

much would begin to exert a disturbing effect itself.

The alternative explanation is based upon analogy with atomic hydrogen, which can be definitely proved to recombine catalytically with great rapidity on clean glass walls of containing tubes: impurities such as water are shown to poison the walls and stabilise the atomic hydrogen. The

impurities could have an exactly similar effect in preventing the destruction of the atomic nitrogen in a 'useless' wall reaction. In this connexion it is significant that Rayleigh found the decay to be much influenced by the walls of the vessel, while Bonhoeffer and Kaminsky showed that the effect of the different foreign gases was particularly a function of the walls.

The British Association at Glasgow.

THE 1928 meeting of the British Association will linger in the memory as a delightful reunion, at which, without the announcement of any sensational discovery, much useful and important work was accomplished. Centred in the midst of one of our greatest industrial and commercial communities, it has accomplished valuable propaganda work for science, driving home into the mind of the ordinary citizen some appreciation of the fact that not merely his material prosperity and comfort, but also a large proportion of all that renders civilised existence possible, is dependent upon science and its advancement.

The formal proceedings commenced upon the evening of Sept. 5, when Sir William Bragg took over the presidential chair in succession to Sir Arthur Keith. Between seven and eight o'clock the St. Andrew's Hall began to fill with an immense audience, who whiled away the time listening to an excellent organ recital and watching the platform fill with well-known figures of the worlds of science and citizenship. At 8.30 precisely, Sir Arthur Keith appeared, followed by the president-elect, the Lord Provost, and the Principal of the University. The proceedings opened with short speeches from the two last-mentioned, who with kindly warmth and facile wit bade the Association welcome to Glasgow. Incidentally, it may be mentioned that an outstanding feature of the Glasgow arrangements was the cordial and smoothly working co-operation of all concerned in making the meeting a success. In his presidential address, so admirably conceived to fit a great centre of art and craftsmanship and applied science, Sir William Bragg held his vast audience throughout with that success to which auditors of his lectures at the Royal Institution and elsewhere are accustomed.

On Thursday, Sept. 6, the various sections settled down to work, and those members of the Association more particularly who flit from section to section, whither for the moment their fancy leads, appreciated to the full the advantage of having the various sections housed, each in its own appropriate department, within the one ring fence of the University.

The sectional proceedings themselves have proved of great and varied interest and have aroused much appreciative comment. Here and there, glints of the sunshine of humour have illuminated the sombreness of scientific exposition and debate, as for example the comment that was heard after a paper by one of our brilliant marine zoologists upon a method which he had devised for

collecting and recording upon a continuous band of silk gauze the minute forms of life constituting the plankton along the track of his ship. "What a wonderful young man!" the commentator said, "just fancy catching *whales* in a machine like that!"

As usual, during the week the centre of organisation has been the Reception Room in the Bute Hall of the University, the normally somewhat austere and cheerless interior of which, brightened up by the presidential banners hung round the gallery, has been from morning to night a scene of cheerful activity and bustle.

On Saturday, Sept. 8, the members for the most part forsook town for country—many accompanying one or other of the numerous excursions which had been arranged beforehand, others going off by motor-car on unofficial expeditions of their own. The good fortune of the Glasgow meeting did not fail it, for the gloom and rain of preceding days cleared away entirely and a pleasant south-westerly breeze with blue sky and heavy clouds gave to the full these light and shade effects which show western Scottish scenery to its greatest advantage. On Sunday again the same conditions held, and there were many who sought their sermons not in cathedral or church, but in the stones and running brooks of the Highland glens.

As was to be expected, social activities were a conspicuous feature of the Glasgow meeting: in fact, its activities may be said to have been inaugurated by a luncheon given on the opening day by the Glasgow Chamber of Commerce—the oldest of such chambers—to a number of the chief officials of the Association, while almost at its close came the annual dinner of the Clyde Navigation Trust, to which again were invited representative members of the Association's organisation. Both the usual evening parties were well attended. The first of these, on the evening of Thursday, Sept. 6, was given by the Lord Provost and Corporation in the magnificent City Chambers, and the invited guests had a delightful time—conversing with their friends, listening to an admirable programme of music, dancing, or looking on—and listening—during the—to many—unfamiliar evolutions of the Scotch reels. The second party, still larger though less crowded, was held in the spacious galleries of Kelvingrove, where the artistic and other treasures provided an endless source of interest.

