

by the railroads was to be made during the morning of the eighteenth, but a few days before that Mr. Allen wrote Professor Abbe, saying that he feared some embarrassment if the Harvard College Observatory should fail to change its public time signals, as the director of the observatory was absent from the country. Accordingly, a telegram from General Hazen to President Eliot urged that by reason of its eastern longitude Harvard College and New England should have the honor of thus beginning the desired reform. The people as well as the railroads of New England began the good work on that Sunday morning.

By an agreement with the Western Union Telegraph Company, made about 1877, that company sold its time signals received from the Naval Observatory to its customers throughout the country who would pay for them. This was, probably, the only case in which a government institution cooperated with a corporation to sell that which would seem to be government property and without any return to the Treasury. Of course the telegraph companies made equivalent returns to the government by allowing the free use of their lines for longitude purposes, but it seemed rather hard that this last concession, which had been in effect since 1845, should be used as an argument for maintaining a popular distribution of time signals that cut under or competed with the work of local astronomical observatories. Of course on November 18, 1883, at the request of the telegraph company the Naval Observatory began sending signals on the 75th standard for transmission to the railroads, but its own time-balls and signals for use in Washington city continued to be regulated by Washington local mean time until March 1, 1884.

In conclusion it may safely be said that the adoption of the present system of standard hours, with all its manifold advantages, has been accomplished by persons outside the government service. The officials of our railroads have lately united in ascribing the successful introduction of standard time to Mr. W. F. Allen, without saying a word in favor of the Naval Observatory's pretensions.

#### SCIENTIFIC NOTES AND NEWS.

DR. GEORGE F. KUNZ, of New York City, has been appointed by the State Department a delegate to the International Congress for the Study of Radiology and Ionization, which will be held in Liège, Belgium this month.

WE learn from the *American Geologist* that Professor T. C. Chamberlin has been appointed a member of the Illinois Geological Survey Board. The other members are *ex-officio* Governor Deneen and President James, of the State University.

MR. E. C. CHILCOTT, agronomist of the South Dakota Agricultural Experiment Station, has been appointed expert in connection with the cereal work of the Department of Agriculture.

DR. WALTER SCHILLER has been appointed head of the geological division of the Museo de la Plata and geologist of Buenos Ayres.

ON the occasion of the installation of Mr. Andrew Carnegie as lord rector of St. Andrew's University on October 17, the university will confer the honorary degree of doctor of laws on Mr. Carnegie; Mr. Whitelaw Reid, the American ambassador to Great Britain; Mr. Charlemagne Tower, the American ambassador to Germany; Bishop Potter of New York; Dr. Nicholas Murray Butler, president of Columbia University, and Dr. William J. Holland, director of the Carnegie Museum at Pittsburg.

A MEMORIAL in honor of Professor Friedrich von Esmarch, the eminent surgeon of the University of Kiel, has been erected in his native place, Tönningen in Schleswig-Holstein. Professor von Esmarch was present at the unveiling, which took place on August 6.

M. VIDAL DE LA BLACHE has received the medal of the Paris Geographical Society in recognition of his work, 'Tableau de la Géographie de la France,' which is the introduction to the 'Histoire de France,' published under the direction of M. E. Lavisse.

SECRETARY WILSON has made public the report of Solicitor George P. McCabe on the investigation of the charge that Dr. Daniel E. Salmon, head of the Bureau of Animal

Industry, was improperly interested in the firm of George E. Howard and the Howard Label Company. Secretary Wilson's indorsement on the report is as follows: "Inquiry discloses the fact that Dr. Salmon had an unfortunate connection with the firm of George E. Howard & Co. While this connection was not an ideal relation for a government officer to have with a firm doing business with the department, I am convinced that Dr. Salmon never intended to profit by work done by Mr. Howard for the Department of Agriculture, and that he has never been connected with the Howard Label Company or received any benefit from the contract of that company with the department. The action of the department regarding the meat inspection service was as fair, considerate and comprehensive as the appropriations would warrant. The case does not seem to call for further disciplinary action."

THE statement which we quoted from the *American Geologist* in regard to the change in the directorship of the Geological Survey of Michigan was incorrect. In regard to the survey, we are informed that the director, Professor A. C. Lane, is engaged in detailed studies in the copper region. Professor I. C. Russell is making an examination of the surface geology in the Upper Peninsula, and Mr. Frank Leverett, of the United States survey, is studying the same problem. They are working in cooperation. Professor C. A. Davis is studying the development and ecology of the peat bog flora. Mr. W. C. Gordon is completing a cross section of the copper-bearing formation to determine the different horizons near the Wisconsin line. Professor W. M. Gregory is finishing his report on Arenac County. Mr. W. F. Cooper is working on the Wayne County report and watching the shaft going down to rock salt, near Detroit.

PLANS for the cooperative investigation of the artesian waters in the vicinity of Wilmington, North Carolina, have been arranged by the United States Geological Survey and the State Geological Survey of North Carolina. It is expected that the work will be in charge of Mr. M. L. Fuller, who will be assisted by

Mr. L. W. Stephenson, of Johns Hopkins University, and Mr. B. L. Johnson, recently of the Massachusetts Institute of Technology.

