

of 52). 85. Copper (continuation of 72). 86. Pharmaceutical Products (continuation of 55). 87. Washer Waste. 88. Soda (continuation of 47). 90. Gas (continuation of 62). 91. Coke. 92. Leather Belting. 93. Collars (continuation of 60). 94. Coffee. 95. Magnesias. 96. Machinery (continuation of 58). 97. Oil (continuation of 64). 98. Paints (continuation of 50). 99. Glyceryl Phosphates (continuation of 66). 100. Fiber. 101. Milling (continuation of 59). 102. Fruit Juice. 103. By-products Recovery. 104. Copper (continuation of 85). 105. Illumination (continuation of 73). 106. Silverware. 107. Cottonseed. 108. Insecticides. 109. Refractories (Glass). 110. Toilet Articles. 111. Distillation. 112. Laundering (continuation of 80). 113. Flavoring (continuation of 75). 114. Enameling. 115. Bread (continuation of 48).

The Mellon Institute is now active in promoting the progress of science and in stimulating further inquiry by making available to the workers in pure and applied science complete and detailed reports of researches conducted under its auspices;⁴ it maintains an attitude of welcome towards prospective industrial research organization⁵ and has established stable cooperative relations with other research laboratories; and it is continuing its policy of educating the public to the realizable functions of research.⁶ While effectively com-

⁴ Twenty-two journal contributions were made during the past Institute year. For a list of the scientific papers published by the Institute from 1911-1914, see Bacon, *J. Frankl. Inst.*, November, 1914, 629-32. Eighteen journal articles were published by the Institute during 1914-1915 (Sparks and Noyes, *SCIENCE*, N. S., Vol. XLV. (1917), 169).

⁵ The following institutions have entered the field of industrial research: the universities of Kansas, Washington, Toronto and Akron, the Georgia School of Technology and the University of Finland (Helsingfors, Finland). The establishment of industrial fellowships in accordance with the practical system in operation at the Mellon Institute, is being considered by Massachusetts Agricultural College, Harvard University, Washington State College, McGill University, University of Sheffield (England), Sir John Cass Technical Institute (London), Sydney University (New South Wales, Australia), and University of Tokyo (Japan).

⁶ See, in this connection, Bacon, *SCIENCE*, N. S., Vol. XLV. (1917), 34.

batting pseudo-research in industry by reducing the cost of systematic investigation to a minimum, the Mellon Institute has been able to demonstrate to industrialists that, under favorable conditions, numerous manufacturing problems can be advantageously studied outside of plant laboratories. This has resulted in the extension of the practise of referring certain of the problems of industry to university laboratories for study.⁷ However, this cooperative relation must be stabilized and promoted by the demonstration of its advantages by the institutional laboratories involved. About seventy per cent. of the problems assigned to the Mellon Institute for study during the five years, March, 1911, to March, 1916, were solved to the satisfaction of the donors, and like results can undoubtedly be obtained by similarly well-founded establishments. On every side the research men of our universities are needed for the execution of real attainment in the technical world with its difficulties, wastes and unexplored lines of manufacturing.

The administration of the Mellon Institute is now constituted as follows:

Raymond F. Bacon, Ph.D., Director;
Edward R. Weidlein, M.A., Associate Director;
Samuel R. Scholes, Ph.D., Assistant Director;
E. Ward Tillotson, Jr., Ph.D., Assistant Director;
John J. O'Connor, Jr., M.A., Assistant Director;
Martin A. Rosanoff, Sc.D., Head of the Department of Research in Pure Chemistry.
R. F. BACON

PITTSBURGH, PA.,

March 1, 1917

SCIENTIFIC EVENTS

GRANTS FOR SCIENTIFIC AND INDUSTRIAL RESEARCH IN ENGLAND

WHEN the establishment of a separate department of scientific and industrial research was announced in December last, Lord Crewe

⁷ For detailed presentments of the present-day technochemical problems which could be referred to university laboratories for investigation, see Bacon, *J. Ind. Eng. Chem.*, 7 (1915), 535; and *J. Soc. Chem. Ind.*, 36 (1917), 9.

stated that the chancellor of the exchequer was prepared to advise the government to devote a sufficient sum to cover operations during the next five years on a scale which would provide four, or perhaps five, times as much for cooperative industrial research as had been spent for the whole purposes of research hitherto. According to *Nature* the civil service estimates just issued include the sum of £1,038,050 to the Department of Scientific and Industrial Research, being a net increase of £998,050 upon last year's amount. Grants for investigations carried out by learned and scientific societies, etc., are estimated at £24,000, and grants to students and other persons engaged in research at £6,000. These grants will be distributed by a committee of the Privy Council, on the recommendation of the Advisory Council, to promote the development of scientific and industrial research in the United Kingdom, and will be subject to such conditions as the committee may think necessary. The £1,000,000 grant in aid of industrial research will be paid to the account of the Imperial Trust for the encouragement of scientific and industrial research. The expenditure of the trust will be audited by the comptroller and auditor-general, but any balance remaining on the account will not be surrendered at the close of the financial year. Grants will be made by the directions of the committee of the Privy Council over an agreed period to approved trade associations for research, to supplement the funds of the associations, and payments in respect of such grants will not be liable to surrender by the grantees at the end of the financial year. It is understood from Lord Crewe's remarks on December 1 that for the next five years or so about £200,000 a year would be available for scientific and industrial research, so that apparently the grant of £1,000,000 is the sum which is to be drawn upon for this purpose. The amount estimated for salaries, wages and allowances in the new department is £7,250, which includes £1,500 for the secretary and £850 for the assistant secretary. Traveling and incidental expenses are estimated to amount to £800.

THE GENERAL MEDICAL BOARD OF THE COUNCIL OF NATIONAL DEFENSE

A GENERAL medical board of the Council of National Defense was organized on April 17 at a meeting attended by leading physicians from all parts of the country. The board is to have general supervision of the mobilization of the nation's medical resources during the war. Dr. Franklin Martin, of Chicago, will be chairman of the board, which will also include the leading members of the executive committee of the board, announced a short time ago. The list follows:

- Dr. Franklin Martin, chairman.
- Dr. F. F. Simpson, vice-chairman.
- Surgeon General William C. Gorgas, United States Army.
- Surgeon General William C. Braisted, United States Navy.
- Surgeon General Rupert Blue, United States Public Health Service.
- Colonel Jefferson R. Kean, director of military relief, American Red Cross.
- Dr. William H. Welch, professor of pathology, Johns Hopkins University.
- Dr. William J. Mayo, Rochester, Minn.
- Dr. Edward Martin, professor of surgery, University of Pennsylvania.
- Dr. Victor C. Vaughan, dean of the medical school of the University of Michigan.
- Dr. George H. Simmons, editor, *Journal of American Medical Association*, Chicago.
- Dr. Richard P. Strong, professor of tropical medicine, Harvard University.
- Dr. Joseph M. Flint, professor of surgery, Yale University.
- Dr. Stuart McGuire, professor of surgery, University of Virginia.
- Dr. John Young Brown, professor of surgery, University of St. Louis.
- Dr. Charles H. Mayo, Rochester, Minn.
- Dr. Thomas W. Huntington, professor of surgery, University of California.
- Dr. Hubert A. Royster, secretary of Southern Surgical Association.
- Dr. Charles H. Peck, professor of surgery, Columbia University.
- Dr. Winford Smith, superintendent, Johns Hopkins Hospital.
- Dr. Frederic A. Besley, professor of surgery, Northwestern University.
- Dr. George W. Crile, professor of surgery, Western Reserve University.