SCIENCE.

FRIDAY, SEPTEMBER 19, 1884.

COMMENT AND CRITICISM.

THE Philadelphia meeting of the American association is credited with being the most successful up to this time. The total attendance was 1,249. Great Britain contributed 303; Pennsylvania, 246; New York, 161; Massachusetts, 87; District of Columbia, 84; New Jersey, 58; Ohio, 57; Connecticut, 32; and Virginia, 22. The membership was increased nearly twenty-five per cent, 515 new members being elected, and the number of members up to this meeting being 2,033. The number of papers read was larger than ever before; and it is to be hoped that the weeding-out of the trivial matters so often offered was carried to a greater extent than usual. There was a general feeling that there was too much going on. A large portion of the physicists were engaged as examiners at the electrical exhibition, and were, of course, interested in the meetings of the electrical conference. Somewhat less science, and somewhat more time to enjoy the junketing, would be more in accordance with the desires of many, if one may judge from the opinions expressed on the way home. A proposition to confine the reading of papers to the mornings would have met with many supporters.

THE International association, which has been so earnestly advocated by Dr. C. S. Minot, has now a more assured existence; thanks to the fund of twenty thousand dollars, which will be established through the liberality of Mrs. Elizabeth Thompson. Of this fund, five thousand dollars have already been paid to the association; and five thousand more will be paid next year on condition of ten thousand being raised from other sources. The income from this fund is to be devoted to research. Not only did Mrs. Thompson give liberally to this new society, but also gave one thousand dollars to the American association for the advancement of science, to be used in researches on light and heat. Mrs. Thompson takes great interest in the recent marvellous advances in the application of electricity and felt a desire to contribute, as far as lay in her power, to the advancement of our knowledge of the forces of nature. Appreciating the unity of energy, whether displayed as heat or light or electricity, Mrs. Thompson gave the money for researches as to the nature and sources of light and heat, in the hope that more may be learned of the connection which may exist between heat and light and electricity.

CONGRESS passes laws to favor science and literature in importations; and the treasury officials, under the pretence of protecting the revenue, interpose vexatious requirements, which defeat the purpose of congress. Are the treasury officials so devoid of administrative skill that they cannot devise some way to further the end of congress, and protect the revenue at the same time? Have colleges, for instance, no rights under the laws which treasury officials are bound to respect? What is the use of congress giving colleges the right to import current periodicals, duty-free, if these protectors of the revenue cause delays and expense, to incur which were worse for the colleges than to pay duty? Under recent decisions of the treasury, each successive part of a periodical for a public institution must be made the matter of a distinct oath, involving time and money, and the passage and re-passage of documents between the college and its agent at the port of entry. If all the wits these treasury officials have spent in devising these vexations are not exhausted by the process, they may perhaps calculate what new endowments colleges will now need to help these officials protect the revenue! It is hard to contemn the witless.

AMONG the meetings which have just been held in Philadelphia, was a friendly and informal gathering of some of the contributors to *Science*. About thirty persons came together, and listened to some statements which were made on the part of the managers, and expressed their views in respect to the position which this journal has taken and may take. The tone of the meeting was in all respects encouraging. A review which had been made of the subscription-list, by our publisher, shows that these pages now reach the chief scientific institutions and the chief scientific workers of the country. An effort will next be made to secure an extension of the circulation among other intelligent and educated classes.

Our contributors were invited at this meeting, and are always invited, to bear in mind that not only *Science* as a journal, but science in higher and broader aspects, will be best promoted by enlisting the attention of the general reader to the results which are attained in all departments of knowledge. This can only be done if our friends will write as persons who are specially informed, to persons who are not specially informed, on the subjects treated in our columns. One of our most valued contributors says that the man who is eminent in one department may have only an ordinary knowledge of other subjects: the greatest astronomer may be a tyro in entomology; the best of chemists may have no conception of elliptic functions. *Science* in its articles should be readable throughout; and, if our friends will continue to help us, we shall soon reach success.

LETTERS TO THE EDITOR.

**** Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

Phosphorescence in the deep sea.

The following paragraph by Dr. Studer,[1] the naturalist of the *Gazette*, has probably escaped the notice of those who have lately written regarding the protective nature of the phosphorescence of pelagic animals. He closes a general description of phosphorescence in marine animals, and the probable nature of it, as follows: 'Immer aber ist es ein von aussen kommender reiz, welcher das leuchten hervorbringt, so dass wir vielleicht die erscheinung als eine schutzvorrichtung für das tier betrachten dürfen.' He further says, on the same page, 'Wir dürfen vielleicht annehmen, dass es vorwiegend rote und orange strahlen sind, welche in diese tiefen gelangen (2–300 faden), dass die blauen und violetten schon vorher absorbiert und reflektirt werden. Daraus würde sich dann die vorwiegend rote färbung der Crustaceen als eine schutzfärbung erklären lassen, wie die vorwiegend blaue der am tage erscheinenden geschöpfe.'

ALEXANDER AGASSIZ.

Newport, Sept. 12, 1884.

[1] Ueber einige wissenschaftliche ergebnisse der gazellen-expedition . . . Verhandlungen des zweiten deutschen geographentages. Berlin, 1882.

Fish remains in North-American Silurian rocks.

The Rev. W. S. Symonds seems somewhat disturbed by my letter of July 11. He apparently fears lest the honor of yielding the earliest fish-remains should pass from England to North America.

My note to *Science* was purposely made very short, but I was quite aware of the fact that a *single* specimen of Scaphaspis Ludensis (not fish-remains) had been found in the *lower* Ludlow rocks. Mr. Symonds will excuse my reminding him that Sir C. Lyell mentions this discovery by Mr. Lee at Leentwardine in 1859. The statement may be found in his Elements for 1865: not having the book at hand, I cannot name the page. Professor Lankester also, in 1869, refers this species to the *lower* Ludlow. To have been unacquainted with the fact would therefore be inexcusable.

Mr. Symonds will probably be surprised to learn that I am a native of the county (Herefordshire) in which he has himself done so much excellent geological and archeological work. I have been familiar from boyhood with much of the country which forms the 'hunting-grounds' of the Woolhope club, and visited some of them as lately as 1879.

As an abstract of my paper will shortly appear, I refrain from giving details at present.

E. W. CLAYPOLE.

B. A. A. S., Montreal, Aug. 29.

Korean curios.

The article in *Science*, No. 82, entitled 'Korean curios,' contains some errors, excusable, however, when one considers the difficulty of speaking through two languages, and getting the information filtered back through the same channel. For these corrections, and the brief information embodied in them, I am indebted to one of the Korean embassy, Mr. Yu, who has been with me constantly for several months, and who now speaks very good English.

The ring worn upon the thumb of Min Yong Ik (who, by the way, is not a prince, but a noble) is the Chinese thumb-ring worn in archery, by means of which the bowstring is drawn back. These rings are often very expensive. I was shown one in Canton valued at one hundred and fifty dollars, and some are valued much higher. The Korean archery-ring for the thumb is nearly always of horn, and entirely different in shape.

The amber bead is not necessarily imported; as amber is found in Korea, and is recognized by the Koreans as being a kind of gum from pine. They regard the best and oldest, which is of light color, as being three thousand years old, the darkest and poorest as being one thousand years old.

The button represented in Fig. 4 can only be worn by high officials. Officers of the first rank wear