

taking office, announced the founding of the medal in commemoration of Henry Stopes; after mentioning Stopes's work on prehistoric man and Pleistocene geology, he called upon Dr. Marie Stopes, herself a pioneer in certain branches of geology, to make the presentation. She alluded to Mr. Kennard's varied work on this subject and, in particular, to the debt which many prehistorians owe to him for his detailed study of the contemporary land and freshwater mollusca as indicators of climatic and other environmental factors. The next award of the medal, the only one in Britain given for prehistory, will be in 1949, when, at the express desire of the donor of the fund, all members of the Geologists' Association will have a vote in the selection of the recipient or joint recipients.

Two Notable Geomagnetic Storms

DISTURBANCES of considerable intensity, comprising two distinct geomagnetic storms, occurred during the interval March 23–29. Displays of the aurora borealis have been reported; there was dislocation over long-distance radio channels and, in the case of the second storm, with submarine-cable telegraphy. The Astronomer Royal has given the following provisional data: ranges in the three elements (D , H and V) of the earth's magnetic field as recorded at the Abinger magnetic observatory during the three 24-hour intervals commencing March 23 at 11h. U.T.

	D	H	V
March 23–24	0.9°	300 γ	180 γ
„ 24–25	0.8	230	400
„ 25–26	1.5	430	510

A small abrupt movement in H at 17h. 16m. on March 23 might be taken as the beginning of this storm, which at first did not, however, increase rapidly. The aurora borealis was seen in Britain on each of the above nights. At 17h. on March 23, a biggish group of sunspots was nearly 50° east or four days before central meridian passage of the sun's disk—not a favourable position for any transient corpuscular stream ejected from the spot region to encounter the earth.

On March 28, another disturbance began suddenly at 6h. 35m. and rose to one of great intensity within a few hours. The range in D probably exceeded 2½° and that in H 1500 γ , but further details are awaited. The last storm of similar intensity occurred in 1941 on March 1–2, in which the D range at Abinger was 3.0°; 1770 γ in H and > 800 γ in V . At 6h. on March 28, the spot group was 13° or 1 day past the central meridian. The connexion between the spot region and this storm seems more probable, but at present there is an absence of reports of major solar flares having been observed with their accompanying radio fade-outs. Superficially, the recent solar conditions seem to contrast sharply with those preceding the magnetic storm of February 7–8 (see *Nature*, February 16, p. 187). There was then the great spot near the central meridian; numerous fade-outs had been recorded, and some distinctive solar flares had been observed.

Development of Atomic Energy in Great Britain

SPEAKING in the House of Commons on March 28 on the motion for the adjournment, Mr. John Wilmot, Minister of Supply and Aircraft Production, emphasized a point which has repeatedly been made by scientific men, namely, that there is no justification for the suggestion that the use of atomic energy for peaceful purposes will provide a quick solution of

industrial problems. The most probable use will be for the production of electrical power by big units employing steam or gas turbines. The possibilities of development, however, are immense, and Mr. Wilmot considers that the prospects for Great Britain in this connexion are bright. He admitted that the United States has valuable technical experience of which Britain is not fully informed; but experience is being gained through development work now proceeding and mainly financed by the Canadian Government. So far as Great Britain is concerned, he said that the Government is determined to push on with research and development with the utmost vigour; the central planning is in the hands of the Prime Minister and Cabinet, advised by the committee under the chairmanship of Sir John Anderson on atomic energy.

Turning to the work being done in Great Britain, Mr. Wilmot said that the work of converting the air-field at Harwell into the research establishment for atomic energy is proceeding. A team of experts is in Canada preparing plans for the highly specialized buildings required. The planning of the main production plant for fissile material is under way; and engineering and other expert staff is being recruited. No decision has yet been made on a site for the main production plant; a Government factory at Springfield, near Preston, will be used for a subsidiary plant for processing materials. The Government's policy, he said, is also to encourage and support research at the universities and elsewhere on fundamental problems in the field of atomic physics. Speaking of the amount the Government is prepared to spend on this field, Mr. Wilmot said that the limit of what can be done is physical and not financial. It is hoped to mobilize the best brains for the tasks ahead; and as large a sector of the national effort as can be spared will be used for this development, which the Government regards as of transcendent importance.

Biological Risks of Atomic Fission

SIR HENRY DALE, chairman of the Medical Research Council's Committee on the medical and biological applications of nuclear physics, has commented (*Lancet*, 399, March 16, 1946) on the letters written to the *Lancet* by Dr. Wiesner and Mr. Kenneth Walker on the biological dangers of atomic fission (see *Nature*, Feb. 23, p. 222). The issues raised by these letters are, Sir Henry Dale agrees, undoubtedly important; "but," he continues, "having knowledge of what has been done to deal with them, I can say with assurance that all the dangers mentioned in the two letters have received full consideration by those in charge of the Canadian and British Atomic Energy Projects, in connexion with which an elaborate health organisation has been built up". The possibility of genetic effects is being kept in mind and "authoritative opinion is being kept in touch with the nature of the risks to which workers concerned with an atomic energy installation might be exposed, and will require to be satisfied that these are reduced to a level which is not significant. . . ." New information hitherto covered by security restrictions will be released as soon as possible. "A study of the extensive existing literature on this subject," concludes Sir Henry, "would make possible a more correct assessment of the dangers involved than that which the letters of Dr. Wiesner and Mr. Walker might be taken to suggest." Meanwhile some work on the toxicity of uranium is the subject of an annotation in the *British Medical Journal* (397, March 16, 1946). Fair-

hall (*Physiol. Rev.*, 25, 182; 1945) has reviewed the inorganic industrial risks and says that uranium salts are very toxic and may cause chronic nephritis and degeneration of the liver. Gustafson, Koletsky and Free (*Arch. Intern. Med.*, 74, 416; 1944) reported severe tubular necrosis of the kidneys in dogs to which uranyl nitrate had been given intravenously, but sodium citrate, given either by the mouth or intravenously, protected the kidney against uranium poisoning. This was confirmed by other American workers. The reason why sodium citrate should protect the kidney in this way is apparently not known.

