

least three fourths terminate during the first four weeks.

The industries which contribute the greatest number of fatal accidents are railroad employments and agricultural pursuits, each group being responsible for approximately 4,200 fatalities each year. Coal mining contributes more than 2,600, and building and construction work nearly 1,900. General manufacturing, while employing large numbers, produces only about 1,800 fatal accidents. When the fatality rates are considered, metal mining ranks as most hazardous, with a rate of 4.0 per 1,000, coal mining coming next with a rate of 3.5, and fisheries and navigation following with a rate of 3.0 per 1,000. Manufacturing industries as a whole rank lowest, with a rate of 0.25 per 1,000, but the fact should not be overlooked that this low average rate covers manufacturing groups varying widely in hazard, including, on the one hand, boiler making and the various departments of the iron and steel industry, in some of which fatality rates as high as those in metal and coal mining have prevailed, and, on the other hand, the textile and clothing industries, in some of which the risk of fatal accident is practically negligible.

These estimates are derived from the best sources available. At the present time there are no entirely complete and trustworthy industrial accident statistics for even a single important industry in the United States. This lack of trustworthy industrial accident statistics is due to the absence of any uniform requirements in the various states as to the reports of industrial accidents. Prior to the establishment of workmen's compensation systems, no state received reports of all the accidents, or even of all the fatal accidents in its industries.

THE AMERICAN SOCIETY OF AERONAUTIC ENGINEERS

THE American Society of Aeronautic Engineers, which was organized at the request of Mr. Thomas A. Edison, and which was requested by the secretary of the navy to appoint two members to serve on the navy's ad-

visory board, has, after polling its members for their selection, nominated Messrs. Henry A. Wise Wood and Elmer A. Sperry, together with a special committee of the following aeronautic engineers and experts to cooperate with them:

Orville Wright, Glenn H. Curtiss, W. Starling Burgess and Charles M. Manly, to advise on matters pertaining particularly to the theory and construction of aeroplanes and aeronautical motors.

Peter Cooper Hewitt, John Hays Hammond, Jr., and Joseph A. Steinmetz, to advise on matters pertaining particularly to the application of aircraft for warfare.

Captain Thomas S. Baldwin, A. Leo Stevens, Ralph H. Upson and Raymond B. Price, to advise on matters pertaining particularly to dirigibles, balloons and parachutes.

Messrs. Henry A. Wise Wood and Elmer A. Sperry constituted the popular selection, being nominated by eight tenths of the total votes. Both are scientific engineers, recipients of the Elliott Cresson and John Scott gold medals of the Franklin Institute, respectively, awarded for inventions of a basic character. Mr. Wood is president of the American Society of Aeronautic Engineers, vice-president of the Aero Club of America, and was a member of the aerodynamics laboratory committee appointed by President Taft in 1912. Mr. Elmer A. Sperry is vice-president of the American Society of Aeronautic Engineers. The Sperry gyroscopic stabilizer for aeroplanes in June, 1914, was awarded the first prize for safety devices of \$10,000, by the French government.

The special committee of aeronautic engineers and experts was appointed as a result of many suggestions received from members of the society who, in sending in their selections, pointed out that no two men in aeronautics to-day have expert knowledge of every branch of the science of aeronautics. In most cases, therefore, they proposed additional names of experts in different branches of the science.

In the organization of the American Society of Aeronautic Engineers it was provided for the addition of directors to be appointed as

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 RESEARCH 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 of:

- 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. McClelland, F.R.S., Prof. R. Meldola, F.R.S., Mr. R. Threlfall, F.R.S., with Sir William S. McCormick, 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