

at the end of one of his logical treatises (Soph. Elench. cap. xxxiv. 6). These are his words:—

"No other writer has surveyed the same field, or any great part of it, from a similar point of view. . . . The lucubrations of Herder and other diffuse writers of the same description, while some of them possess a merit of their own, are not concerned in the same design, or directed towards the same scope. Their object is to portray national character as resulting from combined influences—physical, moral, and political. They abound in generalisations, often in the speculative flights of a discursive fancy, and afford little or no aid for the close induction from facts, which is the aim of the present work. Nor have these inquiries often come within the view of writers on geography, though the history of the globe is very incomplete without that of its human inhabitants." A generation has scarcely passed away since these words were published in 1841; we are living in 1875; yet what a change has been effected in the condition of anthropological literature! The existence of such a dignified quarterly as the "Archiv für Anthropologie," bearing on its title-page in alphabetical order the honoured names of V. Baer, of Desor, of Ecker, of Hellwald, of His, of Lindenschmidt, of Luce, of Rüttimeyer, of Schaaflhausen, of Semper, of Virchow, of Vogt, and of Welcker, is in itself perhaps the most striking evidence of the advance made in this time, as being the most distinctly ponderable and in every sense the largest anthropological publication of the day.

Archæology, which but a short time back was studied in a way which admirably qualified its devotees for being called "connoisseurs," but which scarcely qualified them for being called men of science, has by its alliance with natural history and its adoption of natural history methods, and its availing itself of the light afforded by the great natural history principles just alluded to, entered on a new career. There is, as regards natural history, anatomy, and pathology, nothing left to be desired for the conjoint scheme represented by the periodical just mentioned, where we have V. Baer for the first and Virchow for the last, and the other names specified for the rest of these subjects; whilst archæology, the other party in the alliance, is very adequately represented by Lindenschmidt alone. But when I recollect that Prichard published a work "On the Eastern Origin of the Celtic Nations" ten years before the volume of "Researches," from which I have just quoted, and that this work has been spoken of as the work "which has made the greatest advance in Comparative Philology during the present century," I cannot but feel that the Redaction of the "Archiv für Anthropologie" have not as yet learnt all that may be learnt from the Bristol Ethnologist; and they would do well to add to the very strong staff represented on their title-page the name of some one, or the names of more than one comparative philologist. This the Berlin "Zeitschrift" has done.

Prof. Rolleston concluded by a few words on the possible curative application of some of the leading principles of modern Anthropology to some of the prevalent errors of the day.

MEETING OF THE ASTRONOMISCHE GESELLSCHAFT AT LEYDEN, AUGUST 13-16.

THE sixth biennial meeting of the Astronomische Gesellschaft, founded in the year, 1863, at Heidelberg took place this year at Leyden, according to the international character of the Society, and in conformity with the resolution of the last meeting at Hamburg. The first session was opened by the President, O. Struve, in the rooms of the magnificent Observatory at Leyden. Besides him were present the following members: Auerbach, Bruhns, Engelmann, Scheibner, and Zöllner from Leipzig; Winnecke, and Hartwig from Strassburg; H. G. Bakhuyzen, E. F. Bakhuyzen, Kaiser, Schlegel and Valentiner, from Leyden; Gyllden from Stockholm, Repsold from Hamburg, v. d. Willigen from Harlem, Förster and Tietjen from Berlin, Seeliger from Bonn, Bruns from Dorpat, Kortazzi from Nikolajew, Palisa from Pola, Bosscha from the Hague, Block from Odesa.

After an address from the Curator of the Leyden University, Baron Gevers van Endegeest, in which he spoke of the great merits of the late Director of the Leyden Observatory, the eminent Kaiser, and his exertions in promoting astronomical studies in Netherland, the usual statistical notices were read.

The President stated that after the conclusion of the Hamburg meeting the number of members was 231, that 28 new

members had been admitted, while the loss by death or otherwise had been 24, so that the actual number of members was 235. He gave biographical notices of some of the deceased members, Hoek, Mödler, Argelander, Winlock, and d'Arrest. The treasurer, Auerbach, read the balance of the two last years' income and expenses; the secretary, Prof. Winnecke, reported that the publications of the Gesellschaft published were: Publication No. xiii.; Spörer, "Beobachtungen der Sonnenflecken zu Anklam mit 23 Tafeln," and "Vierteljahrsschrift der Astron. Gesellschaft," (vol. viii., 3, 4, vol. ix., vol. x., 1, 2, 3). Prof. Scheibner reported on the library and mentioned, amongst others, the very valuable gift of all the manuscripts of the great astronomer of Gotha, Hansen, made by his widow to the society.

Prof. Bruhns gave an account of the progress of work on comets, undertaken by the Society. Of especial interest was the communication and discussion on Encke's comet.

Prof. Scheibner presented the first copy of a posthumous memoir of Hansen on the Perturbations of Jupiter, and explained the present state of the undertaking.