CHARLES E. BROWN, curator of the Wisconsin Archeological Society, has returned from a week in the field plotting mounds and collecting archeological data in the vicinity of Beaver Dam and Fox Lakes in the western part of Dodge County, Wisconsin, and is now preparing the society's exhibit of archeology for the state fair.

On August 9 the London County Council erected a tablet on the house in which Edward Jenner, the discoverer of vaccination, lived during 1803.

It is proposed to erect a memorial to the late Professor Emerich Meissl in the agricultural experiment station at Vienna, with which he was connected for more than twenty years.

PROFESSOR ELLIS A. APGAR, for twenty years state superintendent of public instruction in New Jersey and a writer on botany, died at East Orange, N. J., on August 28.

DR. ROBERT BILLWILLER, director of the Swiss Meteorological Bureau, died in Zurich on August 14, at the age of fifty-six years.

It appears from cable despatches to the daily papers that the weather was very favorable for observations and photographs of the total solar eclipse on August 30 for the large number of parties of different nationalities that went to Spain, Algeria, Tunis and Egypt. The weather was unfavorable on the Island of Majorca. In this country the partial eclipse was obscured by clouds.

REUTER'S AGENCY telegraphs that members of the British Association arrived at Durban on August 22. They proceeded to Pietermaritzburg on August 24, where they were welcomed by the governor of Natal. A number of excursions were made on the twenty-fifth, and the members left for Colenso on the twenty-sixth.

THE seventy-seventh meeting of German Men of Science and Physicians was held in Meran last week under the presidency of Dr. Franz von Winckel, professor of gynecology

at Munich. At the general sessions papers were presented by Professor W. Wien, of Würzburg, on 'Electrones'; Professor Nocht, of Hamburg, on 'Tropical Diseases'; Professor H. Molisch, of Prague, on 'The Reaction of Plants to Light'; Professor H. Dürck, of Munich, on 'Beri-Beri'; Dr. Cl. Neisser, of Lublinitz, on 'Individuality and Psychoses'; and by Professor J. Wimmer, of Vienna, on the 'Mechanics of the Development of Animals.' At a meeting of the entire association papers on heredity were presented by Professor C. Correns, of Leipzig; K. Heider, of Innsbruck, and B. Hatschek, of Vienna. The association met in thirty sections for the reading of scientific papers, of which seventeen were in medicine and thirteen in natural science, the latter being as follows: (1) Mathematics, astronomy and geodesy; (2) physics; (3) applied mathematics and physics; (4) chemistry; (5) applied chemistry; (6) geophysics and meteorology; (7) geography; (8) mineralogy, geology and paleontology; (9) botany; (10) zoology; (11) anthropology, ethnology and archeology; (12) mathematical and scientific education; (13) pharmacology.

THE sixth Congress of Criminal Anthropology will meet at Turin on April 28, 1906, under the presidency of Professor Lombroso. An exhibition of criminal anthropology will be held in connection with the congress.

THE nineteenth annual convention of the Association of American Agricultural Colleges and Experiment Stations will be held at Washington, D. C., in the early part of November next.

THE Sank County Historical Society has been organized, in Wisconsin, to further archeological and historical research, by Messrs. A. B. Stout and H. E. Cole, members of the Wisconsin Archeological Society.

FROM June 21 to 26, 1906, a large agricultural exposition is to be held at Berlin, which will also comprise a special division for preserved-food articles, such as products of the dairy, dough, potatoes, fruits, wines and extracts, meats, beer, etc. Money prizes, diplomas and medals will be awarded. In order to

test the preserving capacity of these exhibits they will be sent to the tropics.

#### UNIVERSITY AND EDUCATIONAL NEWS.

By direction of the late Mrs. Adolphus F. Elliott, a hospital, to cost \$175,000, has been given to the University of Minnesota.

THE University of Melbourne attains its jubilee next year, and preparations are already in progress to celebrate the event.

THE board of Trinity College, Dublin, has instituted a diploma in economics and commercial knowledge. The course for the examination includes, as obligatory subjects, the theory of economics, commercial history and geography, accountancy and commercial law; and as optional subjects a modern language (French or German or Spanish), any one of a variety of special economic subjects, and any one of the following branches of economic and business organization—banking, railways, insurance, agriculture.

THE summer course in experimental phonetics at the University of Marburg was delivered this year by Dr. E. W. Scripture. The course had been previously given by the Abbé Rousselot, of the Collège de France, Paris.

MR. SAMUEL M. KINTNER, for some years professor of electrical engineering at the Western University of Pennsylvania, has been appointed associate professor of electrical engineering in the Carnegie Technical School.

MR. W. P. BROOKS has been appointed director of the Massachusetts Agricultural College and Experiment Station, in succession to the late Henry Hill Goodale.

M. LAVASSEUR, the statistician, has succeeded M. Gaston Paris as executive head of the Collège de France.

DR. VERNEUIL and Dr. Rosenstiehl have been appointed professors of applied chemistry in the National Conservatory of Arts and Measures. Dr. Deperet has been appointed professor of geology and mineralogy in the faculty of sciences at the University of Lyons and Dr. Rivals professor of technical chemistry at Aix-Marseilles.