The American Chemical Society has now reached a membership of more than three thousand, and after a careful consideration of the questions involved the council of the society has decided that a set of abstracts should be furnished to the members of the society in the same manner that this is done by the other large chemical societies. The society has accordingly undertaken the publication of such abstracts in the form of a separate journal, which will appear under the name *Chemical Abstracts*, beginning with January 1, 1907. The journal will be published semi-monthly.

The corps of those in charge of the various divisions of the journal is already well organized and work upon the abstracts has been commenced. It is intended to include in the journal abstracts of all new work in chemistry published in the world after October 1, 1906. Chemical patents issued in the United States, Germany, France and England after July 1, 1906, will be included. The abstracts will be classified under the following divisions, the selection of abstractors and the oversight of each division being placed in the hands of the persons named:

Apparatus: W. H. Walker.

General and Physical Chemistry: G. N. Lewis.

Photography: L. H. Friedburg.

Electrochemistry: W. R. Whitney.

Radioactivity: H. N. McCoy.

Inorganic Chemistry: Alexander Smith.

Analytical Chemistry: L. M. Dennis.

Mineralogical and Geological Chemistry: W. F. Hillebrand.

Metallurgy: J. W. Richards, Henry Fay.

Acids, Alkalies and Salts: T. L. Briggs.

Glass and Pottery: G. E. Barton, Albert V. Bleininger.

Cements and Mortars: Harry Drew.

Fuel, Gas, Coke: J. D. Pennock.

Organic Chemistry: M. T. Bogert.

Petroleum, Asphalt, Turpentine, Wood Products: S. S. Sadtler.

Cellulose, Paper: A. D. Little.

Explosives: C. E. Munroe.

Dyes, Textile Fabrics, Bleaching, Inks: L. A. Olney.

Pigments, Resins, Varnishes, India Rubber: A. H. Sabin.

Fats, Fatty Oils and Soap: W. D. Richardson. Sugar, Starch and Gum: C. A. Browne, Jr. Leather, Glue: J. H. Yocum.

Biological Chemistry: L. B. Mendel.

Foods: W. D. Bigelow.

Nutrition: C. F. Langworthy.

Water, Sewage, Disinfectants, Insecticides: L. P. Kinnicutt.

Fermented and Distilled Liquors: Robert Wahl. Pharmaceutical Chemistry: A. B. Stevens. Soils and Fertilizers: F. P. Veitch, J. H. Pettit. Patents: W. H. Seaman.

In order to cover the expense of the new publication the dues of the society will be increased from five to eight dollars per year. It is expected for the first year or two at least the cost of the abstract journal will be considerably greater than the increased receipts from dues, but the vote of the society upon the matter has given evidence of such a strong desire for the establishment of the journal that it is hoped that the increase in membership will be sufficient to support the enterprise financially within a very few years.

The Journal of the American Chemical Society will be continued and will contain original articles, book reviews and reviews of recent progress in the various fields of chemistry.

SCIENTIFIC NOTES AND NEWS.

DR. CH. WARDELL STILES, of the Public Health and Marine Hospital Service, has been named one of the experts to be sent to Germany to investigate customs tariff complaints.

THE sum of about \$5,000 has been subscribed for the foundation for the advancement of geographical study in honor of Dr. von Neumayer.

Dr. OTTO BÜTCHLI, professor of zoology at Heidelberg, has been elected an associate of the Royal Academy of Belgium.

DR. HEINRICH BRUNS has celebrated the twenty-fifth anniversary of his directorship of the Leipzig Astronomical Observatory.

DR. WILHELM WALDEVER, professor of anatomy at Berlin, and secretary of the Berlin Academy of Sciences, has celebrated his seventieth birthday.

DR. L. A. BAUER, assisted by Messrs. P. H. Dike and E. H. Bowen, of the Department of Terrestrial Magnetism of the Carnegie Institution, of Washington, during September and October determined the three magnetic elements (declination, dip and intensity) at 70 stations in the portion of Canada bounded by the parallels of latitude 42° and 49° and the meridians of longitude 65° and 105° west. In this region very few observations had previously been made. With the completion of this work it is now possible to extend the magnetic maps for the United States up to the fortyninth parallel across the entire continent. The standard magnetic instruments of the Toronto Magnetic Observatory were likewise compared with those at the Cheltenham Magnetic Observatory, making it possible thereby to reduce all the magnetic work in the United States and Canada to the same stand-Through the courtesy of Professor ard. Stupart, director of the Canadian Meteorological Service, the Toronto Magnetic Observatory, situated at Agincourt, was made available as the base station for the work undertaken by the Carnegie Institution.

PROFESSOR SAVAS, of the University of Athens, has recently visited the Liverpool School of Tropical Medicine with view to obtaining information in regard to the extermination of mosquitoes. It is said that in a Greek population of 2,500,000 there were, last year, 960,000 cases of malaria.