On Monday, Sept. 10, a special honorary graduation ceremonial was held, in the presence of a somewhat restricted company owing to the Bute

Hall, in which graduation ceremonials normally take place, being in use as the Reception Room. The short list of graduands was restricted to the president and president-elect of the Association and foreign representatives, and consisted of Sir William Bragg, Sir Thomas Holland, Dr. Adrien Loir, representing the Association française pour l'Avancement des Sciences, Dr. F. L. Stevens, representing the American Association for the Advancement of Science, Prof. E. Suess, Prof. P. Zeeman, Prof. Shailer Mathews, and Prof. E. A. Westermarck. By a particularly happy arrangement the Frazer Lecture—founded in honour of Glasgow's greatest living representative in the world of scholarship, Sir James G. Frazer, author of "The Golden Bough"—had been made to coincide with the first evening discourse, and Prof. Westermarck in his dual capacity delivered on Friday evening a fascinating discourse upon "The Study of Popular Sayings"—remarkable alike for its subject matter, its admirable English, and the thread of humour which ran through it.

As usual at British Association meetings, a centre of particular activity was the Conference of Delegates. Perhaps the chief item of business there decided was the unanimous adoption of a resolution proposed by Dr. Charles R. Gibson urging upon the Government "to stimulate the employment by local authorities of the powers already conferred upon them by Parliament for the preservation of scenic amenity in town and country." This resolution followed a powerful address by Dr. Vaughan Cornish, and was strongly supported by

other speakers, including Lord Crawford and Sir John Stirling-Maxwell. An interesting announcement was made by Dr. Hamshaw Thomas that a conference summoned by Government had approved of a by-law prohibiting the public from uprooting ferns or other plants in places to which they had access.

It is not possible here to do more than merely mention one or two of the more important items of administrative business passed by the General Committee of the Association. Chief amongst these is the appointment of Sir Josiah Stamp as general treasurer in succession to Dr. E. H. Griffiths, whose retirement—forced by ill-health—was referred to in feeling and grateful terms by the president.

An invitation to meet in Bristol in 1930 was gratefully accepted, as well as a similar invitation from Leicester, the precise year being in this case left undetermined in the meantime. An invitation from Aberdeen was cordially appreciated, and a meeting there also foreshadowed in the near future.

Dr. Adrien Loir attended the Glasgow meeting and, announcing that the French Association would meet at Havre next year, extended a cordial invitation to such members of the British Association as do not go to South Africa to attend the meeting of the French Association. This invitation was, on their behalf, gratefully accepted by the General Committee.

The number of members registered was more than three thousand, as compared with 1912 at the last Glasgow meeting.

Obituary.

VISCOUNT HALDANE OF CLOAN, K.T., O.M., F.R.S.
THE death of Lord Haldane on Aug. 19 has removed from our midst not only a distinguished lawyer and statesman, but also a man of wide learning and a thinker of much ability and acuteness. I have been asked to give some account in these pages of his philosophical and scientific work, and of his labours in the cause of education. It is not a task easy to accomplish within the compass of a short article.

Richard Burton Haldane was born in 1856. His father, Robert Haldane, belonged to an old Scottish family, and was a Writer to the Signet in Edinburgh. His mother, who died in 1925, at the advanced age of over a hundred years, was a daughter of Richard Burdon-Sanderson, a Northumberland landowner. He went in 1873 to the University of Edinburgh and studied under Campbell Fraser. In due course he graduated with first class honours in philosophy, obtaining the Bruce of Grangehill Medal in metaphysics, and three years later the Ferguson Scholarship of the four Scottish Universities. Part of his student life was spent in Göttingen, where he worked under Lotze, for whom he always expressed profound admiration. In conjunction with his friend, Mr. J. Kemp, he translated Schopenhauer's chief work into English, the first of the three volumes appearing in 1883. He was Gifford Lecturer in St. Andrews

in 1902-4, and his lectures, entitled "The Pathway to Reality," were published in two volumes in 1903 and 1904. His next considerable work, "The Reign of Relativity," did not see the light until 1921, although he tells us it was projected on the day of his release from office as Lord Chancellor in 1915. There followed in 1922 "The Philosophy of Humanism," and, in 1926, "Human Experience: A Study of its Structure." Haldane was raised to the peerage in 1911; and received the Order of Merit in 1915. He was elected fellow of the Royal Society in 1906; and, in 1914, fellow of the British Academy. In 1907-8 he was president of the Aristotelian Society, and he contributed many papers both to its *Proceedings* and also to *Mind*.

Lord Haldane's first published article, written in collaboration with his brother, Dr. J. S. Haldane, on "The Relation of Philosophy to Science," appeared in 1883 in the volume of "Essays in Philosophical Criticism," dedicated to the memory of T. H. Green,—a volume which also contains contributions from several other men who afterwards became well known, such as Andrew Seth, Bosanquet, Sorley, Henry Jones, and W. P. Ker. In this essay the Hegelian position, to which throughout his life Haldane steadily adhered, is concisely and lucidly set forth. The term 'mind' has, he insisted, a twofold significance. It may