

(4) "That it is desirable to express the subject of one's paper in its title, while keeping the title as concise as possible."

It is satisfactory to find no objections raised to this recommendation, since there is no doubt that there is room for much improvement in this direction. Such phrases as 'Further contributions towards our knowledge of the \* \* \* \*,' or 'Einige Beobachtungen über \* \* \* \*,' or 'Essai d'une monographie du genre \* \* \* \*' might well be dispensed with as superfluous. The ornithologist who, in 1895, published a book with a title of ninety-one words would seem to have forgotten the functions of a preface.

On the other hand, it is pointed out that certain periodicals, such as the *Bulletin de la Société Entomologique de France* and the *Sitzungsberichte der Gesellschaft naturforschender Freunde zu Berlin*, publish communications without any title, to the constant confusion of naturalists. The Committee begs to urge the reform of this practice, in which it can see no advantage.

(5) "That new species should be properly diagnosed, and figured when possible."

The only comment on this is the proposed omission of the words 'when possible.' With this the Committee sympathizes, but wishes to avoid all appearance of laying down a law that would constantly be broken.

(6) "That new names should not be proposed in irrelevant footnotes or anonymous paragraphs."

Naturally nobody supports such actions as are here objected to, but since some have doubted the possibility of the latter, it is as well to state that the suggestion was based on an actual case occurring in the Report of a well-known International Congress. The proposal of a new name, without diagnosis, in a footnote to a student's textbook, or in a short review of a work by another author, is by no means a rare occurrence. The Committee believes that

such practices are calculated to throw nomenclature into confusion rather than to advance science.

(7) "That references to previous publications should be made fully and correctly if possible, in accordance with one of the recognized sets of rules for quotation, such as that recently adopted by the French Zoological Society."

Dr. Paul Mayer, of Naples, writes: "Most authors are extremely idle in making good lists of literature themselves, and even opposed my correcting them according to our rules. There ought to be some training in this at our universities." This is confirmed by one or two other editors, but not all have the energy of Dr. Mayer. Some, indeed, oppose the word 'fully' on the ground that it leads to waste of time and space. The Committee would explain that the reference to a particular set of rules was intended merely as a guide to those who have not had the training that Dr. Mayer would like to see; they would also point out, in the words of the editor of the Cincinnati Society of Natural History, that 'what may be intelligible to the specialist is very puzzling to the general student.' Nowadays, when so many zoologists work with the aid of authors' separate copies, it is an enormous convenience to them to have the title of the paper at least indicated, and not merely the volume, date and pagination given. The Committee, therefore, cannot agree that this suggestion involves a waste of time.

#### ASTRONOMICAL NOTES.

##### SECTION A AT THE BOSTON MEETING, A. A. A. S.

It might be thought that the meetings of the Astronomical Conference and of the Mathematical Society, which preceded that of the American Association and were prolonged so as to interfere somewhat with it, would have detracted from the interest in Section A. While this may have been true in part, it did not reduce the number of the

papers nor their excellence. Forty papers were offered, of which twenty-six were read in full. As two days only were given to meetings for the reading of papers, a subsection was organized on the second day, to which were referred the papers in abstract mathematics. There were also four valuable reports on recent progress, two of which were read before the mathematical subsection and two before a joint session of Sections A and B.

Of the strictly astronomical papers, three were concerned with the teaching of the science; two each with subjects relating to stellar positions, to the work of observatories and to the study of planetary details; and one each with the subjects of photometry, personal equation, variation of latitude and solar eclipses. The short time allowed for these papers, which were all of interest and without exception well presented, prevented their discussion, as there was a perceptible feeling of hurry due to the desire to complete the program. This lack of discussion is to be lamented in scientific gatherings. Fortunately it did not exist at the Conference at Cambridge, where the discussions called out by the papers were a marked feature.

