

BRITISH CHEMICAL RESEARCH.

SIR.—The recent merging of the outstanding British chemical companies into a single organization is hailed by scientific men as one of the greatest steps towards the economic prosperity of the chemical industry. For the first time in history, Britain will be able to bring to bear upon the problems of organic chemical research an adequate organization, and it would be an impertinence on my part to discuss in this connexion the general questions of research in industry. There is, however, one aspect of the question to which I would like to draw particular attention—namely, the application of research to medicinal and therapeutic organic chemicals.

The last twenty or thirty years have seen the advance of medicine in the direction of accurate recognition of the nature of disease, and the discovery of the infective agents causing it. While there is, undoubtedly, an economic advantage to be derived from the prosperity and advance of huge commercial organizations, one of their fundamental duties to humanity lies unfulfilled if disease and suffering are left for their suppression to the chance efforts of isolated investigators. Many diseases—syphilis, tuberculosis, malaria, sleeping sickness, to mention only a few—are among the scourges which exact an untold tribute of misery from millions every year, and although the cause of these troubles is accurately known, in only a few cases is any selective drug available. It cannot be too strongly insisted upon that the present condition is one which need not endure. Whilst congratulating the German investigators upon their achievement which has culminated in the introduction of drugs of the type of salvarsan and Bayer 205, we may envy the facilities and resources upon which they are able to draw; it should be realized that there is now no obstacle in the way of establishing such facilities for ourselves, and, quite apart from commercial rivalry, it should be a question of honour with us to push on in the same direction in an effort to free humanity from some of its scourges. In this connexion, too, I would recall the words of the president of the American Chemical Society:

“ . . . synthetic organic chemistry will prove itself to be, perhaps, the most potent factor of all those that are working towards the advancement of civilization and the peace of the world. I refer to the use of chemical compounds in combating disease and, as a result, prolonging life . . . the modern science of chemotherapy. . . . Malaria, spread in the most fruitful part of the globe, is incapacitating and destroying millions, and we have used but one drug—quinine—to fight it.”

Thus, not only are British human resources concerned, but the whole untapped resources of Empire, now locked up by the spectres of malaria and sleeping sickness, might be released.

What is needed is the vision and broadmindedness of a commercial organization, such as that just formed, that will make possible the formation of a band of synthetic organic chemists, biochemists, and medical men, who, freed from the trammels of routine, will be able to work together upon chemotherapeutic problems. More, also, is necessary; the men concerned must be able, not only to place their hands upon every known compound, process, and method of treatment, but they must also be able to appreciate the difficulties of each other's craft. The medical men must realize that the task of building up the necessarily complex substances which alone seem to have therapeutic value is a matter for careful thought and patient experiment; the chemists must realize the intense difficulties of obtaining and correlating medical and clinical data, and, above all, the commercial organization which endows such a product must be prepared to wait, not months, but years for the fruitful results which must of necessity arise from such a combination of resources.

Finally, it appears to me to be a cogent argument that if, for economic reasons, the cotton industry found itself able to finance research on textiles, then the chemical industry should, for humanitarian reasons, finance research for the full utilization of the resources of chemistry.—I am, etc.,

ARNOLD RENSCHAW, M.D.

Laboratory of Applied Pathology and Preventive
Medicine, Manchester, Oct. 29th.

Obituary.

FRANCIS WARNER, M.D., F.R.C.P.,
Consulting Physician to the London Hospital.

WE have to announce with regret the death, on October 26th, in his eightieth year, of Dr. Francis Warner. He was one of the first to enter on a field of clinical research, which has since been very assiduously cultivated. He was physician to the East London Hospital for Children at Shadwell, as well as to the London Hospital, and at an early stage of his career he began to devote much of his time and energies to establishing a system by which the physical and mental defects of children might be scientifically estimated and recorded.

He received his medical education at King's College Hospital and graduated M.B.Lond. in 1872; in the following year he took the M.D. degree and became F.R.C.S.Eng. He was appointed medical registrar of the London Hospital in 1877, and assistant physician in 1879. In 1883 he was elected a Fellow of the Royal College of Physicians of London. He published a number of books and essays on his favourite subject, including works on the study of children and on the nervous system of the child. During the years 1893-96 he undertook a laborious investigation of the mental condition of some hundred thousand children in 106 schools; his results were published in the *Journal of the Royal Statistical Society*. In 1896 he wrote *The Children: How to Study Them*, and two years later made another contribution to this subject under the title *The Study of Children*. In 1887 he described his methods and researches in a Hunterian Lecture at the Royal College of Surgeons of England, and in 1892 gave the Milroy Lectures before the Royal College of Physicians of London. In them he described the methods and results of an inquiry as to the physical and mental condition of school children. In 1889 he had given evidence before the Royal Commission on Blind, Deaf, and Defective Children; the report of this Commission led to the passage of the Act which enabled the London School Board to provide special schools. In addition he made reports at various times to the Local Government Board, the Home Office, and the Education Department, on the condition of children for whose care and education these departments were responsible.

Dr. Warner retired from practice some years ago and the present generation knew very little of him; but he was a well known figure in London in the last twenty years of the nineteenth century, and was very greatly liked and respected by his fellow practitioners, although few thoroughly appreciated the importance of the pioneer work he was doing.

FRANK H. BARENDT, M.D.LOND., F.R.C.S.ENG.,
Physician, Skin Department, Royal Southern Hospital,
Liverpool.

WE have to record with great regret the sudden death at his home in Rodney Street, Liverpool, on the morning of Thursday, October 28th, of Dr. F. H. Barendt, the well known dermatologist.

Frank-Hugh Barendt, the third son of J. H. Barendt, was born in Liverpool in 1861, and received his early education at Liverpool College (of which he later became a life governor) and St. Petri School, Danzig. At an early age he decided to follow the profession of medicine, and on leaving school in 1879 entered the University of Liverpool, where he had a distinguished student career, winning the Roger Lyon Jones scholarship in pathology, a subject which always attracted him. In 1885 he obtained the M.R.C.S. and L.R.C.P. diplomas; in 1887 he graduated M.B.Lond. with honours in materia medica, and in the following year proceeded M.D. He became a Fellow of the Royal College of Surgeons of England in 1890. After obtaining his first qualifications he travelled and studied for some time in France, Germany, and Austria, working in the Universities of Vienna and Berlin under Hebra, Kaposi, Neumann, Max Joseph, and Lassar. On returning to Liverpool he served as house-physician at the Royal Infirmary, senior medical officer to the Bootle