Four members of the faculty of Wells College have been given leave of absence for the year 1906-7: Professor J. W. Frelev (physics), Professor Dolson (philosophy), Professor Van Benschoten (mathematics) and Professor Vernette L. Gibbons (chemistry).

DR. A. BACKHAUS, professor of agriculture at Königsberg, has been given leave to absence for four years, to become director of the agricultural school in Montevideo, Uruguay.

DR. COOPER CURTICE has resigned from the Rhode Island College to take up work in the Bureau of Animal Industry in connection with the eradication of the Texas fever tick.

DR. T. J. HEADLEE has been appointed entomologist at the New Hampshire College.

F. A. Ports, B.A., of Trinity Hall, has been appointed assistant to the superintendent of the Museum of Zoology, Cambridge Dr. A. WASSERMANN has been made director of one of the departments of the Institute for Infectious Diseases at Berlin.

DR. B. HAGEN, of Frankfort, has received 1,700 Marks from the Bavarian Academy of Sciences towards his publication of an atlas illustrating the types of heads and faces of East Asiatic and Malaysian races.

THE annual dinner of the New York Association of Biology Teachers will be held at the Tuxedo, Madison Avenue and 59th Street, on Friday evening, November 9. Professor E. G. Conklin, head of the department of zoology, of the University of Pennsylvania, will be the guest of the association and will make an address on 'Biology and Life.'

PROFESSOR WALTHER NERNST, professor of physical chemistry in the University of Berlin, delivered a lecture at the Johns Hopkins University, on October 19, before the graduate students in physics and chemistry. He gave an account of his work on the dissociation of water-vapor at high temperatures.

PROFESSOR HENRY FAIRFIELD OSBORN gave a public lecture under the auspices of the New York Academy of Sciences at the American Museum of Natural History, on October 29, his subject being 'The Collection of Extinct Elephants in the American Museum.'

DR. D. RANDALL MACIVER, of Oxford, gave a lecture under the auspices of the American Ethnological Society at the American Museum of Natural History, on October 29, on 'The Ethnology and Archeology of North and South Africa.'

THE Swiney lectures on geology in connection with the British Museum of Natural History will be given this year by Dr. R. F. Scharff. The course of twelve lectures, which begins on November 5, has as its subject 'The Geological History of the European Fauna.'

THE graduates of the classes of '04, '05, '06 and '07 of Sibley College, Cornell University, will erect a memorial to Robert H. Thurston, late director of the college.

DR. JOSEF WEINLECHNER, formerly professor of surgery at Vienna, has died at the age of seventy-six years. THERE has been added to the Agassiz Museum, Harvard University, a valuable collection of Hawaiian fishes, representing 140 species, presented by Sherman F. Denton, of the Bureau of Fisheries.

MR. J. OGDEN ARMOUR has offered to give \$5,000 annually, through the International Live Stock Exposition, for scholarships to be competed for by the state agricultural colleges at the live stock exhibitions.

THE Middlemore prize of the British Medical Association will be awarded in 1907 for an essay on *Ophthalmia Neonatorum*.

THE twenty-fourth annual congress of the American Ornithologists' Union will convene in Washington, D. C., on Monday, November 12, at 8 P.M. The evening session will be devoted to the election of officers and the transaction of other routine business. The meetings open to the public and devoted to the reading and discussion of scientific papers will be held in the lecture hall of the United States National Museum, beginning on Tuesday, November 13, at 11 A.M., and continuing for three days.

At the recent Stuttgart meeting of German Men of Science and Physicians a Society of German Neurologists was organized.

THE German Astronomical Society met this year at Jena, on September 11 and the following days, with an attendance of more than sixty members. The meeting next year will be in Vienna.

The Experiment Station Record states that the eighth International Congress of Agriculture will be held at Vienna, Austria, May 21-25, 1907. The previous congresses were held at Paris, 1889; The Hague, 1891; Brussels, 1895; Budapest, 1896; Lausanne, 1898; Paris, 1900 and Rome, 1903. A pamphlet has been issued giving the organization, regulations and program of the forthcoming con-This contains the subjects for disgress. cussion of each of the eleven sections in which the congress is to be divided. All reports intended for the congress should be sent to the executive committee before December 1, 1906. Persons desirous of becoming members should notify the executive committee and pay the membership fee of 20 kronen (\$4) before March 31, 1907. The secretary of the executive committee is Professor Josef Häusler, Vienna, Austria, I. Schauflergasse 6.

THE French Geographical Society has organized a mission to West Africa to study the sleeping sickness in the French Congo. A central laboratory will be established in Brazzeville. The sum of \$40,000 has been collected for this work.

