. E. B. Frost, director of the Yerkes Observatory; J. G. Hagen, S.J., director of the Vatican Observatory; M. Benjamin Baillaud, director of the Paris Observatory; C. L. W. Charlier, director of the observatory at Lund,

and Johannes Franz Hartmann, of the Astrophysical Observatory at Potsdam.

The Alvarenga prize of the College of Physicians, Philadelphia, for 1908 has been awarded to Dr. William T. Shoemaker for an essay entitled "Retinitis Pigmentosa."

THE Denny gold medal, provided for by the late Peter Denny, LL.D., and granted each session for the best paper read before the Institute of Marine Engineers, London, has been awarded to Mr. Robert Elliott, B.Sc., for his paper on "Repairs to Ships," read during the session 1907-8.

DR. WM. T. GLAZEBROOK is acting president of the second Optical Convention, which will meet in London in May of next year.

Dr. Kurt Wegener has been appointed director of the Observatory of Samoa.

Dr. Franz Lincke, of Göttingen, has been appointed director of the aeronautic department of the Physical Society at Frankfort.

Professor Simon Newcomb, U. S. N. (retired), was received in audience by Emperor William, on August 17, at Wilhelmshohe, after which he was invited to luncheon. Professor Newcomb thanked the emperor for the order Pour le Mérite for Science and Arts bestowed upon him three years ago.

Dr. Adolf Wüllner, professor of physics in the Aachen Technical Institute, has celebrated the fiftieth anniversary of his doctorate.

Dr. N. L. Britton, director of the New York Botanical Garden, and Mrs. Britton left New York for Jamaica on August 22, expecting to return at the end of September.

Dr. WILLIAM W. KEEN, who has been abroad for more than a year and a half, has returned to Philadelphia.

The president of the British Board of Trade has appointed Lord Rayleigh, O.M., Professor J. J. Thomson, F.R.S., Dr. R. T. Glazebrook, F.R.S., Sir John Gavey, C.B., and Mr. A. P. Trotter, to be the British delegates to the International Conference on Electrical Units, which is to assemble in London on October 12. Mr. W. Duddell, F.R.S., and Mr. M. J. Collins, of the Board of Trade, will act as secretaries to the British delegates.

KING EDWARD has made the following appointments: David W. Finlay, M.D., F.R.C.P., London, professor of the practise of medicine in the University of Aberdeen, to be one of the honorary physicians to the king in Scotland, in the room of Sir Thomas McCall Anderson, M.D., deceased. Sir William Macewen, F.R.S., M.D., regius professor of surgery in the University of Glasgow, to be one of the honorary surgeons in Scotland, in the room of Sir Patrick Heron Watson, M.D., deceased. James Little, M.D., regius professor of physic in the University of Dublin, to be one of the honorary physicians in Ireland, in the room of Sir John Thomas Banks, K.C.B., M.D., deceased.

Dr. Friedrich Paulsen, professor of philosophy, at Berlin, died on August 14, from cancer, aged sixty-two years.

THE death is also announced of Dr. K. Zoeppritz, observer in the Geophysical Institute at Göttingen, and known for his work on atmospheric electricity.

THE ninth International Congress of Geography was held in Geneva from July 27 to August 6, and was preceded and followed by interesting excursions conducted by local geographers. The occasion was also notable as the jubilee celebration of the founding of the vigorous Geographical Society of Geneva. The division of the assembly into numerous sections, including a number of new divisions of science not admitted to previous geographical congresses, much increased the interest in the papers, though it disposed of the program long before the congress adjourned. American geographers were represented by Professors Davis and Johnson, of Harvard: Brigham, of Colgate; Cleveland, of Williams; Fenneman, of Cincinnati: Leverett, Hobbs and Scott, of Michigan; and Professor Simon Newcomb and Dr. D. T. Day, of Washington.

The French Association for the Advancement of Science, which has been meeting at Clermont-Ferrand under the presidency of M. Paul Appell, professor of mathematics at the Sorbonne, adjourned to meet next year at Lille. The meeting of 1910 will be held at Toulouse. One of the addresses at the recent

meeting was by Sir William Ramsay on the results of his researches into radioactive substances.

AT the meeting of the Paris Academy of Sciences on August 10, Mme. Curie stated that working in collaboration with Mlle. Gleditch, she had been unable to confirm Sir William Ramsay's experiment, by which copper appeared to be transmuted into lithium by radium emanations. With copper receptacles containing distilled water absolutely without any trace of lithium certain traces of that metal made their appearance after 24 hours under the application of radium. same result took place in the case of a quartz Mme. Curie and Mlle. Gleditch receptacle. thereupon used a platinum apparatus. placed in it distilled water and used copper salts produced in the laboratory entirely free from lithium. These copper salts were then exposed to emanations of radium, and no trace of lithium was discovered.

Among guests from abroad who attended the recent Sheffield meeting of the British Medical Association were Professor Axenfeld (Freiburg), Professor Bouchard (Paris), Dr. Bossi (Genoa), Dr. Depage (Brussels), Professor Fuchs (Vienna), Dr. A. M. Gilchrist (Nice), Professor Axel Holst (Christiania), Jacoby (Brussels), Professor Kolli (Bern), Professor Von Kronig (Freiburg), Dr. Just Lucas-Championnière (Paris), Professor Luigi Mangiagalli (Milan), Professor Alb. Neisser (Breslau), Dr. Noiré (Paris), Professor Onodi (Buda Pesth), Dr. Sabouraud (Paris), Professor Zweifel (Leipzig), Professor Tillmanns (Leipzig), Dr. C. Willems (Ghent), Professor Ambrose Monprofit (Angers), Professor Alb. Plehn (Berlin), Dr. Marc Armand Ruffer (Alexandria), Dr. J. G. Willmore (Alexandria), Dr. E. Marchoux (Paris), Professor Pozzi (Paris), Professor Gilchrist (Baltimore), Professor Garceau (San Francisco), Professor Holt (New York), Dr. Charles Leonard (Philadelphia), Dr. J. B. Murphy (Chicago), Dr. H. H. Pratt (Baltimore), Dr. Marcy Riverton (New Jersey), Dr. Maurice Richardson (Boston).

