

ably rounder and smoother at the surface. From this experiment eighteen more or less spheroidal masses were obtained, some of which measured one half millimeter in diameter. They were similar to the small plasmodial masses produced in this species (and in *Stylotella*) when the sponges are allowed to remain quietly in aquaria. As already stated, it is only in *Stylotella* that I have directly proved the regenerative power of these masses.

Maas has just announced<sup>3</sup> that calcareous sponges (*Sycons*) when exposed to sea water deprived of its calcium undergo marked degenerative changes, which may be of such a character that the living tissue quite separates from the skeleton and breaks up into compact cords of cells showing active amœboid phenomena. The cords further constrict into rounded masses the likeness of which to gemmules is pointed out. Maas states that he is not yet in a position to say whether these masses have the power to transform into sponges, but adds that some of his observations induce him to believe that this is possible.

It is evident that Maas, working on very different forms, has independently met with the same degenerative-regenerative phenomena as are described in this communication, the essential facts of which were presented (together with an exhibit of gemmule-like degeneration masses and young sponges into which such masses had transformed) at the recent December meeting of the American Society of Zoologists. I may add that more than two years ago at the end of the summer of 1904, in my official report (unpublished since the research was still in progress) to the Bureau of Fisheries on the investigation under my charge, I described the degenerative phenomena in *Microciona* and *Stylotella*, i. e., the formation under certain conditions of confinement of minute masses presenting a likeness to gemmules, and emphasized the

<sup>3</sup>Ueber die Einwirkung karbonatfreier und kalkfreier Salzlösungen auf erwachsene Kalkschwämme und auf Entwicklungsstadien derselben. Archiv für Entwicklungsmechanik der Organismen, Bd. XXII., Heft 4, December, 1906.

probability that these masses were able to regenerate the sponge. It was not, however, until the summer of 1906 that I was able to demonstrate the truth of this view.

H. V. WILSON

UNIVERSITY OF NORTH CAROLINA,  
CHAPEL HILL, N. C.,  
February 16, 1907

#### SCIENTIFIC NOTES AND NEWS

THE honorary freedom of the City of London is to be conferred on Lord Lister.

THE gold medal of the Linnean Society, London, has been awarded to Dr. Melchior Treub, director of the Botanical Garden at Buitenzorg.

A COMMITTEE has been appointed to arrange for the presentation to the Medical Department of the University of Pennsylvania of a portrait of Dr. John Guitaras of Havana, formerly professor of pathology at the University of Pennsylvania. The portrait will be painted by Mr. Armando Menocal of Havana.

DR. W. J. MCGEE has been elected secretary of the Inland Waterways Commission, recently appointed by President Roosevelt.

PROFESSOR ELIJAH P. HARRIS, A.B. (Amherst, '55), Ph.D. (Göttingen, '59), since 1868 professor of chemistry at Amherst College, has retired from active service.

PROFESSOR ERNEST RUTHERFORD, whose call from McGill University to the University of Manchester was announced some time since, has now gone to Manchester.

DR. J. HALM, assistant at the Royal Observatory, Edinburgh, has been appointed first assistant at the Cape Observatory, in succession to Mr. S. S. Hough, F.R.S., who was recently promoted to succeed Sir David Gill as H.M. Astronomer at the Cape.

THE Chicago Chapter of the Sigma Xi Society has held three meetings during the year 1906-7. The following papers were read:

December 3, 1906—'Some Glimpses of Mexican Vegetation,' by Professor C. R. Barnes, of the University of Chicago.

February 21, 1907—'The Conduct of Research,' by Professor H. H. Donaldson, of Wistar Institute, Philadelphia.

May 11, 1907—'Some Problems in the Study of Nutrition,' by Professor R. H. Chittenden, director of Sheffield Scientific School, Yale University.

Thirty members have been elected to membership in the society during the year. At the meeting on May 11 the following officers were elected:

*President*—Professor J. P. Iddings.

*Vice-president*—Professor J. R. Angell.

*Recording Secretary and Treasurer*—Professor Carl Kinsley.

*Corresponding Secretary*—Professor F. R. Moulton.

*National Councilor*—Professor S. W. Williston.

*Members of the Electoral Board*—Professors S. W. Williston, E. H. Moore, R. A. Millikan, R. R. Bensley, J. Stieglitz.