THE magnetic survey yacht Galilee of the Carnegie Institution of Washington returned to San Diego, California, on October 20, having successfully concluded under the command of Mr. W. J. Peters since March 2 a cruise of 20,000 miles, embracing San Diego, Fanning Island, Samoan Islands, Fiji Islands, Marshall Islands, Guam, Yokohama and return to San Diego. The accident to the Galilee at Yokohama, already noted in this journal, proved not to be as serious as at first appeared, so that the vessel was able to leave Yokohama on September 6, the trip to San Diego having been made in forty-four days, or at an average rate of about 115 miles a day. Mr. Peters' assistants were Messrs. J. P. Ault and J. C. Pearson, magnetic observers, and Dr. H. E. Martyn, surgeon and recorder. The sailing master as in the cruise of 1905 was Captain J. T. Hayes. The two cruises of 1905 and 1906 of this vessel have already furnished sufficient data for the revision of the present magnetic charts of the North Pacific Ocean. In order to obtain some results as soon as possible in the other oceans, it is now proposed to send the vessel shortly on the following cruise: San Diego, Valparaiso, Rio Janeiro, Washington, D. C., and from thence return to the Pacific Ocean by way of Cape of Good Hope and the Philippines.

THE University of Colorado had two parties in the field during the past summer, engaged in the study of the geology and natural history of parts of the state. One, in charge of Mr. Junius Henderson, the director of the museum, traveled northeastward from Boulder by wagon, covering a distance of about 400 miles. The country visited is the dry plain region of northeastern Colorado. Valuable collections were obtained, some of the material being new to science. Visits were made to a number of the type localities of fossils. Α good series of photographs was made to illustrate the topography and vegetation of the Professor T. D. A. Cockerell conregion. ducted an expedition to Florissant, Colo., where he obtained a valuable series of fossil insects and plants from the Tertiary lakebeds of that vicinity. A beginning of such a collection for the University of Colorado was made the year before, but at that time comparatively few specimens were obtained. The revival of interest in the fossils of Florissant is auspicious. Some of the known species have never been described, others have been improperly referred to European species from which they are distinct. The university has issued a pamphlet containing brief articles in popular language describing the geology, botany and paleontology of the Florissant region.

The Bulletin of the American Geographical Society states that the Service Géographique de l'Armée, to which is entrusted the topographic survey work of the country, is making excellent progress with the new map of France in eight or nine colors, which is being published on the scale of 1:50,000. The survevs are being conducted in the field on a scale of 1:10,000 in regions of moderate relief and of 1:20,000 in mountainous regions. Surveys on these scales are to form the basis of the new cartography of France. It is probable that the next publications will be maps of the environs of the other large cities of the country. It is estimated that the cost of producing the entire map will be \$6,000,000; and as the appropriations thus far voted are small, it is likely that the progress of the map will be slow.

UNIVERSITY AND EDUCATIONAL NEWS.

THE Georgia legislature has appropriated \$100,000 to erect and equip a building for the Agricultural College.

THE New York State College of Agriculture at Cornell University has received a gift of \$30,000 for the foundation of six agricultural scholarships. Tuition in the college is free to students from New York State, and the scholarships will be a substantial help toward living expenses.

THE University of Florida, in accordance with plans determined upon a year ago and mentioned in SCIENCE, October 13, 1905, has been removed during the summer from its former location at Lake City to new grounds and new buildings at Gainsville. Fla. The school year opened at the new location on September 26. The new grounds comprise a tract of five hundred acres just outside the city limits of Gainsville. Two three-story brick buildings have been completed, one 300 feet long by 30 feet wide, the other 240 feet long by 30 wide: a one-story brick building has been put up also to serve as shop; experiment station, barns and greenhouse are in process of construction.

THE senate of Oxford University on October 25 adopted, by 206 to 169 votes, the recommendations of the special board for mathematics, involving the abolition of the publication of the names of students in the mathematical tripos in the order of merit. There will consequently hereafter be no senior wrangler.

PROFESSOR L. B. JUDSON, professor of horticulture in the University of Idaho, has been appointed assistant professor of horticulture in Cornell University, to take charge of subtropical pomology with some related courses. He has spent the past six weeks in traveling on the Pacific coast and the gulf states, and will assume his duties in Cornell on November 1.

THE following instructors have been appointed in the Michigan Agricultural College: William E. Lawrence, botany; J. R. Kelton, zoology; E. N. Bates and W. L. Lodge, physics; F. J. Kayfmann, Arthur J. Clark and Herbert S. Bailey, chemistry; Jos. H. Taylor and W. B. Wendt, civil engineering; H. F. Schmidt and J. A. Palson, mechanical engineering.

DR. HEINRICH RUBENS, professor of physics in the Berlin Technical Institute, will for the present assume the direction of the physical laboratory in succession to the late Professor Paul Drude.