

the stalls by a red star. As compared with last year, the exhibits in the Research Section have nearly doubled, while those in the Trade Section are about the same with a somewhat larger proportion of red stars. Some of the illustrations convey more information as to the working parts of the instruments than in past years, and are more useful to prospective buyers. Those on pp. 28, 165, 176 and 179 may be taken as examples. Discourses were delivered on January 4 by Captain G. C. C. Damant on "Diving in Deep Water and Shallow", on January 5 by Prof. A. F. C. Pollard on "Mechanical Amplification of Small Displacements" and by Sir Richard Gregory on "Science and Citizenship" jointly to the visitors to the Exhibition and to those attending the Exhibition of School Apparatus by the Science Masters' Association.

Engineering and Economics

IN an address to the Society of Engineers on October 4, entitled "Engineering and the New Economics", Dr. H. Chatley suggested that the engineer can contribute to the solution of economic problems of to-day in three ways. In the first place, the engineer can study the problem in terms of realities, such as goods, energy and services, and endeavour to disentangle them from the cobwebs of finance. Secondly, some engineers by entering politics can assist in spreading ideas on the realities of life. Thirdly, the engineer both by speech and by writing can help to explode some old fallacies and to educate the public in newer ideas and especially in that of the impartial application of scientific method to public affairs. Dr. Chatley illustrated his argument in respect of the last point by outlining in some detail the way in which the engineer can assist in the development of a sound fiscal policy in regard to coal and oil as well as in regard to the prevention of atmospheric pollution, the preservation of amenities, the question of values and prices, international debts, and population limits, and concluded by asserting that it is the duty of the engineer to understand the problems which have been raised by the misapplication by others of his skill. Scientific method should play an important part in citizenship since the classification of facts, the recognition of their sequence and significance and the habit of forming an unbiased judgment upon the facts which are characteristic of the scientific frame of mind are also essentials of good citizenship.

Awards for War Inventions

THE final report of the Royal Commission on Awards to Inventors, which has now been published (Cmd. 5594) shows that, in all, 1,834 applications were received by the Commission, of which 369 were dealt with by the Commission direct. Of the remaining 1,465, which were in the first instance considered by the Investigating Committee, 846 were withdrawn or apparently abandoned, 75 were referred to and later heard by the Commission and 544 were rejected by the Committee as having no reasonable chance of success. In 200 of them the claimant exercised his right of a personal appearance before

the Investigating Committee. The total amount of awards was about £1,500,000, and a summary of the awards is appended to the report. Claims submitted to the Commission before the final date fixed by Royal Warrant (March 31, 1932) were virtually determined by December 31, 1933, but there were at that date certain claims the position of which had not been finally determined. The claims in question have since been otherwise disposed of, but while further sittings of the Commission were not necessary, the submission of a final report was delayed. The actual sittings of the Commission covered a period of fifteen years, and in that time the Commission lost by death its chairman, Lord Tomlin, as well as two members, Mr. A. C. Chapman and Prof. W. E. Dalby.

Commonwealth Fund Fellowships

THIRTY-FOUR of these fellowships, enabling British university men to devote two years to study and travel in the United States of America, are offered for award in 1938. Twenty-four are open to candidates of British descent, domiciled in the United Kingdom, who are graduates of universities therein, unmarried and less than thirty years of age; two to graduates of a university in a British dominion or colony; five are 'service fellowships' open only to candidates holding Government appointments in the British Empire over-seas; and three are Home Civil Service fellowships. The Committee of Award (chairman, Sir Walter H. Moberly) give primary consideration to intellectual ability, personality and initiative; account is also taken of character and health. Application, in the prescribed form, approved by the authorities of the college or university of which the candidate is or has been a member, must reach the Secretary to the Committee (35 Portman Square, W.1) by February 1. In 1937, awards were made to candidates from Cambridge (5), Cardiff, Glasgow, Liverpool (2), London (4), Manchester (2), Oxford (9), Reading, St. Andrews, New Zealand and South Africa. The subjects of study were very various, comprising: physics (3), chemistry (2), biophysics, zoology, physiology, medicine (2), engineering, architecture (2), law, political science, economics, international relations, education, modern languages, English literature, American literature, theology. The fellowships, in some respects complementary to the Rhodes scholarships, were established with the view of promoting mutual amity and understanding between Great Britain and the United States.

Constable's Portrayal of Weather

MR. L. C. W. Bonacina's paper on "John Constable's Centenary: His Position as a Painter of Weather" (*Quart. J. Roy. Meteor. Soc.*, October 1937) is a notable contribution to that affiliation of the Nature studies of the artist and scientific worker which is so much to be desired. The character of the country in which Constable was born and bred evidently influenced his practice of emphasizing cloud effects in landscape. The Suffolk countryside where the celebrated pictures of Flatford Mill, Dedham Mill and Stoke-by-Nayland were painted is the plain seen by the traveller on the London and North-Eastern Railway when