has not yet been written. At the age of twenty-three he led the British Arctic Air Route Expedition of 1930–31 in Greenland, a venture which is destined to be an important milestone along the road of polar history.

The full significance of the Greenland expedition has probably not yet penetrated the mind of the public, which was intrigued by and slightly critical of the dramatic events which surrounded the relief of Courtauld after his five months' sojourn alone on the ice cap. The narrative, now in the hands of a publisher, will correct some of the misapprehensions and will prove to the readers that here was a new type of expedition, following no former pattern: for Watkins ventured greatly without the lead of tradition; indeed, he constantly questioned the value of traditional methods and devised new and original ones of his own.

Led by Watkins, this group of young and inexperienced men set to work to disprove the wise saws of tradition, to dare great things and to carry them through. In a matter of weeks they were doing what was said to be safe only after years of experience—to drive dog-sledges, to hunt in the Eskimo method, to learn the kayak, to cross the ice-capped continent, to 'live on the land'.

In a crowded year those fourteen men accomplished enough journeys, by air, by sledge, by kayak and motor boat, to be a credit to half a dozen expeditions. A splendid set of men, it is true, but they will all admit that their results were due to the qualities of their leader and to the utter confidence they had in him. Of some of them the world will hear in due course, for they have been trained by the amazing young man whose loss we now deplore.

Of slight build, though strong and supple, somewhat shy and diffident in conversation, there was little in Watkins' appearance to mark him for what he was. Indeed, to the casual glance, his well-groomed figure, his neatly parted hair, his charming but hesitant manner, were signs merely of a pleasant young man who would always follow the precept of others and live quietly but efficiently in some ordinary walk of life. A conversation with him began to awaken doubts as to his being merely that. The alert poise of his head, the quick seizure of essentials, the calm statements of daring plans, all betokened a man of ideas and with the will to carry them out.

Even so, it was not until one saw Watkins in action that one realised his full qualities. It matters not what the action might be, wrestling with a friend, scaling a mountain-side, or, better still, as can be seen in the film of his expedition, 'rolling' a kayak. At one moment he is at ease, smiling and joking, like any other debonair young man; at the next he is tense and alert, head thrust forward, jaws set, and eyes shining with an expression almost grim, balancing his craft for a moment. He flings himself backwards and there is a flurry of paddle and arms, a swirl and a splash, and there he is again, relaxed and at ease, with a shy smile as though he were rather ashamed of his relapse into intense activity.

There must be added to this picture a shy dignity and a charm of manner, a modesty and a thoughtfulness which won all hearts. That is why Dr. H. R. Mill, in his appreciation in the *Times*, used the apt phrase, "so dear a scientific adventurer as 'Gino' Watkins"; that is why his companions would do anything for their leader, and why the news from Greenland has come as the shock of a bullet to his friends. F. D.

News and Views

Function of the British Association

IN suggesting as one reason for the continued success of the British Association the opportunity it affords, in an age of specialisation, for laymen to have intelligent contact with the seekings and findings of the scientific mind and for science to expound its own broad outlook, Sir Alfred Ewing, whose presidential address is printed in our Supplement this week, is on firm ground. The passing of the arroganee characteristic of an earlier age, the widespread belief that there are in science no longer any rigorous laws but only laws of probability, have made for a spirit which strengthens the sense of brotherhood between the scientific expert and the average man, who in his own way is also commonly a seeker after truth. The disappearance of dogma alone should assist the formation of an alliance which is overdue if we are to carry over into human affairs the methods of science and apply the dispassionate temper of science to the solution of our social, economic, and international difficulties.

Progress in Engineering Science

AFTER an engineer's review of the rapid progress in the study of the atom during the last few decades, including the discoveries of the neutron and the splitting of the lithium atom described this year, Sir Alfred Ewing referred to the important contribution of the Association to the advancement of engineering science. Early reports submitted to the Association demonstrated the conspicuous lack of science on the part of early British engineers, and the meagre contributions being made by them to the progress of hydraulics in contrast with the contributions of Italy, France, and Germany. The claim that the British Association by its reports and investigations, its discussions and committees, such as those leading to the establishment of the National Physical Laboratory and international standards for electrical units, has provided an invaluable scientific leaven, few would care to dispute. In his own recollections Sir Alfred Ewing covers the passing of many of the former fairy tales of science into the tissue of everyday life, and in the transition British engineering science has made as important scientific as practical contributions.

