

A MEETING OF THE BRITISH ASSOCIATION.

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VERY year during the latter half of the month of August, is kept the great annual scientific holiday known as the Meeting of the British Association for the Advancement of Science. In some important town of the United Kingdom, and under the presidency of some distinguished philosopher, engineer, or physician, men of science from all parts,

home and foreign, meet together to announce their latest discoveries, or discuss their pet hypotheses, before an admiring circle of the outside world, or to mingle with their friends in rural picnics, social gatherings, and pleasant excursions to interesting manufactories, or sites of geological and antiquarian renown.

Happily these meetings are not confined to the regular professors of science, but are open to the general public, whether lovers of science or not. Any adult person can become a member or associate of the society for the year, and can take part in the discussions. The consequence is that every year many hundreds of people of both sexes assemble at the particular town selected, and flock to the Association lectures, or take advantage of the trips, in order to hear and see the "lions" of the scientific world, or the industrial and scenic wonders of the neighbourhood. Indeed we do not know a better way of touring in a locality, or thoroughly exploring a town, so as to see the sights best worth seeing, and with exceptional facility, than by visiting it while it is entertaining the British Association—for the town and vicinity which has been honoured by the sitting of the Association really entertains the latter as its guest for the time being. The more eminent and wealthy citizens invite to their homes the more famous and promising of the professors; others unite to defray the expenses of luncheons for the excursionists, or refreshments at conversaciones. Special performances of bands and choirs are given gratis; factories, gardens, and manors are thrown open to visitors; and everything that the town or its most liberal societies and personages can do to make the sojourn of the strangers within their gates an agreeable one is done ungrudgingly.

In this way one object, and a very important object, of the British Association is fulfilled—namely, the cultivation of a harmonious intercourse between the teachers of science and the world at large. The mutual advantages proceeding from this wise and genial policy have been considerable. On the one hand, the public have learned to appreciate the labours and results of science far more than they were wont to do; and, on the other hand, men of science have been taught to respect the ideas and the feelings of

the people. Science has gained substantially in the pecuniary support of the public, and the public has gained in the better diffusion of natural knowledge.

The British Association is a national rather than a metropolitan or provincial society, and though it has its London office, in Albemarle Street, Piccadilly, it is rather general than local, for it changes its place of meeting year after year. Now it is Edinburgh, now Dublin, now Plymouth, now Derby. Last year it was Sheffield, and this year it is to be Swansea.

The originator of the Association was Sir David Brewster, who in a letter to Mr. John Phillips, one of the secretaries of the Yorkshire Philosophical Society, proposed to start such an organisation; and, after being well received in that locality, the proposal was submitted to men of science all over the United Kingdom, and met with equal favour. The ostensible objects of the Association were (1) "to give a stronger impulse and a more systematic direction to scientific inquiry; (2) to promote the intercourse of those who cultivate science in different parts of the British Empire with one another and with foreign philosophers; and (3) to obtain a more general attention to the objects of science, and a removal of any disadvantages of a public kind which impede its progress." On the 27th of September, 1831, the British Association for the Advancement of Science was formally instituted at York, so that it is approaching its fiftieth year; indeed the annual meeting of 1880 will be its "jubilee."

Besides the good which the Association has done in promoting cordial relations between science and the general public, it has proved specially beneficial in fostering local societies formerly unfriended and unknown, or in giving rise to new ones; in stimulating the minds of aspirants to scientific fame, by the force of example or advice; in throwing new light on old problems by the friction of mind upon mind, or in starting fresh ones; and last, but certainly not least, in granting sums of money, entrusted in the hands of the Association by Government or private donations, to individual workers in science, for the purpose of enabling them to complete a novel invention or further a valuable research. There are some who think the British Association is beginning to decline; but that opinion is premature while such distinguished names as those of Dr. Carpenter and Dr. Richardson remain connected with the movement.

The officers of the Association consist of the president, vice-presidents, and general and local secretaries and treasurers. The president for this year is Prof. A. R. Ramsay, the eminent geologist. The annual meeting lasts for one week or longer, and the place is appointed by the general committee two years in advance. New members and associates are elected by the executive committee, sitting at the place where the meeting is held. Life members, entitled to receive the annual reports of the Association, may compound

for £10; annual members, entitled to receive the reports, pay £2 the first year and £1 every succeeding year of their membership; associates for the one meeting only pay £1. They are entitled to receive the report for that year at two-thirds of the publication price, but are not eligible, as members are, to serve on the committees or hold any office. Ladies may become members or associates on the same terms as gentlemen.