THE Davenport Academy of Sciences has finished its annual popular scientific lecture course, the lectures this year being by Professor Reuben G. Thwaites, of the Wisconsin Historical Society; Arthur Farwell, of Newton Center, Mass.; Frank M. Chapman, of the American Museum of Natural History, New York; Professor Arthur Fairbanks, of the University of Michigan; Professor Samuel Calvin, of the University of Iowa; Professor Thomas H. Macbride, of the University of Iowa, and Professor Frederick Starr, of the University of Chicago.

PROFESSOR R. H. CHITTENDEN, director of the Sheffield Scientific School, Yale University, has accepted an invitation to deliver the Sigma Xi lectures before the Universities of Nebraska, Kansas, Iowa and Missouri next winter. These four universities have joined together to obtain a man who is an authority on some scientific subject to come west and give a joint lecture course, delivering one lecture before each university. Dr. Chittenden will give the course during the latter part of February, 1908.

THE Robert Boyle lecture of Oxford University for 1907 was delivered by Professor Karl Pearson, on 'The Scope and Importance to the State of National Eugenics,' on May 17.

DR. DAVID P. BARROWS has completed his courses of lectures, on the 'Peoples of the Philippines and the Ethnology of Malaysia,'

at the University of California. These are probably the first regular courses of instruction given at any university in America on the ethnology of these regions. Dr. Barrows sails on July 5 to resume his work as director of education of the Philippine Islands.

THE committee of one hundred, appointed by the American Association for the Advancement of Science to further the promotion, of national interest in health, met in New York City, April 18, and organized by the adoption of rules, the election of officers and the appointment of an executive committee. Professor Irving Fisher, of New Haven, presided as the temporary chairman and was subsequently elected president. Ten vice-presidents were elected, as follows: President Charles W. Eliot, Harvard University; Felix Adler, New York; Dr. William H. Welch, Baltimore; Rev. Lyman Abbott, New York; President James B. Angell, University of Michigan; Miss Jane Addams, Chicago; Hon. Joseph H. Choate, New York; Rt.-Rev. John Ireland, St. Paul; Hon. Ben. B. Lindsey, Denver; Hon. John D. Long, Boston. Mr. Champe S. Andrews was elected secretary. Professor Irving Fisher, Dr. Thomas Darlington, Professor J. P. Norton, Dr. John S. Fulton, Dr. Richard C. Newton, Professor F. F. Wesbrook and Champe S. Andrews were elected an executive committee.

WE learn from the *British Medical Journal* that it is proposed to found a prize in memory of the late Dr. Paul Julius Möbius of Leipzig, well known for his contributions to the literature of neurology and psychiatry and by his medico-literary studies on Goethe and other celebrities. The prize is to be known by his name, and is to be awarded every year for the best essay dealing with some neurological or psychiatric subject. A committee, which includes among its members Professor Edinger, of Frankfurt-on-the-Main; Professor Moeli, of Berlin, and Dr. Lamhofer, of Leipzig, has been formed to collect subscriptions for the purpose.

PROFESSOR HENRY CREW, Fayerweather professor of physics in Northwestern University, has been elected president of the Northwestern Chapter of Sigma Xi. On May 24 Professor

William A. Loez delivered before this chapter a lecture on 'The Life and Work of Linnæus.'

THE Zoological Club of the University of Nebraska celebrated the centenary of the birth of Louis Agassiz on May 28. Addresses were given by Professor H. B. Ward on 'The Debt of the New World to Louis Agassiz,' and by Professor F. D. Losey on 'Lowell's Tribute to Agassiz.'

THE Denison Scientific Association on May 28 celebrated the one-hundredth anniversary of Agassiz's birth by a memorial exercise at which addresses were made by Dr. E. W. Hunt, president of Denison University, on 'The Personality of Agassiz'; by Professor M. E. Stickney, on 'Penikese and the Agassiz Museum'; by Professor Frank Carney, on 'Agassiz's Contribution to Geology,' and by Professor C. J. Herrick, on 'Louis Agassiz and the New Natural History.' These addresses were delivered in the new Barney Memorial Hall of Science of Denison University and were followed by a reception at which the building was opened to the public for inspection. This hall was originally built in 1894 and was destroyed by fire in 1905. It has been rebuilt fire-proof and greatly improved in other respects by the original donor, Mr. E. J. Barney, of Dayton, O.

