

ing ports of the country has shown in a series of articles that trawler owners are losing money owing to the low prices realized for the catches of their boats.

The difficulties of the industry appear to be due to the greatly increased cost of labor, coal, gear and repairs, to the very large quantities of fish recently landed, and to the lack of facilities for transporting fish from the ports to the inland markets. Working costs can not easily be reduced under existing conditions, and the only remedy for the situation would seem to lie in better distribution and an increase in the consumption of fish. The help of the government is sought to improve the means of distribution, but the trawler owners complain that the government takes no interest in deep-sea fishing as an industry.

The view taken by the National Sea Fisheries Association is that more would be done for the fisheries if the ministry of agriculture and fisheries were organized in two divisions, each with its own secretariat and each with its own vote. The association suggests that a fisheries division of the ministry should be developed, with three branches, dealing respectively, with administrative, executive and research affairs, and that the functions to be distributed among these branches should include the administration of the fisheries vote, the promotion of fisheries legislation, matters relating to international fishery conventions or agreements, executive work bearing on the catching, preparation, marketing, and distribution of fish, and researches into the natural history of fish and their treatment as food after capture.

A further proposal is that England and Wales should be divided into seven fishery areas, and that each area should be in charge of a commissioner of fisheries with a staff of inspectors and fishery officers sufficient to enable him to deal with all problems of catching and the distribution of fish in his jurisdiction. Each commissioner would act as the connecting link between the government and the industry, between capital and labor within the industry, and between the producer and the distributor. The staff, it is proposed, should

give assistance in matters affecting the safe dispatch, transport, and delivery of fish from port to market at reasonable rates, in improving conditions at existing markets and inaugurating new markets, in the daily telegraphic publication of wholesale prices at port and market, and in the improvement of fast lateral railway traffic for the carriage of fish from the coasts to the main centers of population.

#### THE SIXTH NATIONAL EXPOSITION OF CHEMICAL INDUSTRIES

THE National Exposition of Chemical Industries returns to the Grand Central Palace in New York, where it will be given during the week of September 20 to 25, 1920, inclusive. *The Journal of Industrial Chemistry* states that this year's exposition will be the largest distinctly industrial exposition ever held. In 1915 the first exposition was composed of 83 exhibitors, the second increased to 188, the third to 288, the fourth to 334, and the fifth, in which the available space was much restricted and exhibitors were held to a minimum, admitted 351 exhibitors. The present number of 358 can not be much increased because of the limited amount of space remaining. Another floor has been added, giving four floors of the Grand Central Palace, each of which covers a city block. To the first exposition there came 63,000 visitors, to the second 80,000, and this has steadily increased till at the last the attendance exceeded 111,000.

This year there will be three special sections: the Electric Furnace, the Fuel Economy and the Materials Handling Section. The two latter are new sections. The first will, as its name implies, be one of electric furnace exhibits; the Fuel Economy Section will consist of exhibits of machinery and apparatus, furnaces, producers, stokers and all devices for the economic utilization or more efficient combustion of fuel. The possible exhaustion of our fuel reserves in the not far distant future and the present high cost of fuel make this section one of much interest to all industrial plants. The Materials Handling Section will be a series of exhibits of machinery and equipment for the handling of material, such as

conveying, transporting, elevating, and included in this will be weighing, measuring and power transmission equipment. So important have these mechanical features become for all industrial plants due to the shortage and high wage for man power that an unusual interest is expected in this new section.

The program for the exposition will have session on subjects the phases of which will be developed in the exhibits of these latter two sections. There will be sessions on chemical engineering for which an elaborate program is planned. Motion pictures which will have an interest for mechanical men will form part of the program, and there will be popular public addresses as well.

#### THE WORK OF THE NATIONAL COMMITTEE ON MATHEMATICAL REQUIREMENTS

THE National Committee on Mathematical Requirements held a meeting in Chicago on April 23 and 24. The principal topic discussed at this meeting was the preliminary report on "Junior High School Mathematics" prepared for the committee by Mr. J. A. Foberg. After detailed discussion and some amendment and revision, the report was adopted by the committee and its publication as a preliminary report authorized. It has been submitted to the U. S. Bureau of Education for publication as one of its secondary school circulars.

Reports of progress were made by subcommittees on the training of teachers, experimental schools and courses, disciplinary values and transfer of training, elective courses in mathematics for high schools, and mental tests. It is expected that preliminary reports on all of these topics will be ready for consideration by the committee at its next meeting on September 2, 3 and 4. The attention of experimental schools throughout the country is called to the report on this subject being prepared for the committee by Mr. Raleigh Schorling of the Lincoln School, New York City. Any experimental school or schools giving experimental courses in mathematics who desire to be represented in this report should communicate with Mr. Schorling

without delay, if they have not already done so. A subcommittee on the standardization of terminology and symbolism, with Professor D. E. Smith as chairman, and a subcommittee on junior college mathematics, with Mr. A. C. Olney as chairman, were appointed. J. W. Young, Raleigh Schorling and W. F. Downey were authorized to take steps to initiate investigations into the mathematical elements entering into various industries, professions, vocations, etc.

A budget for the coming year based on the recent appropriation of the General Education Board of \$25,000 for the use of the committee in completing its work was adopted. It is hoped that the increase in the item allowed for traveling expenses in this budget will make it possible for representatives of the committee to reach educational meetings in all sections of the country where such representatives are desired to discuss the various reports of the committee. Nearly 70 organizations are at present actively cooperating with the committee and it is hoped that many others will communicate with the chairman in the interest of furthering the nationwide study and discussion which is already underway. J. W. Young, 24 Musgrove Building, Hanover, N. H., and J. A. Foberg, 3829 North Tripp Avenue, Chicago, Ill., were re-elected chairman and vice-chairman, respectively, of the committee for the ensuing year.

J. W. YOUNG,  
*Chairman*

#### THE ELLIOT MEDAL IN ZOOLOGY AND PALEONTOLOGY

TERMS of the award of the Daniel Giraud Elliot Medal for zoology are written in the deed of gift to the National Academy of Sciences as follows:

One such medal and diploma shall be given in each year and they, with any unexpected balance of income for the year, shall be awarded by the said National Academy of Sciences to the author of such paper, essay or other work upon some branch of zoology or paleontology published during the year as in the opinion of the persons, or a majority of the persons, hereinafter appointed to be the judges in that regard, shall be the most