The meeting is usually held in some large public building, such as a college or institution connected with the town. In this a hall is set apart as a reception-room, where tickets of membership or passes for excursions can be got, by filling in the necessary forms and paying the necessary fees. Letters and telegrams can also be written, and sent by the branch post-office established there; and lists of available lodgings, or other information suitable to strangers, can be obtained. There are offices also in the reception-room for supplying information regarding all the proceedings of the meeting. The official "Journal," containing announcements of the arrangements for each day, is laid on the tables every morning for gratuitous distribution. Lists of all the members and associates present at the meeting are also issued, and placed in the room for distribution. The published reports of the British Association can be ordered in the room; maps of Sheffield, and plans of the building where the sections are to meet, with particulars of the time and place of lectures, are also available. Moreover, a general programme of all the excursions, with the trains and charges, is officially issued there; and a variety of newspapers, guide-books, novels, and refreshments can usually be obtained from private caterers.

The reception-room is generally a very gay and animated scene. Members of both sexes jostle each other for lecture-cards and excursion tickets. Dozens of letters and telegrams are being written and hastily sent off. Long-haired professors from Copenhagen and St. Petersburg wander about absently. Bewildered philosophers from Berlin and Vienna peer through their spectacles at the unwonted activity, or suddenly bow down in low obeisance as some English or American scientific worthy is introduced to them. For here distinguished *savants* who have only read about each other before have an opportunity of meeting face to face; ambitious young aspirants may gaze unseen upon the lineaments of masters they have venerated, to be disillusioned or not as the case may be; and ancient and rival theorists may converse amicably with the men they have differed from for the last half-century; and critics can be seen exchanging smiling courtesies with the innocent victims of their secret lash.

The general committee of the Association consists of members of council, presidents, authors of reports in the Transactions of the Association, members who have published works or papers calculated to advance the sciences comprised within the scope of the Association, delegates from learned societies, and others. There are also sub-committees appointed for recom-

mending endowments of research, and carrying out special scientific works—such, for instance, as the creation of a national wire-gauge, or a system of electrical measures. The business of the Association is divided into sections, each of which is governed by a committee, and has its president, vice-president, and secretaries. These sections are:—

- A. Mathematical and Physical Science.
- B. Chemical Science.
- C. Geology (including Physical Geography—or, as it is now called, Physiography).
- D. Biology (including Zoology, Botany, and Palæontology).
- E. Geography.
- F. Economic Science and Statistics.
- G. Mechanical Science.

These sections assemble in the rooms set apart for them, at stated times, in order to hear reports and memoirs on their several subjects read, and to discuss the matter submitted to them. Members are, of course, eligible to attend any of these sectional meetings, and as many persons wish to pay a flying visit to two or three different sections during the same hour, in order to hear or see particular celebrities, one may enter or leave the room whilst the proceedings are going on. Those who intend to read papers are required to notify the fact to the Secretary of the British Association at least a month before the meeting begins, in order that the time at which the paper can be read may be fixed beforehand. Indeed, when feasible, the original memoir, together with an abstract suitable for publication in the reports, should itself be sent in to the secretary before July 15th.

The first general meeting is usually held on a Wednesday evening at eight o'clock, in some large assembly-room or hall capable of holding several thousand people. Here, amidst a brilliant throng of scientific lights of greater and lesser magnitude, the outgoing president resigns the chair to the president elect, who delivers himself of an address upon some of the more important aspects of science. Formerly it was the custom to confine these dissertations to a cursory review of the scientific progress throughout the past year; but latterly the practice has crept in of treating questions which have a profound interest for the whole human race. The result is that the inaugural address of the President of the British Association is eagerly looked for by the public, and widely criticised by the press.

On the day following the inaugural meeting the regular business begins. The sections hold their first meetings, when the presidents deliver addresses on their special subjects; papers are read; excursions are carried out; exhibitions of industries and apparatus are thrown open by day, and concerts, balls, and conversaziones beguile the evenings. There are usually two or more evening discourses, too, on popular subjects, by recognised masters of science; and an exceptional lecture to working men, illustrated by experiment. On the following Wednesday another general meeting is held, and the business of the gathering concluded for the year.