At the International Zoological Congress, to be held at Graz in 1910, the subject of the Emperor Alexander III. prize is "The Intervention of Mechanical Phenomena in the Transformation of Animal Forms," and the subject of the Emperor Nicholas II. prize, "A Monographic Study of the Group of Plathelminthes." The essays must be sent in by June 1, 1910, to the general secretary, M. Blanchard, 226 Boulevard St. Germain, Paris.

WE have received from Dr. F. A. Bather an announcement of a double index to the generic and specific names in E. Desor's "Synopsis des Echinides Fossiles," preceded by a "Note sur les Dates de Publication," by M. Jules Lambert. Further information may be obtained from Dr. Bather at the Natural History Museum, South Kensington, S.W.

CONSUL GENERAL RICHARD GUENTHER, of Frankfort, notes that at the annual meeting of the Association of German Engineers lately held at Dresden, announcement was made that the great work of compiling and publishing the new technical dictionary, which was conducted under the auspices of the association, had to be stopped because it was found that the expenses would amount to more than four times the estimates. Mr. Guenther adds: "The great progress in science and industries had created a vast mass of new terms and matter largely in excess of what had been estimated at the beginning. This stoppage is to be greatly regretted, as the want of a new technical dictionary and encyclopedia is acutely felt by thousands of persons engaged in scientific research, in all lines of commerce and production, in literature, journalism, and in the administration of state and municipal government. It is, however, satisfactory to note that the executive board of the Association of German Engineers has made strenuous efforts to take up and complete this valuable work, and has succeeded in obtaining therefor the aid of the federal government of Germany and of the ministry of education of the Prussian kingdom."

WE learn from Terrestrial Magnetism and Atmospherical Electricity that arrangements are being made to secure in cooperation with the Canadian government, magnetic observations on the eighteen-months' cruise of the Canadian steamer Arctic (formerly the Gauss), among the Arctic Islands north of the Magnetic North Pole. Mr. W. E. W.Jackson has been detailed by the minister of marine and fisheries, to duty on the Arctic. Magnetic, meteorological, electric and tidal observations will be attempted. Dr. Bauer recently visited the Arctic at Quebec, commanded by Captain J. E. Bernier, and arranged with him and Professor Stupart at Toronto regarding the magnetic and electric instruments and accessories to be supplied by the Department of Terrestrial Magnetism and as to the methods of work to be followed.

THE London Times states that Mr. C. Kenrick Gibbons has presented to the Zoological Gardens a large number of the small freshwater fish from Barbados known as "millions" (Girardinus poecilloides). These little fish, which have been placed in a tank in the tortoise house, are of special interest because of their supposed action in preventing malaria. Malaria is very much less common in Barbados than in other West Indian islands, and it has been suggested that this freedom is due to the presence of enormous quantities of the "millions" in the fresh-water pools. little fish are very voracious, and destroy large numbers of the larvæ of mosquitoes that spread malaria. The males are about half an inch long, with brilliant iridescent colors, and large black spots on the sides. The females are considerably larger and less highly colored. It is understood that experiments are going to be made with the introduction of these fish into tropical countries where malaria is prevalent.

THERE is, it appears, in Great Britain a National Canine Defense League, which claims that 1,250 medical men have signed a petition in favor of a bill now before Parliament exempting dogs from vivisection, and further that 388 members have given their written promise to support the measure.

UNIVERSITY AND EDUCATIONAL NEWS

The College of Agriculture and Mechanic Arts, of Hawaii, was established by act of the legislature last March. The new college will be located at Honolulu. A site for the campus and buildings has been secured in Manoa Valley, commanding a fine view of the ocean. Professor John W. Gilmore, of the Pennsylvania State College, has been chosen president. The college will open on September 4.

On August 15, fire destroyed the main building of the large barn of the Massachusetts Agricultural College, at Amherst. Two valuable Holstein and Jersey bulls and eleven calves, together with a large quantity of hay and farm machinery, were also burned. The loss is estimated at about \$40,000.

Two upper floors of Curtis Hall, used as dormitories, at Tufts College, were destroyed by a fire of unknown origin on the 16th instant, with damage of \$5,000.

Professor Otto Frank, of Giessen, has been elected professor of physiology, at Munich, to succeed the late Professor Carl von Voit.

Dr. Nagel, of Berlin, has become professor of physiology at Rostock.

Dr. Curt Hensel, professor of mathematics at Marburg, has been called to Leipzig.

## THE HARVARD BUSINESS SCHOOL

THE Official Register of Harvard University in its issue of this week contains the first detailed announcement of the Graduate School of Business Administration which will be opened to students on October 1, under the direction of Dean Edwin F. Gay. The unique feature of the school, both in Harvard experience and in the educational world, is that the new school starts with the requirement of a college degree for admission. Upon that foundation of liberal education it rests a severe two years' course, partly prescribed and partly elective, leading to the degree of Master in Business Administration and representing work in the following special fields: Banking and finance, accounting and auditing, insur-