follows: Two by the army, two by the navy, one each by the Smithsonian Institution, the Post Office Department, the Weather Bureau, the Bureau of Standards, the Massachusetts Institute of Technology and the University of Michigan. The society has received a large number of applications for membership, but it is the intention of the executive board to apply the severe requirements of such technical societies as the American Institute of Electrical Engineers and the American Society of Mechanical Engineers in passing upon candidates for membership.

THE ORGANIZATION OF SCIENTIFIC RE-SEARCH IN GREAT BRITAIN

Particulars of a "Scheme for the organization and development of scientific and industrial research" were issued on July 26 by the British Board of Education in a document signed by Mr. Arthur Henderson. The scheme is designed to establish a permanent organization, and it is pointed out that the research done should be for the kingdom as a whole, and that there should be complete liberty to utilize the most effective institutions and investigators available, irrespective of their location in England, Wales, Scotland or Ireland. There must, therefore, be a single fund for the assistance of research under a single responsible body.

The scheme provides for the establishment

- a. A committee of the privy council responsible for the expenditure of any new moneys provided by parliament for scientific and industrial research;
- b. A small advisory council responsible to the committee of council and composed mainly of eminent scientific men and men actually engaged in industries dependent upon scientific research.

The committee of council will consist of the lord president, the chancellor of the exchequer, the secretary for Scotland, the President of the Board of Trade, the president of the Board of Education (who will be vice-president of the committee), the chief secretary for Ireland, together with such other min-

isters and individual members of the council as it may be thought desirable to add.

The first non-official members of the committee will be: The Right Hon. Viscount Haldane of Cloan, O.M., K.T., F.R.S., The Right Hon. Arthur H. D. Acland, and The Right Hon. Joseph A. Pease, M.P.

The president of the board of education will answer in the House of Commons for the sub-head on the vote, which will be accounted for by the Treasury under Class IV., Vote 7, "Scientific Investigations, etc."

The first members of the Council will be: The Right Hon. Lord Rayleigh, O.M., F.R.S., LL.D., Mr. G. T. Beilby, F.R.S., LL.D., Mr. W. Duddell, F.R.S., Prof. B. Hopkinson, F.R. S., Prof. J. A. M'Clelland, F.R.S., Prof. R. Meldola, F.R.S., Mr. R. Threlfall, F.R.S., with Sir William S. M'Cormick, LL.D., as administrative chairman.

The scheme is designed to establish a permanent organization for the promotion of industrial and scientific research. It is in no way intended that it should replace or interfere with the arrangements which have been or may be made by the war office of the admiralty or ministry of munitions to obtain scientific advice and investigation in connection with the provision of munitions of war.

The primary functions of the advisory council will be to advise the committee of council on: (i) proposals for instituting specific researches; (ii) proposals for establishing or developing special institutions or departments of existing institutions for the scientific study of problems affecting particular industries and trades; (iii) the establishment and award of research studentships and fellowships.

The advisory council will also be available, if requested, to advise the several education departments as to the steps which should be taken for increasing the supply of workers competent to undertake scientific research.

Arrangements will be made by which the council will keep in close touch with all government departments concerned with or interested in scientific research and by which the council will have regard to the research work

which is being done or may be done by the National Physical Laboratory.

It is planned that the advisory council should act in intimate cooperation with the Royal Society and the existing scientific or professional associations, societies and institutes, as well as with the universities, technical institutions and other institutions in which research is or can be efficiently conducted.

It is proposed to ask the Royal Society and the principal scientific and professional associations, societies, and institutes to undertake the function of initiating proposals for the consideration of the advisory council, and a regular procedure for inviting and collecting proposals will be established. The advisory council will also be at liberty to receive proposals from individuals and themselves to initiate proposals.

It is contemplated that the advisory council will work largely through sub-committees reinforced by suitable experts in the particular branch of science or industry concerned. On these sub-committees it would be desirable as far as possible to enlist the services of persons actually engaged in scientific trades and manufactures dependent on science.

The advisory council will proceed to frame a scheme or program for their own guidance in recommending proposals for research and for the guidance of the committee of council in allocating such state funds as may be available. This scheme will naturally be designed to operate over some years in advance, and in framing it the council must necessarily have due regard to the relative urgency of the problems requiring solution, the supply of trained researchers available for particular pieces of research, and the material facilities in the form of laboratories and equipment which are available or can be provided for specific researches.

Office accommodation and staff will be provided for the committee and council by the board of education.

SCIENTIFIC NOTES AND NEWS

THERE is published in this issue of SCIENCE the address of the president of the American

Association for the Advancement of Science, Dr. W. W. Campbell. We hope to publish in subsequent issues other addresses given at the Pacific Coast meeting, together with reports of the proceedings of the sections.

FREDERIC WARD PUTNAM, emeritus professor of American ethnology and archeology in Harvard University, honorary curator of the Peabody Museum, permanent secretary of the American Association for the Advancement of Science from 1873 to 1898 and president of the association in 1898, distinguished for his contributions to anthropology, died at Cambridge, on August 14, in his seventy-seventh year.

JOHN ULRIC NEF, head of the department of chemistry in the University of Chicago, eminent for his contributions to organic chemistry, died on August 13 at the age of fifty-three years.

Dr. Francis X. Mahoney has been appointed health commissioner of Boston.

THE Ontario government has appointed a commission to investigate the production and shipment of nickel in relation to the conditions created by the war. The members are Mr. G. T. Holloway, of London (chairman); Professor W. G. Miller, provincial geologist; Mr. McGregor Young, K.G., Toronto, and Mr. T. W. Gibson, deputy-minister of mines.

THE directors of British Dyes (Limited) are establishing a research department, and have invited Dr. G. T. Morgan, F.R.S., of the Royal College of Science for Ireland, Dublin, to become the head of the department. They have named a technical committee to consist of Dr. M. O. Forster, F.R.S., chairman, Dr. J. C. Cain, Dr. G. T. Morgan, F.R.S., and Mr. J. Turner. An advisory council, under the chairmanship of Professor Meldola, F.R.S., is also to be appointed.

Dr. Edward W. Ryan, Scranton, chief of the American Red Cross in Belgrade, has been decorated by both the Serbian and French governments for his work in the hospitals where typhus fever has been raging.

Dr. John W. M. Bunker, of the department of hygiene and sanitation, and sanitary in-