on research and development, only about 6 per cent was on basic research. In making a strong plea for more support of basic research, especially in colleges and universities, Dr. Waterman said that this would ultimately reduce development costs by indicating the best fields of research. The Federal Government was supporting research in academic institutions but wished to see industry increasing its support for such research as well as its support of basic research in its own laboratories. Industry was the largest employer of scientific personnel, employing in January 1957 nearly two-thirds of the scientists and engineers in the United States, including 528.000

engineers, 152,000 scientists and 58,000 administrators

of such activities, about a third of whom were

# engaged on research and development. Scientific and Technical Personnel

THE National Science Foundation of the United States has announced that at the request of the Bureau of the Budget it will be responsible for establishing and maintaining a programme of national information on scientific and technical This will cover their training and personnel. utilization, compensation levels, supply and demand, and other related data. The Foundation will organize the register, co-ordinate and analyse all information gained, and ensure that the findings be made public. Much of the information recommended will be produced by extending existing statistical records. Other projects will have to be initiated to meet the objectives of the programme. The decision of the Bureau to ask the Foundation to organize the register arose from recent recommendations of an advisory panel on 'Scientific Manpower Data Requirements'. The panel recommended a programme of fifteen projects, of which the most urgent were considered to be : first, an identification of scientific and technical occupations; secondly, a periodic survey of organizations employing scientific and technical personnel; and finally, a periodic study of the demand outlook for various categories of scientific and technical personnel in each major activity. The last item would include analyses of employment and production growth trends and also the changing roles of particular classes of scientific and technical personnel.

#### Productivity Measurement in Great Britain

A REPORT by T. E. Easterfield (Department of Scientific and Industrial Research. Productivity Measurement in Great Britain : a Survey of Recent Work. By T. E. Easterfield. Pp. ii + 79. London : Department of Scientific and Industrial Research, 1959) attempts to survey recent or current British studies of productivity measurement at the level of the individual factory, together with such other related work as seems particularly illuminating. Studies based on overall statistics of whole industries are included only where they throw light on the problems of more detailed studies. The report first briefly discusses the main purposes of productivity measurement : overall economic analysis and planning; planning, target setting and the forecasting of requirements of industries or firms; the spotlighting of cases that stand out by reason of high (or low) productivity; and investigation of other factors that may affect productivity, and their relative importance. The main sections are the problem of multiple inputs; the problem of multiple outputs; the study of factors affecting productivity and the translation of results for practical application.

### Education in the Commonwealth

A PAMPHLET, "Commonwealth Education : The United Kingdom Contribution" (prepared for the Commonwealth Relations Office and the Colonial Text by Office by the Central Office of Information. Duncan Crow. Pp. 68+4 plates. (London: H.M. Stationery Office, 1959.) 2s. 6d.), gives an impressive picture of what the United Kingdom is already doing in this field, to which, in the twelve years April 1946– March 1958, Britain contributed under the Colonial Development and Welfare Acts £35 million in grants and loans, of which £16 million were for primary and secondary education, £6 million for technical and vocational education and £13 million for higher education. The pamphlet brings together, moreover, facts about an effort which embraces also what is being done through the British Council for the welfare of the 7,000 odd full-time Commonwealth students in the United Kingdom, some of whom are numbered among the 728 training as teachers in the United Kingdom and for the teaching of English in the Commonwealth. There is a section dealing with the Colombo Plan trainees and with the 6,566 Commonwealth students in United Kingdom technical colleges, and another with the remarkable growth of Commonwealth universities between 1938 and 1957, in which period the number of institutions has increased by 50 per cent, their teaching and research staff has trebled and full-time students have nearly quadrupled. No attempt is made to indicate the total cost to Great Britain, and, impressive as it is, the pamphlet shows clearly enough how much more remains to be done and the opportunities which interchange schemes, for example, offer for expansion.

### Public Library Statistics in Great Britain

"STATISTICS of Public (Rate Supported) Libraries in Great Britain and Northern Ireland 1957-1958' Library Association, 1959. London : (Pp. 33. 7s. 6d.) gives the number of public library authorities in the United Kingdom on March 31, 1958, as 569, serving an estimated population of 51,597,000 and holding a stock estimated at 68,600,000, approximately 16 per cent being reference stock. Issues for home reading are estimated at about 431,863,000, an increase of 12,435,000 on 1956–57, and total expenditure was £17,522,000 compared with £15,906,000 in the previous year, of which £4,254,000 and £3,863,000 respectively were expenditure on books. Full-time non-manual staff numbered 12,990 compared with 12,760 in 1956-57, and at least 1,870 part-time paid staff were also employed. There are at least 32,755 public library service points in the United Kingdom, including 569 municipal central libraries and county headquarters, 1,333 full-time branches, and 30,853 part-time branches, centres, etc., as well as 200 mobile libraries.

## Instrument Construction

THE Russian monthly *Priborostroenie*, which is described as a "scientific, technical and production" journal, is being produced in an English translation under the title *Instrument Construction* (No. 1; 1959. Translated from the Russian. Pp. 38. Published monthly. Subscription £6 yearly post free (17.10 dollars U.S.A. and Canada). Special rate of £3 yearly post paid (8.55 dollars U.S.A. and Canada) available to University and Technical College Libraries. Single copies 15s. each (2.15 dollars U.S.A. and Canada). London: Taylor and Francis, Ltd.,