

reporting stations. The observations are sent here (Buenos Ayres) and the maps printed in our own establishment. The recent extension of the telegraph lines to the southern territories has been a great boon to us from a meteorological point of view; the coast line is now at Rio Gallegos in Santa Cruz, and another branch is being constructed near the foot of the Cordilleras from latitude 38 to 47 degrees south and then crosses the country to the Atlantic coast. This is a most important line for us, as it will give us communication with the region where nearly all the 'pamperos' have their birth and development.

"No attempt has been made at forecasting, as I consider it better to have some experience with the conditions, as shown by the daily maps before undertaking to do too much; I trust however that his branch of work will come in due time."

The daily map published by the meteorological office at Buenos Ayres makes a very imposing appearance. It is 16.2 inches high by 11.1 broad and extends between the 46th and 77th degree of longitude west from Greenwich and between the 21st and 57th degree of south latitude. This region, in the Southern Hemisphere, corresponds to a portion of the Northern Hemisphere, extending north and south, between Turks Island, Bahamas, and Maine, Labrador, and east and west between Washington, D. C., and Cape Farewell. When this large region in the Southern Hemisphere shall have had its storms and 'pamperos,' its isobars and isotherms thoroughly studied, we shall feel that a great advance has been made in the meteorology of the globe.

We are not informed whether the daily weather map of the Province of Buenos Ayres, published for ten years past by the Observatory at La Plata, will be discontinued—but evidently the much more comprehensive work of the general Department of Agriculture must supersede that.

The elaborate presentation of Argentine climatology, compiled by Dr. Davis for the official volume of statistics of that Republic is about to appear in Spanish and English text, as a special treatise by him, on the climate

of that region. The climatology of Dr. Davis and his new daily weather map show that the meteorology of the South Temperate Zone of America is in excellent hands.

SCIENTIFIC NOTES AND NEWS.

THE retirement of Surgeon-General Sternberg will be made the occasion of a dinner to be given in New York City on June 13. Those wishing to express their appreciation of Dr. Sternberg's great services to the army, to the medical profession and to science by attending the dinner should address Dr. Hermann H. Biggs, 5 West 58th Street, New York City.

DR. ROSWELL PARK, director of the State Pathological Laboratory at Buffalo, will give the annual address before the Medical School of Yale University at the approaching commencement.

THE Geological Society of London has elected as foreign correspondents Professor T. C. Chamberlin, of the University of Chicago; Professor S. W. Williston, just called to the University of Chicago, and Dr. T. Thoroddsen, of Iceland.

THE Linnean Society of London has elected as foreign members Professors C. S. Sargent, F. E. Schultze, J. Wiesner, H. J. Hansen and A. Giard.

THE Liverpool Biological Society gave a complimentary dinner to Professor W. A. Herdman on the occasion of his return from investigating the pearl oyster fisheries of Ceylon.

M. T. MOUREAUX succeeds the late M. Renou as director of the magnetic observatory in the Parc Saint-Maur.

THE Rede lecture at Cambridge University will this year be given by Professor Osborne Reynolds, F.R.S., his subject being 'On an Inversion of Ideas of the Structure of the Universe.'

DR. THOMAS L. WATSON, of Denison University, will continue field work during the coming season on the manganese and ochre deposits of Georgia, for the Geological Survey of Georgia.

DR. HERM. JORDAN, formerly assistant in the Zoological Station, Naples, has gone to Zurich as assistant in the Concilium Bibliographicum.

PROFESSOR JOHN H. KINEALY, head of the department of mechanical engineering at Washington University, in St. Louis, has resigned to engage in private practice.

DR. S. W. WILLISTON, whose call to the chair of paleontology in the University of Chicago we announced last week, will also have charge of the paleontological collections in the Field Columbian Museum.

THE Council of the Geological Society of America has recommended candidates for election as fellows: Frank M. Anderson, B.A. (Stanford, '95), M.S. (Univ. of Cal., '97), Berkeley, Cal.; Ernest Robertson Buckley, B.S., Ph.D. (Univ. of Wis., '98), Rolla, Mo., state geologist and director of Bureau of Geology and Mines; Arthur J. Collier, A.B., A.M. (Univ. of Oregon), S.B. (Harvard), Washington, D. C., assistant geologist U. S. Geological Survey; John Burchmore Harrison, M.A. (Cambridge, England), F.I.C., F.G.S., Georgetown, Demerara, Brit. Guiana, government geologist; Edward Henry Kraus, B.S., M.S. (Syracuse, '97), Ph.D. (Munich, '01), Syracuse, N. Y., associate professor of mineralogy, Syracuse University; George Davis Louderback, A.B., Ph.D. (Univ. of Calif., '96 and '99), Reno, Nev., professor of geology, University of Nevada; George Curtis Martin, B.S. (Cornell), Ph.D. (Johns Hopkins), Baltimore, Md., assistant in paleontology, Johns Hopkins University, has been assistant geologist on the Maryland Geological Survey; Walter Curran Mendenhall, B.S. (Ohio Normal Univ.), Washington, D. C., geologist, U. S. Geological Survey; George Henry Perkins, A.B., Ph.D. (Yale, '67-'69), Burlington, Vt., professor of geology, University of Vermont, state geologist; William Sidney Tangier Smith, B.L., Ph.D. (Univ. of Calif., '90-'96), Washington, D. C., assistant geologist, U. S. Geological Survey; Alfred William Gunning Wilson, A.B. (Toronto), A.M., Ph.D. (Harvard, '01), Cobourg, Ontario, Can., geologist, temporary staff, Geological Survey of Canada.