A TABLET to the memory of Dr. Mary Putnam Jacobi was unveiled in the Woman's Medical College, New York, May 23. An address was made by Dr. Bertha Lewis on behalf of the alumnae association, and Dr. William Welch accepted the tablet. The memorial tablet is of brass and is inscribed as follows. "In memoriam, Mary Putnam Jacobi, class of 1864, Woman's Medical College of Pennsylvania; president of the Alumnae Association 1881-1891 and 1894-1895. Ecole de Médecine, Paris, class of 1871; professor of materia medica and therapeutics, Woman's Medical College of the New York Infirmary; professor of the diseases of children, New York Post-Graduate Medical College and Hospital; fellow of the New York Academy of Medicine. A distinguished contributor to medical literature, and one of the most eminent women of her time in the medical profession."

At the recent session of the Pennsylvania legislature the senate voted \$300,000 to enable the American Philosophical Society to erect a memorial to Franklin, but the house did not concur in the bill.

THE death is announced of Dr. Charles Féré, physician to the Bicêtre, Paris, well known for his researches in neurology and psychiatry.

SIR JOSEPH FAYRER, well known for his pathological work in India and as one of the most prominent British physicians, died at Falmouth on May 21, at the age of eighty-three years.

MR. SAMUEL LORD MORRISON, A.B. (Harvard, 1873), an engineer, known especially for his work on filtration plants, died in London on May 21, at the age of fifty-six years.

DR. VOLZ, of Berne, while making natural history collections in the Liberian Hinterland, was murdered by natives.

DR. WILHELM MÜLLER, curator of the mineralogical collections of the Technical Institute of Berlin, died on May 2.

THE death is announced at the age of fifty-two years of M. Charrin, professor of general and comparative pathology at the Collège de France.

A COMMITTEE of Filipinos appointed to investigate the inoculation of prisoners at Bilibid Prison with contaminated serum, has made a report. The committee finds that no one was responsible for the accident, and exonerates Dr. F. P. Strong, of the Bureau of Science, who was in charge of the bacteriological work, and was conducting the experiments.

A CONFERENCE of state geologists was held with the officers of the National Geological Survey at Washington, on May 20, to discuss cooperative work in various states by the federal and state authorities. State geologists were present from Alabama, Connecticut, Illinois, Indiana, Iowa, Kentucky, Maine, Maryland, Michigan, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania and South Carolina.

THE Paris Society of Chemistry celebrated the fiftieth anniversary of its foundation on

May 17; among the guests were Professor W. H. Perkin and Professor Henry E. Armstrong.

THE Swiss Scientific Society will hold its ninetieth annual meeting at Fribourg, beginning on January 28. The Swiss National societies of geology, botany and chemistry will meet at the same time as the sections of the general society.

MR. W. T. HORNADAY has presented to the New York Zoological Society his collections of heads, horns and tusks, comprising 131 specimens, representing 108 species. These are to form the nucleus of a collection to be exhibited at the New York Zoological Park, and it is hoped notable additions may promptly be made. Mr. Charles T. Barney has recently given the world's record tusks of African elephant, one measuring 11 feet in length, the other 11 feet 5½ inches. The weight of the pair is 293 pounds. The record pair as regards weight is that shown by Tiffany & Co. some years ago, whose combined weight was 463 pounds.

THROUGH the generosity of Messrs. Alfred F., Charles C., and John S. Pillsbury, of Minneapolis, Dr. Thomas G. Lee has secured for the department of histology and embryology, University of Minnesota, the *Handapparat*, or working library, of the late Professor William His, of Leipzig. This collection comprises over 8,400 monographs and separates contributed by over 2,500 different authors.

THE *Journal* of the American Medical Association states that the library of the Royal College of Surgeons, which is the largest medical library in Great Britain and the largest in Europe, with the exception of the library in Paris, has outgrown the space allotted to it. It now contains 100,000 publications, made up of 60,000 volumes and 40,000 pamphlets. It increases at the rate of 1,000 volumes a year. A large room has been added over the library, which in former years consisted of a suite of apartments occupied by a clerk who lived in the college, a custom no longer followed. This room will be principally devoted to work on public health and official government reports. Thus space has been obtained for another 10,000 volumes.