Prof. Bruhns exhibited an apparatus for the graphical solution of Kepler's problem, and explained its use. The same communicated a description of a new photometer, the execution of which was in progress. Prof. Zöllner explained then, by a model, some improvements of his well-known photometer, through which it becomes more easily adapted to all kinds of telescopes. Some observations of Mars, made by Kononewitsch, appear to indicate a real diminution in the brightness of Mars.

Prof. Bakhuyzen laid before the Society two manuscript volumes, bought lately by the Leyden Observatory, "the Areographischen Fragmente by Schröter" long reputed to be lost. Besides these, he exhibited the very interesting diagrams of Mars made two centuries ago by the celebrated Huyghens.

Dr. Engelmann of Leipzig announced that he is preparing for press an edition of Bessel's various smaller papers.

At the second meeting, August 14, the members Astrand (Bergen), Gelmuyden (Christiania), Hohwü (Amsterdam), Neumayer (Berlin) were present, and six new members were admitted.

The Council gave the Report on the progress of the Meridional Zone work by which all stars down to the 9th inclination between 80° north and 2 south declination are catalogued. The following observatories partake in this great work: Kasan, Dorpat, Christiania, Helsingfors, Cambridge (U.S.), Bonn, Chicago, Leyden, Cambridge (England), Berlin, Leipzig, Neuenburg, Nikolajew.

It was then to be decided where the Gesellschaft would meet the next time. After an invitation by Prof. Gyllden from Stockholm, the Gesellschaft decided on Stockholm for the seventh biennial meeting.

Prof. Förster of Berlin made a detailed communication on the situation of different Astronomical Institutions of Berlin, including those which are in the course of construction. The erection of the Astro-physical Observatory near Potsdam is in good progress. It has not yet been possible to appoint a Director for this extensive institution; meanwhile the services of Prof. Spörer, Dr. Vogel, and Dr. Lohse are secured for it. This new institution is intended to promote science principally in the higher optics, and their application to astronomy, while the Observatory at Berlin and the Institution for exact Numerical Computation under the direction of Prof. Tietjen will pursue their given ways.

Prof. Bakhuyzen exhibited a new wire micrometer, sent by Merz, and explained its peculiarities. Prof. Gyllden gave a new solution of Kepler's problem with the aid of elliptical functions, and distributed some copies of a memoir on the use of elliptical integrals in the theory of the motion of the heavenly bodies. Dr. Palisa explained the construction of the new meridian circle at Pola by many large plates. Different papers sent to the meeting by Astrand, Covarrubias, Lockyer, and Struve were laid on the table.

The Observatory at Brussels appears, after the loss of its founder and genial director, Professor Quetelet, to be in a critical position. The Astronomische Gesellschaft resolved unanimously, that it is to be wished that the distinguished activity exhibited by the Brussels Observatory in the determination of the places of stars with sensible proper motion, may be maintained, and if possible, improved by completing its instrumental means. It is in the interest of science to reduce and print the results of the measures in question as soon as possible.

At the third meeting, August 16, Covarrubias from Mexico, and Metzger from Java were present.

After the discussion of various business matters, the Zone observations, the computations on minor planets, and the reduction of the observations made during the transit of Venus 1874, December 8, Engineer Metzger made from Java different communications on the astronomical and geodetical proceedings at Java. Professor Scheibner spoke on the use of the theory of elliptical functions in the theory of perturbations, and communicated a prize-question concerning this matter by the Tablonowski Society at Leipzig. He also communicated very interesting results of his researches in dioptrics.—Professor Neumayer gave a statement on the regulations and field of labour of the Hydrographical Office at Berlin, and of the Scientific Institutions under its direction, the Observatory at Wilhelmshaven and the Deutsche Seewarte at Hamburg. Professor Winnecke described the new orbit-sweeper of the Strasburg Observatory, and announced the beginning of a review of the nebula. The equipment of the new Observatory at Strasburg is made with the direct intention of activity in this branch of astronomy.—Professor Bruhns remarked, that at the Leipzig Observatory charts for the nebulae are made, which are visible in a comet-seeker.—Professor Bakhuyzen communicated his researches on the latitude of Greenwich, and its diminution in the later years.

The election of the New Council concluded the meeting: President, Professor Struve; Vice-President, Professor Bruhns; Secretaries, Professors Schönfeld and Winnecke.

