

GENERAL.

It is reported that Harvard College and the Massachusetts Institute of Technology will each receive about \$500,000 from the estate of the late Henry O. Pierce, under whose will they are, together with three other institutions, the residuary legatees. The amount to be divided has proved much larger than had been anticipated. The value of these bequests is much increased by the fact that they are unaccompanied by restrictions.

THE will of the late Eliza W. S. P. Field gives \$80,000 to the University of Pennsylvania, and makes the University residuary legatee of her estate.

MRS. ESTHER B. STEELE, of Elmira, N. Y., has given \$5,000 towards the cost of a physical laboratory for Syracuse University. The building, which will cost about \$25,000, will be erected shortly.

FURMAN UNIVERSITY, at Greenville, S. C., has been given by Dr. and Mrs. F. A. Miles real estate valued at \$20,000.

THE will of Theodore Lyman, whose death we were recently compelled to record, bequeathes \$10,000 to Harvard University and a collection of valuable books to the Museum of Comparative Zoology.

EX-GOVERNOR FLOWER has given \$5,000 to Cornell University for the purpose of a library for the Veterinary College.

THE will of the late Henry W. Sage, lately President of the Board of Trustees of Cornell University, to which institution he had given about \$1,250,000, disposes of property worth \$12,000,000, but makes no public bequests.

DR. ELISHA GREGORY, JR., formerly demonstrator of anatomy at the University of St. Louis, has returned, after a year's study in Germany, to enter upon his duties as instructor in histology and embryology at the Harvard Medical School.

PROFESSOR PETER T. AUSTEN has left the department chemistry at the Polytechnic Institute, Brooklyn, and is succeeded by Professor Fay.

MR. C. H. BENEDICT has been appointed instructor and Mr. J. M. Talmage assistant in chemistry in Cornell University.

At a meeting of the regents of the University of the State of California the resignation of Professor Colton from the staff of the Lick Observatory was accepted.

THE following appointments have been recently made: Dr. Weiss, professor of mathematics in the Institute of Technology at Prague; Dr. Herzig, associate professor of chemistry in the University of Vienna; Dr. Zelinka, of Graz, professor of zoology in the University at Czernowitz; Dr. Zwaardemaker, professor of physiology in the University of Utrecht; Dr. Julius Hann, director of the Vienna College of Meteorology, professor of meteorology at Graz, in Styria; Professor Joseph Pernter, professor of cosmical physics in Innsbruck University, appointed to the vacancy caused by Dr. Hann's retirement from the Vienna College; Dr. W. Ernest Thomson, professor of anatomy in Anderson College, Glasgow, and M. Brunhes, professor of physics in the faculty of science at Dijon.

THE Cambridge University Calendar shows that the undergraduates in residence at the University now number 2,928, of whom 664 are members of Trinity College and 264 of St. John's.

THE *Athenæum* says that a proposal is being considered to establish at Swansea, as a great manufacturing center, a branch University College in association with either Aberystwith or Cardiff, as the Newcastle College is associated with Durham. The suggestion is that scientific and technical courses might be taken at Swansea in preparation for the Welsh University degree.

DISCUSSION AND CORRESPONDENCE.

METEOROLOGY IN SOUTH AMERICA.

TO THE EDITOR OF SCIENCE: During the writer's present trip down the eastern coast of South America, he has gathered a few facts regarding meteorological work on this continent which may interest the readers of SCIENCE.

The only complete meteorological service in

South America is that of the Argentine Republic, with headquarters at Cordoba. The Argentine meteorological office, established by the late Dr. B. A. Gould, has, since the date of Dr. Gould's resignation as its director (1883), been under the direction of Mr. W. G. Davis. This service has at the present time nine first-order stations, fifty-eight second-order and one hundred and twenty-six third order. Of the first order stations, the most interesting in many respects, is that on the Isla de los Estados (Staten Island), off the southeastern extremity of South America, where the meteorological conditions present many unusual features. In addition, Mr. Davis will soon have in operation six new mountain stations, reaching from Patagonia along the Cordilleras into northern Argentina. These new stations will, in connection with the Harvard meteorological stations in Peru, form a splendid series along the western coast of South America.

As yet the Argentine meteorological service makes no attempt to publish a daily weather map or to issue forecasts, the director believing that his first duty is to establish and equip his stations, and to study the general climatological features of the region. The *Anales de la Oficina Meteorologica Argentina* already number nine large volumes, containing meteorological data as to the climate of Argentina. Vols. X. and XI. are now in press, and contain, among other data, the observations made on the Isla de los Estados, and a discussion of them. In addition to the ordinary work directly connected with the weather service, the director has made studies of the climatic conditions of different parts of the country as bearing on the raising of various crops, on the manufacture of cotton, etc., and of the relation between atmospheric conditions and disease in Buenos Ayres and Cordoba. The physiological effects of different weather types have also been studied. The forthcoming census of Argentina will contain chapters on the climatology of the country, illustrated by charts, also the work of the director. The observers of the Argentine meteorological service now receive ten dollars (paper) a month for their services, and it is the policy of the director to do all he can to keep them interested in their work and to secure as accurate

observations as possible from them. He accomplishes this by constant personal correspondence with the individual observers, and by sending them such meteorological books as they may wish to see and which he is able to loan them. At present, for instance, he is sending out eighty copies of the new cloud atlas to the observers. Such a policy is worthy of adoption by other weather services.

