

organism. These closing chapters are necessarily less easy to read and understand than the earlier ones, yet the authors have succeeded in giving to the general reader an idea of the truly extraordinary work which has been achieved by chemists in unravelling the molecular constitution of the complex compounds which build up the structure of plants and animals, which control the health of the animal organism and which give to plants their marvellous colours.

The book can be recommended to all who wish to obtain some knowledge of what the science of chemistry means. It is readable and reliable, and is well illustrated by diagrams and plates; but why, one may ask, should there be given on the jacket a picture of an alchemist in his laboratory rather than a picture of, say, Ramsay or of Robinson? Is it thought that the fading glamour of alchemy, of which there is no mention in the text, may act as a lure? ALEX. FINDLAY.

Technological History

The Collected Papers of Rhys Jenkins, M.I.Mech.E.

comprising Articles in the Professional and Technical Press mainly prior to 1920 and a Catalogue of other Published Work. (Links in the History of Engineering and Technology from Tudor Times.) Pp. x+247+8 plates. (London: Newcomen Society, 1936.) 21s.

TWO things strike one at the first glance into this handsome volume: first, the wide range of Mr. Jenkins's researches and his large output; secondly, the reflected glory which shines on the Newcomen Society through having published the volume, apart from the fact that it is "a token of the affectionate regard in which he is held by members of the Society".

Closer examination of the work reveals that it is nearly all based on hitherto unpublished material obtained from the most out-of-the-way sources, indicative not only of keen research, but also of a flair for knowing where to look. Not only so, but also Mr. Jenkins has visited the localities where the industries he describes have been carried out; he has in some cases located their sites and he has exhausted the traditional sources of information locally. What is so refreshing about the author is that he brings to the sifting of the evidence and the weighing of facts a critical inquirer's mind. He examines the stories which have hitherto served as history, and extracts from them whatever modicum of truth they may contain. His papers may be studied as models of historical research, and he himself is rightly regarded as the doyen of students in the field of engineering and industrial history.

The papers have been gathered from many sources, but are reprinted substantially as they appeared; where new matter has come to light after the publication of any particular paper, this matter has been dealt with by Mr. Jenkins in an appendix.

In general, the papers represent Mr. Jenkins's activities prior to the founding of the Newcomen Society by himself and others in 1920; since that date, most of his contributions have found their way into the *Transactions* of that Society. Taken together, they thus form a corpus of all his work up to date.

Turning to the subject-matter in detail, it may be conveniently classified under these headings: mechanical technology; steam engineering and foundry work; hydraulic and sanitary engineering; industrial and economic history. In the space at disposal, attention may be directed to a few of the papers. Foremost among them are those which elucidate the history of the steam engine and the work of Sir Samuel Morland, Thomas Savery, Thomas Newcomen and Henry Beighton. It may be said without hesitation that Mr. Jenkins's researches in this direction have added more to our knowledge than the whole of that available previous to his time. Another subject treated in a masterly manner is the history of paper-making in England in 1495-1788; even the site of the mill of John Tate, the first English paper maker, had been lost. The history of an industry—that of tin-plates—that has been associated with Mr. Jenkins's native county—is the subject of what will undoubtedly remain a classic memoir.

Sufficient perhaps has been said to indicate the interest of these "Collected Papers". To conclude the volume there are complete lists of the published works of Mr. Jenkins, authorities quoted, and a really good index. This is, we believe, the first time that such a volume has been published by an engineering society in Great Britain, and the Society, the editor, Mr. E. W. Hulme, and the printers are to be congratulated on the results of their combined efforts. No student of industrial history can afford to overlook this remarkable volume.