MR. WALTER WELLMAN has now left for Norway en route for Spitzbergen on his second year's work in connection with his project for reaching the North Pole by means of his airship *America*, which is now on its way to Norway. In a statement made to Reuter's representative, he said all the members of the expedition would meet at Tromso, from which place they would sail on June 1 on board the expedition steamer Frithjof for Spitzbergen, where they will arrive on June 5 or 6. The rest of that month will be occupied in installing gas apparatus, enclosing the great balloon house, and assembling the car, motor, etc. At the end of June the balloon will be inflated. In the first week of July there will be trials of the airship until it is demonstrated that it is ready for the voyage. The start for the Pole will be made on the first favorable opportunity afterwards, probably between July 20 and August 10, but, if necessary, Mr. Wellman is prepared to start as late as August 20. The members of the expedition are: Mr. Walter Wellman; Major Hearsey, executive officer and scientific observer, who has been lent by the United States Government; Chief Engineer Vannerman, who is already in Norway; Dr. Fowler, surgeon; and M. Gaston Hervieu, the aeronautical engineer. About thirty men, sailors, mechanics, &c., will be embarked at Tromso, making a total expeditionary force of forty men, including Mr. Felix Riesenbergh, the navigator of the expedition, who, together with two Norwegian companions, has spent all the winter at the base at Spitzbergen.

THE lecture arrangements at the Royal Institute of Public Health for the summer session are as follows: The Harben Lectures will be delivered by Professor Paul Ehrlich, director of the Royal Institute of Experimental Therapeutics at Frankfort, on June 5, 7 and 11, the subject being experimental researches on specific therapeutics. Lectures will be delivered each Thursday from May 23 to June 20, both days inclusive, on the Veterinary Aspects of the Tuberculosis Problem, by Professor J. Penberthy; on the Problem of a Pure Milk Supply, by Professor R. T. Hewlett; on Blood Immunity, by Professor G.

Sims Woodhead; on the Treatment of Infectious Diseases regarded from the point of view of hospital administration, by Dr. E. W. Goodall, Medical Superintendent of the Homerton Fever Hospital; and on the Development of Africa, as a problem of comparative pathology, by Dr. L. W. Sambon. The lectures are all free.

THE Botanical Department of the University of Pennsylvania will hold its closing meeting and reception in the Botanical Garden on June 8, from five to ten in the evening. At 7 P.M. Provost Charles Custis Harrison, LL.D., honorary president of the society, will make the introductory address, followed by a series of lectures and short talks and an inspection of flowers and specimens, many of them added to the department since the last annual meeting by gift or in consequence of the travels and researches of members of the faculty and students.

*Nature* gives the following account of the program of the meeting of the International Union for Cooperation in Solar Research, which was held recently in Meudon, near Paris: "The meeting will open on May 20, when formal business will be transacted in the morning. In the afternoon it is intended that all new proposals for joint work shall be submitted to the meeting, so that members will have an opportunity of privately discussing the desirability of adopting the proposals before a final decision is taken towards the end of the week. The mornings of May 21 and 22 will be spent in receiving the reports of the committees appointed at the Oxford meeting in 1905. It is understood that Professor Pérot is ready to submit his measurements of the wave-length of the red cadmium line, and that his results are in such good agreement with those previously obtained by Michelson that the meeting probably will be able to adopt finally a primary standard of wave-length. Other reports deal with the observations of sun-spot spectra and the organization of the systematic application of the spectroheliograph to solar work. A question of interest to which several members of the union have given considerable attention con-

sists in fixing the best methods of measuring the areas of flocculi. This matter has been under consideration at some of the American observatories, as well as at the Solar Physics Observatory at South Kensington and at the University Observatory, Oxford. On Tuesday evening Dr. Janssen, the president of the congress, will give a banquet to the members at the Hôtel d'Orsay, in Paris, and on Wednesday afternoon Professor Julius will demonstrate in the physical laboratories of the Sorbonne some of his experiments on anomalous dispersion. Arrangements have also been made to visit the Observatory of Paris in the same afternoon. It is hoped that the scientific work of the meeting will be concluded on May 23, and an excursion to the Château de Chantilly has been arranged for Friday. A formal business meeting on May 25 will bring the meeting to a close."

#### UNIVERSITY AND EDUCATIONAL NEWS

THE Pennsylvania legislature voted at its recent session an appropriation of \$500,000 for the University of Pennsylvania. The bill has not yet been signed by the governor.

MR. AND MRS. JOHN C. HEMMETER have given an endowment for the chair of physiology of the University of Maryland.

AN alumnus of Hobart College has given \$20,000 for a new gymnasium.

ONE of the dormitories of Trinity College, Hartford, Conn., was injured by fire on May 22. Some damage was also done to the library, the entire loss being estimated at \$15,000.

SARATOFF has been chosen as the seat of the new Russian University which is to replace that of Warsaw.

THE University of Montana announces the establishment of fellowships in the departments of chemistry, botany, physics and mechanical engineering, each with an income of five hundred dollars annually in addition to tuition and laboratory fees. Each fellow will be expected to devote approximately half his time to assistance in the department in which he is chosen. It is desirable that the fellow