NOTES

THE *Valorous*, which accompanied the two Arctic ships, the *Alert* and the *Discovery*, as far as Disco, with coals and provisions, arrived at Plymouth on Sunday. She has really nothing remarkable to tell, which is so far satisfactory. Severe storms were met with in crossing the Atlantic, but all three vessels seem to have borne themselves well, though the *Alert* and *Discovery* each lost a whale boat, a loss which was made up to them by the *Valorous* before leaving Disco. The *Valorous* was the first to reach Disco, which she did on July 4, the other two not coming up till the 6th. The ships remained together at Disco till the 15th, the two exploring vessels filling up from their consort as much coals and provisions as they could stow away. During their stay at Disco, officers and men seem to have enjoyed themselves and to have been treated with the greatest courtesy and kindness by the Danish officials and the natives. Mr. Kraup Smith, the Inspector of North Greenland, had orders from his Government to pay every attention to the Expedition, and he carried out his instructions most liberally. He provided the Expedition with sixty-four dogs and an Esquimaux. While at Disco the naturalists of the three ships were employed collecting botanical and geological specimens on shore and dredging in and outside the harbour. A very large number of plants were found, some believed to have been previously unknown in this part of Greenland. The *Alert* and *Discovery* having been put into complete trim, the Expedition left Godhavn on July 15, and on the 16th the *Valorous* took leave of her consort ships, after seeing them fairly on their way to their work in the high north. The Danish officials' reports as to the weather are favourable, leading to the belief that the navigation of Melville Bay and northwards will be comparatively easy. It is hoped that suitable winter quarters will be found for the *Discovery* on the north shore of Lady Franklin's Strait, from whence hunting parties will issue. The *Alert* will then press onwards alone to the north, landing depots, building cairns with records at intervals of about sixty miles. The surest way of reaching the Pole, in Captain Nares's opinion, is not to risk failure by pushing forward away from the land. The *Alert* will probably winter in 84° and begin sledge travelling so as to get information of the country, and then in the summer of 1876 will push boldly northwards. The grand achievement will be done by a system of depots and auxiliary sledges, enabling the foremost to be absent about 112 days, and to advance upwards of 500 miles from the ship. The *Discovery*,

in the meantime, will go on exploring and advancing slowly. At the British Association on Tuesday, a paper by Mr. C. H. Markham, who accompanied his cousin to Disco in the *Alert*, was read; and Mr. Carpenter, who with Dr. Gwyn Jeffreys sailed in the *Valorous* for dredging purposes, added a few words. He said, when they parted with the *Alert* and *Discovery* they had every reason to believe from the state of the wind and weather that the Expedition would go on favourably. He thought it was more than probable that the *Discovery* was now in her winter quarters, and the *Alert* was somewhere further north. The letters which the ships would deposit would probably reach England before Christmas, and after that it is not likely they would hear anything of them until next summer, or perhaps later. On its way home the *Valorous* struck on a sunken rock to the north of Holsteinberg, but happily came off without serious damage. Temperature, soundings, and dredgings were made by the *Valorous* in its homeward journey, many interesting forms having been obtained. In a series of temperature soundings taken, 33° and a decimal was found to be the lowest. When the *Valorous* parted with the Expedition everybody on board the two ships was in perfect health.

THE annual meeting of the Ray Society was held at Bristol on Friday; Sir Philip Egerton presided. The Report of the Council stated that the arrears in the issue of volumes were at last overcome. The volumes for 1873 and 1874 had been distributed, and much advance had been made in the "Memoir on the Aphides," by Mr. G. B. Buckton, proposed as the volume for 1875. The very beautiful plates drawn and presented to the Society by Mr. Buckton are now with the colourer, and the whole will be sent to the binder probably in November. In addition to Mr. Mivart's monograph on the Tailed Amphibia, and Prof. Westwood's on the Mantidæ, Mr. G. Brady has promised a work on the Copepoda, and it is found that the MSS. and sketches of the late Mr. Hancock are sufficient to complete the long-promised monograph on the British Tunicata. The balance-sheet showed over 214*l.* in hand. The names of Prof. Bentley, Mr. Hudson, Dr. Gwyn Jeffreys, and Mr. Menell were withdrawn from the Council, and those of Dr. A. Carpenter, Mr. Collinson, Mr. Currey, and Dr. Millar were substituted for them. Sir Philip Egerton was re-elected president, Mr. S. J. A. Salter treasurer, and the Rev. Thomas Wiltshire secretary; and cordial votes of thanks were given to them for their services.

THE Nantes Meeting of the French Association for the Advancement of Science was brought to a close last Thursday. It has been decided with much propriety that next year's meeting will be held at Clermont Ferrand, where the new Observatory of Puy de Dome is sure to prove a great attraction. The Observatory will be then in working order, and everything will be ready for the inspection of visitors. Havre has been chosen as the meeting-place for 1877. This meeting is sure to be a success, Havre being almost to Paris what Brighton is to London. M. Dumas has been appointed a vice-president of the permanent council in room of M. Faye, who has resigned. The accession of M. Dumas in the governing body is sure to infuse new life into the Association. Most of the foreigners present belonged to Oriental nations, being Greeks, Ottomans, or Persians. We hope to give an abstract of the proceedings next week.

THE twelfth congress of the Italian Scientific Associations was opened at Palermo on Aug. 29 by Count Mamiani, in presence of an audience exceeding two thousand persons. Count Mamiani began by thanking the Municipality of Palermo for the hospitable reception it had given brother Italians as well as strangers, and explained that the future Congress will assemble under the new name of the Italian Association for the Promotion of Science. No longer representing a little aristocracy of *savants*,