DR. JOHN ALEXANDER MATHEWS, of Columbia University, has been informed by the secretary of the Iron and Steel Institute of Great Britain that 'by the unanimous vote of the president and council the first Andrew Carnegie Gold Medal for research' had been awarded to him on May 8. Dr. Mathews has held the university fellowship in chemistry and has three times been awarded the Barnard fellowship for the encouragement of scientific research, both by Columbia University. A year ago the Carnegie research scholarships of the Iron and Steel Institute were awarded to Dr. A. Stansfield, of London; Mr. Julius Goldberg, an Austrian; and to Dr. Mathews. At the meeting of the Institute held in London, May 7 and 8, his paper entitled, 'A Comparative Study of Some Low Carbon Steel Alloys,' was presented and for it the medal was awarded. Mr. Carnegie was so well pleased with the result of his original endowment that he has doubled his gift for next year with the result that six research scholarships have been awarded for the coming year. Three of these were awarded to English metallurgists, one to a Parisian, one to a resident of Berlin and the sixth to Mr. William Campbell, an Englishman, who is at present studying with Professor H. M. Howe. Mr. Campbell is an 1851 exhibition scholar and fellow-elect in metallurgy at Columbia University. Mr. Campbell and Dr. Mathews worked together with Professor Sir William Roberts-Austen and later with Professor Howe, and Mr. Campbell's appointment to the Carnegie scholarship is made with the understanding that he continue researches upon low carbon steel alloys.

THE centenary of the birth of the Norwegian mathematician, Niels Henrik Abel, will be celebrated at Christiania in September. Abel was born in 1802 and died at the early age of twenty-seven years, but in this short period attained rank among the foremost mathematicians of the century.

MR. JEFFERSON CHASE, the well-known inventor, died in Portland, Me., on May 20. Mr. Chase, his father, brother and son, made many inventions, including a circular saw, a water wheel, wood pulp mills, etc.

MR. C. HENRY WERNLE, a maker of mathematical instruments at the U. S. Arsenal at Frankfort, died on May 20, aged seventy-one years.

MR. GEORGE GRIFFITH, the assistant general secretary of the British Association for the Advancement of Science, and formerly science master of Harrow School, died on May 7, at the age of sixty-eight. Mr. Griffith had been connected with the British Association for over forty years, having first acted as local secretary in 1859 for the Oxford meeting. An English correspondent writes: "Mr. Griffith's death will be keenly regretted by the members of the Association, with whom his relations were most courteous, he being, as is needful in that position, one of those who 'suffer fools gladly.' His death was unexpected. He died in harness."

DR. G. MONRO GRANT, since 1887 principal of Queen's College, Kingston, a well-known Canadian educator and author, died on May 11, at the age of sixty-seven years.

THE fourteenth annual meeting of the Association of Economic Entomologists will be held in Pittsburgh, Pa., on Friday and Saturday, June 27 and 28. Sessions will be held in the west room of Carnegie Lecture Hall, Carnegie Institute, Schenley Park. The opening session will convene on Friday at 10:00 o'clock A.M. Members are requested to send titles of communications, which they may desire to present, as soon as possible to the secretary, Professor A. L. Quaintance, College Park, Md.

THE Royal Society of Canada is this week holding its annual meeting at Toronto, the exercises being on May 27, 28 and 29. They include the address by the president, Dr. James Loudon, president of the University of Toronto and professor of physics, whose subject is 'Universities in Relation to Research,' and a popular science lecture by Dr. Jeffrey, of the University of Toronto, on 'The Forest Trees of Canada.' The Society meets in four sections, one devoted to French literature, one to English literature, one to the mathematical, physical and chemical sciences and one to the geological and biological sciences.

