I should like to see such a book that would set forth on the elementary side the best arrangement of work, the accuracy desirable and attainable in any given process, short cuts, rough approximations and rough checks and on the more advanced side, in the use of differences, interpolation, mechanical quadrature, numerical solution of equations, calculations with infinite series.

Even more advanced topics might be introduced, but that question involves another aspect of numerical calculation about which I wish to say a few words in closing. The solution of problems for mathematical physics in general, and of many problems in geophysics in particular, are often satisfactory enough from the purely analytical point of view, but rather unsatisfactory from the point of view of numerical calculation. It would be desirable if mathematicians would think more of this aspect of the question, for, after all, the final test of a theory is numerical comparison with the results of observation. The book on numerical computation of which I have spoken might contain as a second part a discussion of the numerical solution of differential equations, of integral equations, of the treatment of series that converge for the pure mathematician, but not for the practical computer, in short, a number of topics continually increasing as our mathematical theories develop. The easiest way to have such a book kept up to date would be for each mathematician who develops a theory that leans in any way towards practical application not to leave the analysis until he has considered the question of putting his formulas into numbers by the easiest and safest way.

These remarks can be summarized very briefly: Geophysics involves mathematics to a greater extent than do most physical sciences. Elementary mathematics is involved because of the extensive tabulations and numerical computations that are required. Even elementary mathematics, judiciously used, may serve to check the vagaries of an over-active imagination and to warn the inquirer off paths that lead nowhere, except perhaps to confusion. Advanced mathematics is needed, not merely because geophysics is a part of mathematical physics in general and has given rise to many interesting mathematical problems, but chiefly because geophysics is peculiarly dependent on mathematical methods.

W. D. LAMBERT
U. S. COAST AND GEODETIC SURVEY

## SCIENTIFIC EVENTS

### THE LONDON MUSEUM OF SCIENCE AND TECHNOLOGY

THE resolution given below in regard to the London Museum of Science and Technology has been adopted by the Royal Society, the British Association for the Advancement of Science, the British Science Guild and about thirty other scientific societies of Great Britain, and has been submitted to the Board of Education:

We the undersigned, being deeply interested in the progress of science and in its application to industry, desire to bring to the notice of H.M. Government the inadequacy of the accommodation provided for the collections at the Science Museum, and the disadvantages resulting to science and technology therefrom. Several committees have reported on the Science Museum, notably in 1874, 1884, 1889 and 1912, and all of them have emphasized the importance of the collections and the value of the assistance which they can give to science and industry; they have also commented on the unsatisfactory character of their accommodation; to-day the Science Museum is still the only national museum housed in buildings most of which were neither designed nor constructed for museum purposes.

The collections which illustrate the development of science and of large and important branches of technology are in some respects unique. They include many selected examples of modern practice and are of the greatest value to students as well as to investigators and all who are concerned with these departments of knowledge, but they can not be fully utilized for consultation and study in the crowded and insufficiently lighted galleries where they are now displayed, while the risk from fire is very great.

The Departmental Committee which reported in 1912 considered that a total of 265,000 square feet of exhibition space was immediately necessary, which should be increased subsequently by an additional area of 287,000 square feet. They sketched out a plan for a building in three blocks, and recommended that the immediate need should be met by the erection of the Eastern and Central Blocks. We understand that the work at present authorized will bring the exhibition area up to a total of 120,000 square feet only, or less than one half of what the Committee recommended, and only about 30,000 square feet in excess of that now available.

We venture, therefore, to urge upon H.M. Government the importance of completing the whole of the Eastern Block of the new Science Museum building forthwith, thus raising the space available for exhibition to 180,000 square feet, and since this will not provide all the space which was considered immediately necessary in 1912, of preparing plans for a central block as soon as possible.

### STANDARDIZATION IN GERMANY

STANDARDIZATION of industrial production has been one of the important factors in enabling Germany to maintain its industrial machine intact, in the face of the obstacles now confronting that country, according to a bulletin by Dr. P. G. Agnew, secretary of the American Engineering Standards Committee, recently issued by the American Engineering Standards Committee. Dr. Agnew recently returned from Europe,