The Future of Science

A CONSPICUOUS feature in any such review is bound to be the realisation of the accelerated pace at which

development proceeds once the science has advanced well beyond its nursing stage. The pace of these developments is disturbing only because man is ethically unprepared for the bounty which engineering science has brought him. The world has been made practically instant in its interchange of thought, and international co-operation and brotherhood has become much more than a dream, were man fit for the tremendous moral responsibility which the new gifts and potentialities of life entail. Due to the slow evolution of morals, he has, however, not yet learnt to command himself, to relinquish old habits of thought, sovereignty, independence, which are inconsistent with the command of Nature now put into his hands. If the future is uncertain, at least those whose labours have brought such riches to man may be concerned but not despondent. They cannot but believe with Sir Alfred Ewing that the creative ingenuity which has brought these gifts will yet stir man to achieve in the future the better distribution of leisure and labour and the fruits of labour, which are essential to the continued enjoyment of his new powers. So we find the engineer man of science of the present century voicing the ideals of the great biologist of two or three decades ago.

John Locke, 1632–1704

THE tercentenary of the birth of John Locke occurred on Aug. 29 last, and to mark the event Messrs. J. and E. Bumpas, Ltd., have brought together at the Old Court House, Oxford Street, London, W.1, a well displayed and comprehensive series of engravings, manuscripts, and printed books, including the first edition of Locke's celebrated "Essay on the Human Understanding", as well as letters from Boyle, Newton, Sloane, and other men of his period. The collections are mostly in the ownership of the Earl of Lovelace, having happily suffered no disturbance or vicissitudes since their original assignment within the family. Various special loans that have been received greatly enhance the personal, artistic, and literary interest of the series. Thus, the impressive three-quarters length portrait of Locke, from Christ Church, Oxford, is there, whilst recently Lord Lee of Fareham has sent in an early plaster statuette of Locke, by an Italian hand. A letter from Locke, as a schoolboy, to his father, tells of seeing a "company of Quakers" in Westminster Hall, on business bent, whose leader's hat was "shook off"—recalling that Charles II. removed his own hat in the presence of Penn, explaining that it was the custom at Whitehall for only one person at a time to remain covered.

JOHN LOCKE was proposed for the fellowship of the Royal Society, by Sir Paul Neile, on Nov. 19, 1668, and at a meeting in the following week he was elected and signed the charter book. In that year, too, the illustrious Marcello Malpighi was elected. On St. Andrew's Day, Nov. 30, 1672, Locke was chosen a member of council, and Pepys and Evelyn were brought in at the same time. Earlier in the year, at an ordinary meeting held at Arundel House, Hooke had mentioned his interest in Otto von Guericke's experiments. There was one which he thought deserved to be tried before the Society, namely, that of a sulphur ball, when revolved and rubbed, having a considerable attractive power, and representing the properties of the earth. Mr. Locke, so we learn, intimated that himself had made some experiments with such a ball, and promised that he would bring it to the Society at the next meeting. At that meeting, however (Hooke being present), when he was called upon, Locke excused himself; he had forgotten it, and promised it for the next. Thereafter nothing happened, and, as a matter of fact, Locke's interests in the philosopher's doings were eclipsed by other pregnant interests. He seems, though, to have maintained constant intercourse with Boyle, who signs as "Yr. very affectionate friend", saying he looks up to Locke as a virtuoso.

Report on the Post Office

THE Report of the Committee appointed "to inquire and report as to whether any changes in the constitution, status or system of organisation of the Post Office would be in the public interest" has now been published (Cmd. 4149. London: H.M. Stationery Office, 9*d*. net). The Committee, which consisted of Lord Bridgeman (chairman), Lord Plender, and Sir John Cadman, is of opinion that the total transference of all Post Office communication services to a public utility company or statutory corporation is impracticable, and is neither necessary nor desirable. The Committee considers that the main modification in the status of the Post Office which is required is in respect of its relationship to the Exchequer, and it is recommended that the contribution of the Post Office to the Exchequer should be fixed, for the next three years, at £11,500,000 plus 50 per cent of any cash surpluses in excess of that figure, the residue to be available for the improvement and development of Post Office facilities and services.

As regards organisation, the Committee recommends that the control of Post Office business should be effected through the medium of a functional board presided over by the Postmaster-General. In addition to the Assistant Postmaster-General, the board would comprise four or five members of the Post Office staff, such functions as general operating and supply, engineering and research, finance, and personnel being represented upon the board. A senior permanent member of the board would act as vice-chairman and would be styled 'Director-General', with the duty of ensuring that board decisions were made effective and that continuity and unity of policy were maintained. A decentralisation of administration is recommended under regional directors who would exercise jurisdiction over all the services. Stress is laid on the necessity for fluidity of interchange of staff between headquarters and the provinces. The Committee believes that under these proposals the engineer will be able to play a larger and more effective part in the determination and execution of policy, and it is considered that there should be no bar to a technical officer holding an administrative post, provided he has shown himself to possess administrative ability. Con-