IN connection with the proposal to enlarge the Royal Society so as to include representatives of the historical, philological and moral sciences, or to establish a new academy for these sciences, Mr. Charles Waldstein, of King's College, Cambridge, has proposed the establishment of an Imperial British Academy of Arts and Sciences, which would include four sections as follows: The Royal Society for the natural and mathematical sciences, a new Royal Society of Humanities for the historical, philological and moral sciences, the present Royal Academy for painting, sculpture, architecture and the decorative arts, and a new Royal Academy of literature and music.

WE have noted that a commission is considering the question as to whether a state electrical laboratory should be established in New York state, to provide means for testing electric measuring instruments. Of this proposal the *Electrical World and Engineer* says: "We sincerely hope that no such state laboratory will be established, as it would be worse than useless expense. The Bureau of Standards at Washington is a national body, charged with doing this precise work among other duties. There is no immediate likelihood of this bureau being so far overwhelmed with electrical work as to be incapable of supplying the demand. No sub-standardizing bureaus should be called into official existence without being annexed to the National Bureau at Washington. A number of state electric standardizing bureaus are likely to lead to just as many different values of the volt, ampere and watt, besides involving much reduplicated labor and expense. Were the states generally to indulge in the practice, the situation might become particularly unbearable to the manufacturing companies doing business all over the country."

THE botanical laboratories, presented to University College, Liverpool, by Mr. W. P. Hartley, were opened by Sir William Thiselton-Dyer, F.R.S., on May 10 last.

BEFORE the Zoological Society of London on May 6 Mr. Oldfield Thomas, F.R.S., read a paper on the 'Mammals obtained during the

Whitaker Expedition to Tripoli. At Mr. J. I. S. Whitaker's expense Mr. E. Dodson had made a successful collecting expedition into Tripoli, and the specimens of mammals obtained had been presented to the National Museum. Twenty-one species were referred to, and, among others, a Hare (*Lepus whitakeri*), allied to *L. æthiopicus*, but of a bright pinkish buffy color, and a Gundi (*Ctenodactylus vali*) like *C. gundi*, but with much larger bullæ, were described as new.

WE learn from *Nature* that a meeting of delegates representing a number of natural history and photographic societies was held at Croydon on Friday, May 9, Mr. W. W. Whitaker, F.R.S., being in the chair, to consider and set in motion a photographic survey of Surrey. It was resolved that a society be formed to be called 'The Photographic Survey of Surrey,' and that its object be to preserve a record in permanent photographs of buildings of interest, antiquities, scenery, geology, natural history, anthropology, and of portraits of notable persons, representations of passing events of local or historical importance, and of old records, rare books, prints, maps, so as to give a comprehensive survey of what is valuable and representative in the county of Surrey.

At a meeting at the Mansion-house on May 18 the Duke of Devonshire, as reported in the *Times*, spoke as follows concerning the conditions which have to be complied with before incorporation of University College with the University of London can take place: The value of the site, buildings, and equipment to be transferred under the scheme provisionally settled between the authorities of the college and the senate of the university is estimated at £500,000, and in addition the administration of the income of certain trust funds, which amount to nearly £300,000, will pass to the university. In order to make the transfer effectual certain preliminary conditions were required: (1) The extinction of the debt upon the college, which has been accomplished by a gift of £30,000 from the Drapers' Company. (2) The removal of the University College School, an institution of a secondary type, in

order to obtain the needful accommodation for university teaching and research, the cost of which is estimated at £60,000. (3) An arrangement by which separate provision, including class-rooms, laboratories, and a pathological museum, can be made for advanced medical studies in order to place the school of medicine on a proper footing, which is calculated to cost another £40,000. Towards this sum of £100,000, which is the immediate object of the appeal, £30,000 have been given by an anonymous donor, and there are other sums promised to the extent of £15,000. On the remaining £55,000 being raised and the college placed at the disposal of the university, the £20,000 offered by Mr. Astor for the increase of the endowment of chairs becomes immediately available for university purposes, and the university will also assume direct administration of that part of the contribution of the Technical Education Board which it has hitherto entrusted to the college. Later and at far greater cost, as the funds at the disposal of the university increase, it is hoped that further advantage will be taken of the opportunities presented by the acquisition of the college for the development of higher education. Schemes for the completion of the west wing, to include the space required for engineering, applied mathematics, physiology and chemistry, are in contemplation, and other changes that would give sufficient accommodation to the departments of zoology, anatomy and physics and also provide a library of adequate dimensions. For the present, however, two great objects will be gained by the success of the appeal for £100,000: (1) A fuller utilization of the resources of the college as an establishment for the promotion of advanced studies; and (2) the provision for the university, which has as yet done little but create administrative machinery, of the means of entering fairly well equipped upon the two-fold mission of instruction and research.

UNIVERSITY AND EDUCATIONAL NEWS.

MR. ISAAC H. CLOTHIER, of Philadelphia, has offered \$100,000 to Swarthmore College on condition that an endowment fund of \$600,000 be