

In Mr. Karl Hagedorn's "Spanish Fishing Boats" (702) we have a study of the captivating curves of sailing craft which it is now so urgent to record.

Sir John Lavery's impressive portrait "Grey Owl" (553) is of special interest to the scientific world. This man, a Red Indian, by a self-denying life in the company of beavers, has carried our knowledge of an animal species to a point which it is only possible to attain when intellect is reinforced by loving-kindness.

VAUGHAN CORNISH.

Among the portraits of men of science are Catherine Dodgson's chalk drawing, "Sir Thomas Barlow, Bt., M.D., F.R.S." (1236); a white metal bust "Dr. Alexander Scott, F.R.S." (1518) by Sir W. Reynolds-Stephens; a charcoal drawing of Sir Almroth Wright, K.B.E., C.B., M.D., F.R.S.

(1212) by Francis Dodd and also a bronze bust of Sir Almroth (1503) by Donald Gilbert; oil paintings of "Dr. J. Vargas Eyre, Ph.D., M.A." (375) by Algernon Talmage, and "A. E. Morgan, Esq., M.A., Principal and Vice-Chancellor of McGill University, Montreal, formerly Principal of University College, Hull" (409) by Frederick W. Elwell; miniatures of "Emeritus Professor R. W. Reid, M.D., LL.D., F.R.C.S.", emeritus regius professor of anatomy, University of Aberdeen (1055) by Isabella E. Reid, and "Bernard Dyer, Esq., D.Sc." (1133) by Inés Johnson; mezzotints of "Thomas Telford, after Sir Henry Raeburn, R.A." (1311) and "The Viscount Wakefield of Hythe, C.B.E." (1335) by H. Macbeth-Raeburn.

In addition, mention may be made of two architectural drawings by Charles Holden, "London University: Bird's-eye View from South-West" (1368) and "London University" (1451).

Hofmann and his Influence on Chemistry in Great Britain

IN his Hofmann Memorial Lecture, delivered at the Imperial College of Science and Technology on May 4, Prof. G. T. Morgan dealt with A. W. von Hofmann's career as chemist and teacher, and vividly recalled the extraordinary influence which he had on contemporary chemistry and chemical technology in Great Britain.

The main facts of Hofmann's life and work are well known through the original lectures delivered before the Chemical Society in 1893 by Lord Playfair, Sir Frederick Abel, Sir William Perkin and Prof. H. E. Armstrong. Hofmann came to England from Bonn in 1845 as a young man of twenty-seven, and spent the best years of his life in this country. Most chemical discoveries had until that time been the work of brilliant individuals, and it was left for Hofmann and for Graham to found the first schools for the training of chemical investigators. The times were peculiarly propitious for the new developments: Liebig's tour of the country in 1842 had awakened a general interest in chemistry, and, under the leadership of the Prince Consort, Sir James Clerk and Playfair, the Royal School of Mines and Royal College of Chemistry were founded. Hofmann became the first director of the latter, which rapidly developed as a centre for both instruction and original research. The early account books of the College show that chemistry became a popular and even fashionable study, owing no doubt to Hofmann's close associations with the Royal family. When he left England, twenty years later, to use Prof. Morgan's words, "Hofmann

had established a school of research in organic chemistry such as had never existed before in this country."

Organic chemistry was then beginning the rapid development which was one of the main features of the science of the second half of the nineteenth century, and Hofmann was one of the first great chemists to specialise in this particular branch. His name is particularly associated with that of aniline, the compound which he described as his first love. In 1843, he investigated the "cyanol" of coal tar and suggested that this was identical with the bases "aniline" and "crystallin" prepared by the degradation of indigo and with the "benzidam" obtained by reducing nitrobenzene, a view which was afterwards shown to be correct. In later investigations he dealt with a wide range of derivatives of aniline, including the chloranilines and the phenyl carbamides. The early experiments were greatly hampered by scarcity of material; aniline was made from indigo and "the production of a few ounces was a proud achievement".

Hofmann was greatly attracted by Wurtz's contemporary discovery of monomethylamine and monoethylamine. This led him to investigate whether the remaining two hydrogen atoms attached to nitrogen in aniline and the alkylamines could be substituted by alkyl radicals without affecting the general nature of the bases. This led to the discovery of the alkyl anilines and of the quaternary ammonium compounds. Hofmann at once correctly interpreted the nature of these substances and their theoretical significance. Prof.