Bureau of Current Affairs

THE functions of the new Bureau of Current Affairs which has recently been set up by the Carnegie United Kingdom Trust has been outlined in the first of a series of information leaflets which the Bureau proposes to issue. The leaflet contains a brief summary of the policy of the Bureau and a prospectus of the activities which, gradually, it intends to develop. Although the Bureau does not seek to establish discussion groups, it proposes to act as a 'provisioning' body for those that already exist and those new ones which will be developed by various educational and social organisations. Of the services which the Bureau will offer there will be, first, a discussion-brief in pamphlet form called *Current Affairs*. This will be issued fortnightly and will be similar in size, style and purpose to the Army Bureau of Current Affairs bulletins so long familiar to the Services. The bulk of the twenty-page pamphlet will contain a popular exposition of some selected theme by an accepted authority; the preamble will be a 'layout for discussion' built up in the editorial office. The bulletin will, moreover, be illustrated in a variety of ways—with line-drawings, for example, which the group-leader could reproduce on his black-board, or with pictorial devices to illuminate some obscure point in the text. The second publication to be launched in the Bureau's immediate programme is a pictorial one called *Map Review*. This, too, will be published once a fortnight and will be produced in poster size and in colour. Its front side will embody in maps, pictures and diagrams the more significant events in current affairs for the particular fortnight, while its reverse side will carry full-scale maps delineating the major political, social and economic problems of our time. Displayed on the walls of any canteen, library or club, these map-reviews will provide a graphic summary of topical issues. The Bureau will also develop other pictorial media. *Current Affairs* and *Map Review* will probably first appear this month.

The war-time promotion of discussion groups has shown the necessity to give group leaders some basic training in the art of chairmanship. In the Services, particularly, many thousands of men and women, in short courses, have been taught the rudiments of discussion group leadership. These concentrated courses produced impressive results, and the Bureau proposes to organise courses on similar lines; a leaflet about them will appear in due course. Besides reference facilities at its London headquarters, the Bureau proposes to have a team of resident advisers to give callers guidance and direction in problems likely to harass the amateur leader of a discussion group. Travelling advisers will carry out similar functions throughout the country. The management of the Bureau's affairs has been initially assigned by

the Carnegie United Kingdom Trust to a provisional committee made up partly from the Trustees and partly from people of standing in British education. The chairman is Mr. P. R. Morris, vice-chancellor of the University of Bristol, and the members include Mr. E. Salter Davies, Sir George Dyson, Lord Elgin, Mrs. Walter Elliott, Mr. W. O. Lester Smith, Mrs. Barbara Wootton, Sir Robert Wood and Mr. J. Wilkie. The director of the Bureau is Mr. W. E. Williams, who created the Army Bureau of Current Affairs in 1941 and remained its only director until 1946. Anyone interested in this significant new experiment in adult education may obtain further particulars from the Director at 117 Piccadilly, London, W.1.

Road Research Board

THE Lord President of the Council announced in the House of Commons on April 1 that the Road Research Board of the Department of Scientific and Industrial Research has been re-constituted under the chairmanship of Sir Frank Smith, and that the terms of reference of the Board have been extended to enable it to deal more specifically with problems of road safety and traffic flow as well as with problems of road construction and maintenance. The change is to meet the relevant recommendations of the report of the Select Committee of the House of Lords on the Prevention of Road Accidents (the Alness Committee). The constitution of the Board is as follows: Sir Frank Smith (*chairman*), former secretary of the Department of Scientific and Industrial Research; Major H. E. Aldington, chief engineer (roads), Ministry of Transport; Prof. J. D. Bernal, professor of physics at Birkbeck College, University of London; Mr. J. L. Beckett, city surveyor, Leicester; Mr. R. V. Birch, on the board of several road transport companies; Mr. E. J. Buckton, consulting engineer of Rendel, Palmer and Tritton, consulting chartered civil engineers; Sir George Burt, engineer and contractor, John Mowlem and Co. Ltd., chairman of the Building Research Board, D.S.I.R.; Prof. J. H. Jones, professor of economics, University of Leeds; Mr. E. J. Powell, county surveyor, Glamorgan; Mr. J. Davidson Pratt, director and secretary, Association of British Chemical Manufacturers, chairman of the Road Tar Research Committee, D.S.I.R.; Mr. J. H. M. Richards, borough engineer, Hornsey; Mr. E. C. Ruffle, of Morris Commercial Cars Ltd.; Sir Alker Tripp, assistant commissioner of the Metropolitan Police; Col. T. U. Wilson, county surveyor, Lanarkshire. Assessors have also been appointed to the Board to represent the Ministry of Transport and other Government departments concerned with the work of the Board. The Board is charged with recommending a programme of research, advising on its execution and reporting each year on the work done. The Department of Scientific and Industrial Research will be responsible for conducting the researches.

Veterinary Education in Great Britain

IT was stated in the House of Commons on April 1 that the Government welcomes, in principle, the recommendations made by the Loveday Committee on Veterinary Education in Great Britain and by the Chancellor Committee on Veterinary Practice by Unregistered Persons, and it is intended as soon as practicable to introduce legislation to authorize a university to confer degrees which shall entitle the holders to registration with the Royal College of