In 1882 the capital of the province of Buenos Ayres was removed from Buenos Ayres to the new city of La Plata, in Latitude $34^{\circ} 55'$ S., Longitude $57^{\circ} 54'$ W. Here an observatory was built for carrying on astronomical, magnetic and meteorological work, and a provincial weather service has been organized under the direction of V. Bœuf. The headquarters are at La Plata, and there are at present some sixty stations in all. Sixteen of these take the ordinary observations at 8 a. m. and 8 p. m., and report by telegraph to La Plata every morning, while the remaining (pluviometer) stations report wind direction, cloudiness and rainfall. The La Plata Observatory publishes a daily weather map, based on these data, and this is the only map of the kind at present issued in South America. This is no forecast, and the map relates solely to the province of Buenos Ayres, and not to the republic as a whole. The chief office has a poor instrumental equipment, there being, at the time of the writer's visit, no self-recording instruments in operation. Cloudiness is estimated in quarters of the sky covered, instead of in tenths, as is usually the case. Hourly observations are made at La Plata every hour from 6 a. m. to 8 p. m.

At Rio de Janeiro meteorological observations are regularly made at the National Observatory, situated on the most easterly hill of the city, overlooking the harbor. The instrumental equipment is good, and observations are made eight times in every twenty-four hours (1, 4, 7 and 10 a. m. and p. m.). The observatory is under the direction of L. Cruls, who also has charge of the geographical and geodetic work of the republic. The meteorological observations have been published in various volumes of the *Annales de l'Observatoire*. M. Cruls has lately been the chief of a commission appointed

to inquire into and report upon the availability of a new site for the national capital. According to the Federal Constitution the capital must be removed from Rio de Janeiro to a more healthy location in the interior province of La Goyaz, at a considerable altitude above sea level. The above-mentioned commission has published an elaborate report, finely illustrated with photographs and charts, in which the geology, hydrography, climatology, etc., of the new site receive consideration. The work is a very interesting one.

Owing to the unfavorable atmospheric conditions at Rio, where the cloudiness is very considerable, there has for some years been a plan to remove the Observatory to a new location near Petropolis, in the Organ mountains, at an altitude of over 2,700 feet. Petropolis is a place much sought by the wealthier classes of Rio during the summer months, when yellow fever is most prevalent in the capital. It is high enough to be above the yellow fever zone, and its cool evenings and nights are much more agreeable than the hot nights of Rio. Furthermore, it is above the fogs which commonly hang over Rio harbor at night, and is therefore a much more favorable location for an astronomical observatory. The necessary funds for the removal are, however, lacking, and there is at present no prospect that the location of the Observatory will be changed.

There is a very common belief that the *climate* of Rio is unhealthy. This is by no means the case. The climate itself is a fine one in many ways, the unhealthy character of the city being due simply to the lack of attention to the simplest sanitary measures. Rio harbor itself, beautiful as it is, is the most deadly feature about the whole place. The waters are so foul, as a result of the improper disposal of the city's sewerage, that they are a veritable storehouse of disease. When the city adopts proper sanitary regulations and builds sewers to empty its drainage into the open ocean, instead of into the harbor, then Rio will become as healthy as a city with its beautiful situation deserves to be.

This letter is mailed in the Falkland Islands. Although the meteorology of these islands is most interesting, regular observations are no longer made here. Those made here in the

past have been discussed by Marriott (Quart. Jour. Roy. Met. Soc., London, 1880), and by von Dankelmann (Ann. d. Hydrog., Berlin, 1885). Mr. Davis, of the Argentine meteorological office, has sent two sets of instruments to the islands, but has not yet succeeded in securing regular observers. The climate of the islands is particularly interesting by reason of their far southerly position in the stormy prevailing westerlies of the southern hemisphere. Sunshine is so rare here in winter that, as an old resident of Port Stanley said to the writer to-day, "When we see the sun for an hour or two everyone says 'what fine weather we are having.'"

R. DEC. WARD.

PORT STANLEY, FALKLAND ISLANDS, July 29, 1897.

SCIENTIFIC LITERATURE.

Memoirs of the American Folk-Lore Society. Vol. V., 1897. Navaho Legends, Collected and Translated by WASHINGTON MATTHEWS, M.D., LL.D. With Introduction, Notes, Illustrations, Texts, Interlinear Translations, and Melodies. Boston and New York, Houghton, Mifflin and Company. Pp. 299.

A study of aboriginal life from the pen of Dr. Washington Matthews is always welcome, and this volume of Navaho Legends is no exception to the pleasant rule. Out of the abundant material collected by the author he has selected three legends for this publication: two incomplete rite-myths and the Navaho Origin Legend. The latter 'divides itself into four very distinct parts,' I. The Story of the Emergence; II. Early events in the Fifth World; III. The War Gods; and IV. The Growth of the Navaho Nation. The term rite-myth is defined as 'a myth which accounts for the work of a ceremony, for its origin, for its introduction among the Navahoes, or for all these things.'

The Navahoes, we are told, "celebrate long and costly ceremonies, many of which are of nine days' duration. Each ceremony has connected with it one or more myths, or legends which may not be altogether mythical." These rite-myths possess a degree of traditional value, and the last chapter of the Origin legend, our author says, 'is in part traditional or historical, and is even approximately correct in many of