#### THE ASTEROID DQ.

THE discovery by Herr Witt at Berlin, August 13th, of a minor planet whose mean distance from the sun places it between the Earth and Mars is of great interest. It was detected by photography and given especial attention because of its rapid motion. Provisional elements were calculated by Herr Berberich, who has made a specialty of asteroid orbits, and were published in the *Astronomische Nachrichten*. The observations made since their publication show but small departures from the calculated positions, and confirm the substantial accuracy of the provisional orbit. Mr. A. C. D. Crommelin, of the Greenwich Ob-

servatory, published in the *Observatory* for October the results of calculations which assume the accuracy of the first orbit, but which can probably be relied on. As the perihelion distance is 1.13 and the eccentricity 0.23, the least distance of the planet from the Earth is 0.15 (about 14,000,000 miles), while that of Venus is 0.27 and of Mars 0.38. The planet, therefore, comes nearer the Earth than any other planet except the moon, and can be used with great advantage for observations to determine the solar parallax. Its sidereal period is 644.-734 days and its mean synodic period 2.-30692 years. It is approximately 17 miles in diameter and was of the 7th magnitude in 1894. It is surprising that it has not been detected before, but Mr. Crommelin is of the opinion that it has not been introduced into the system by the action of any other planet (the nearest approach to Jupiter is 3.2), but has always been one of the solar family. It will be interesting to learn if the photographs made so abundantly in recent years at Cambridge and elsewhere do not contain it, and undoubtedly they will be examined when the planet's positions in former times are determined.

The Earth passes the longitude of the planet's perihelion January 22d. The next opposition of the planet comes in November, 1900, the perihelion passage occurring February 12, 1901. The opposition in 1894 was a very favorable one, unfortunately lost; another will come in 1924, but that of 1900 will be sufficiently good to warrant careful observations for the solar parallax. In *Circular 34* of the Harvard College Observatory Professor Pickering gives the results of determinations of its brightness. Mr. Wendell's observations with the visual photometer give the mean  $12.13 \pm 0.04$ , which corresponds with the 11.39 at the distance 1. The photographic determination of its brightness is difficult, because an exposure of sufficient length to give any

image at all produces an elongated image, whose intensity is compared with difficulty with the circular stellar image. The photometric magnitude is  $12.70 \pm 0.08$ , which implies, when compared with the visual magnitude, that the color of the planet is redder than that of the comparison stars.

Professor Pickering notes that the planet offers opportunity for the examination of several photometric problems:

"First, the approximate diameter may be determined by comparison with the brighter asteroids and satellites, assuming that the reflecting power is the same. Secondly, the great variation in the distance of this object from the earth will afford an excellent test of the law that the light varies inversely as the square of the distance. The existence of an absorbing medium in the solar system will thus be tested. Thirdly, owing to the proximity of this object to the earth at opposition, its phase angle will vary by a large amount. It will, therefore, afford an excellent test of the law connecting this angle with the variation in brightness which has been found by two or three observers independently."

#### THE ANDROMEDA NEBULA.

SUSPICIONS of change in this nebula have been recently announced, but lack confirmation. Mr. A. A. C. Merlin, British Vice-Consul at Volo, Greece, telegraphed August 29th that a star near the nucleus of the nebula was visible in an 8-inch refractor. This information was not cabled to this country, because observations at Hamburg, Bamberg and Bonn, on August 30th and 31st, failed to confirm the observation. But the *Observatory* for September announced publicly the alleged discovery, and added that observations at Greenwich, August 31st, showed nothing unusual. On September 20th a despatch was sent from Kiel to this country and distributed announcing that "Seraphimoff, of Pulkowa, confirms a

stellar condensation in the center of the Nebula in Andromeda." Photographs at Harvard Observatory on September 20th and 21st, when compared with those taken in 1893, 1894, 1895, 1896, failed to confirm the confirmation, and the evidence of the suspected change seems to be decidedly in the negative.

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#### ZOOLOGICAL NOTES.

##### ANOTHER SPECIMEN OF NOTORNIS.

FOURTEEN years ago, in referring to the capture of the third living *Notornis*, the great flightless water-hen of New Zealand, the writer took occasion to remark that "it is by no means impossible that other specimens may be added to the three already known, since the localities at which these were taken were some 90 miles apart in a region little known." This expectation has recently been realized and the capture of a fourth *Notornis* is recorded at some length by a correspondent of the *London Times*. The species was based by Owen on some bones, including an imperfect cranium, collected by Walter Mantell so long ago as 1847, and as the remains were associated with those of *Moas* it was naturally supposed that, like them, *Notornis* was extinct. The discovery of a living bird in 1849 showed that fortunately this supposition was incorrect and that this, the largest member of the Rail family, had escaped being 'eaten off the face of the earth by gluttonous man.' It may be said here that Dr. Meyer, and doubtless correctly, considers the fossil and living species of *Notornis* as distinct species, the former bearing the original name *Notornis mantelli*, while the latter is called *Notornis hochstetteri*.

The first living *Notornis* was taken on the shores of Dusky Bay by some sealers who followed its tracks through a light snow, and a second was caught three years later on