

THE publication of Mr. Hutchinson's "Archives of Surgery," which has lapsed for six months, is now being resumed. No. 21 will appear in a few days, with additional letterpress as well as nine plates, and this number, which commences vol. vi., will contain a chronology of medicine from the fifteenth to the nineteenth century. The publishers will in future be Messrs. West, Newman, and Co.

A ROUGH list (No. 147) of rare and valuable books for sale, has been issued by Mr. Bernard Quaritch. The list includes a number of important archæological works, and a few works belonging to the natural sciences. Mr. W. F. Clay has also just issued a list of scientific books, including the works on chemistry lately purchased by him from the library of the late Prince Lucien Buonaparte.

WE have received a copy of *El Obrero*, a fortnightly paper published at Quito, Ecuador, with a summary of meteorological observations made at the astronomical observatory at that place for the month of September. Observations at that locality are very desirable, and we are glad to see that their publication is to be continued, and copies to be distributed to a number of places.

THE Meteorological Office of Argentina has just issued vol. ix. of its *Anales* in two large quarto parts, forming a splendid contribution to the climatology of that part of the globe. The first part, which contains 678 pages, gives the observations and the means deduced from them, for Cordova, during the years 1872-1892; while the second part, which extends to 400 pages, contains an exhaustive discussion of the data, and of the influence of the various elements on each other, e.g. of wind on temperature, &c. It is not possible to give in a brief space any summary of so comprehensive a work. We merely note that the monthly mean temperature varies between 73° in January and 50° in June. The rainfall varies considerably; the mean of a number of years gives about 26 inches. The Director of the Service is G. G. Davis, who is also a member of the International Meteorological Committee, and attended the meeting at Upsala in August last.

Science Gossip is now one of the brightest and most diversified monthlies for the lover of science. The January number is remarkably good. Mr. J. T. Carrington, one of the editors, contributes a number of replies he has received to a letter asking for an opinion upon the use of the word "scientist." The word is never allowed knowingly to appear in contributions to NATURE. A twin-elliptic pendulum, exhibited by Mr. Joseph Gould at the Royal Society's soirées last year, is described by the inventor, and seven exceedingly fine figures, drawn by means of the apparatus, are reproduced. There is also a summary of Schiaparelli's views about Mars; and a page of astronomical ephemerides and notes, as well as scientific news, and notes on various branches of natural science. We are glad to see that physical science comes in for a fair share of attention, but there is still room for improvement.

SIX volumes have lately been added to the comprehensive series of reprints, "Ostwald's Klassiker der Exakten Wissenschaften," published by Engelmann, of Leipzig. No. 54 contains J. H. Lambert's paper, published in 1772, on the projection of terrestrial and celestial maps. The following number is also on map projection, and is made up of memoirs by Lagrange (1779) and Gauss (1822). Translations of two papers by Sir Charles Blagden, from the *Philosophical Transactions* for 1788, appear in No. 56. The subject is the effect of various substances in lowering the freezing point of water. Treatises on thermometry find a place in No. 57, which includes five of Fahrenheit's papers, three of Réaumur's, and a paper by Celsius. The volume thus comprises all the important communications con-

nected with the foundation of the three thermometric scales. The classical work of Scheele on the nature of air and of fire is reprinted in No. 58 of the series; and No. 59 contains Otto von Guericke's experiments with Magdeburg hemispheres, carried out in 1672. The quaint illustrations of the original paper give this volume additional interest.

THE additions to the Zoological Society's Gardens during the past week include a Black-eared Marmoset (*Hapale penicillata*) from South-east Brazil, presented by the Lord Auckland; a Pardine Genet (*Genetta pardina*), a Two-spotted Paradoxure (*Naudinia binolata*) from West Africa, presented by Lieut. F. E. W. Batt; a Sparrow Hawk (*Accipiter nisus*), British, presented by Mr. A. M. Lees Milne; two Long-nosed Crocodiles (*Crocodylus cataphractes*) from West Africa, presented by Captain F. W. Raisin; a Robben Island Snake (*Coronella phocorum*) from South Africa, presented by Mr. G. R. Picton Thwaites; two Grey Parrots (*Psittacus erithacus*) from West Africa, deposited.

Erratum.—In NATURE of December 13, 1894, p. 157, column two, line one, for "of a" read "near the." The cascade represented in the note serves to show clearly the overhanging ledge of limestone.

OUR ASTRONOMICAL COLUMN.

THE GREATER NEBULA OF ORION.—The numerous photographs that have been taken by means of portrait lenses during the past few years, go to show that many of the so-called celestial spaces are really filled with filmy nebulosities. Dr. Robert's classical photograph greatly extended the limits of the old Theta nebula in Orion, but few astronomers would care to say that it represents the great "tumultuous cloud" in its entirety. Indeed, three photographs obtained by Prof. W. H. Pickering in 1889, with a portrait lens, revealed a large zone of nebulosity surrounding the belt and sword handle, and extending towards γ Orionis. The significance of these photographs has perhaps been somewhat overlooked, but attention is again directed to them by a paper communicated by Prof. E. E. Barnard to *Astronomy and Astro-Physics* for December. By means of a lens only 1½ inches in diameter and 3½ inches focus, Prof. Barnard has recently taken two photographs of the Orion constellation (for the lens takes in nearly the whole constellation at one view), with exposures of two hours and one hour fifteen minutes respectively. These pictures show "an enormous curved nebulosity encircling the belt and the great nebula, and covering a large portion of the body of the giant." Without doubt, the nebulous stream which has left its impression upon Prof. Barnard's photographs, is the same as that of which the existence was recorded by Prof. Pickering. The "Great Nebula" in Orion is therefore but a pigmy compared with the greater nebula thus revealed. It is not too much to believe that in a few years the immense band of nebulosity will be shown to be more or less filled with luminous haze, the old nebula being probably but the brightest part of a nebula involving the whole constellation.

THE TRANSIT OF MERCURY.—We have already noted observations of the transit of Mercury on November 10, 1894, made in Europe and America. News has now reached us of successful observations, made under the direction of Mr. J. P. Thomson, at Mr. F. D. G. Stanley's Observatory, Brisbane. The instrument employed was a 6 inch equatorial by Grubb, stopped down to four inches. Times of contact at egress were carefully taken. When the planet had come sufficiently above the horizon to be observable, it had advanced about two-thirds across the solar surface. The whole periphery of Mercury was remarkably clear and well-defined. There was no trace of haze or vaporous aureola around the disc of the planet, but a bright spot was distinctly seen near the centre. At the instant of internal contact at egress there was a faint phenomenon resembling ligament. This, however, was only momentary. When the external contact occurred, the planet's limb tangential with that of the sun was remarkably clear and sharp. There was not a trace of disturbance, and the phase was regarded as a pure