

Book Reviews

Fourcroy, Chemist and Revolutionary (1755–1809), by W. A. SMEATON, Cambridge, printed for the author by Heffer & Sons, 1962, pp. xxi+288, 40s.

Antoine François de Fourcroy was one of Lavoisier's group of brilliant French chemists who achieved fame both as scientists and as men of affairs. His life was eventful and makes fascinating reading, particularly when superbly presented as in the volume under review.

Born to poverty, Fourcroy brought to the battle of life qualities more valuable than money—ambition, ability and activity. Financially helped by friends, whom later he repaid, he qualified in medicine, but like many another embryo doctor he turned to chemistry. A professor in a veterinary college at twenty-eight, he was eventually to hold Chairs at the Jardin du Roi, later the Muséum d'Histoire Naturelle, the École de Médecine and the École Polytechnique. A brilliant lecturer and orator, he became the leading teacher of chemistry in France. His books went through many editions and were translated into several European languages. He was a competent and careful investigator and published over 160 papers but it is as a teacher rather than as a research worker that he is to be remembered in chemistry. The ultimate acceptance of Lavoisier's views is owing in large measure to their skilful presentation by Fourcroy; strangely enough he was slow at first to accept these ideas.

He became a member of the National Convention in 1793 and played a part in the establishment of the metric system of weights and measures and in the development of scientific education in France at all levels. He continued this work under Napoleon, becoming Director-General of Public Instruction. It should be noted that the author takes a favourable view of Fourcroy's character, particularly in relation to his attitude at the time of Lavoisier's execution. This is at variance with McKie's assessment in his classical life of Lavoisier. McKie regards Fourcroy as one of the scientists morally responsible for the tragedy.

There is still a need for an integrated account of Lavoisier and his colleagues on the lines of *Napoleon and His Marshals*. The meeting on 8 January 1794, at his house between Lavoisier, under arrest, and his former collaborators is a dramatic moment in the history of chemistry.

Much scholarly thought and investigation have gone to the making of this volume. The number of primary sources quoted is impressive and a tribute to unflagging industry. The work can be strongly recommended to all who are interested in an important period in chemical history.

T. S. WHEELER

Medicines for the Union Army. The United States Army Laboratories during the Civil War, by GEORGE WINSTON SMITH, Madison, Wisconsin, American Institute of the History of Pharmacy, 1962, pp. vii+119, 8 illus. \$2.75.

In this closely documented, factual account of the Union Army's venture into pharmaceutical manufacturing during the American Civil War, George W. Smith, Professor of History at the University of New Mexico, presents one facet of that war which has not hitherto received scholarly attention.

This little book is concerned with the procurement of drugs for the Union Army, first through the regular system of Medical Purveyors, then through the agency of United States Army Laboratories. Two of these were established in the spring of 1863 on the initiative of Surgeon General William A. Hammond, one at Philadelphia, the other at Astoria, New York. The author traces the history and operation of these

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laboratories, and although he does not find a precise evaluation possible, he indicates that they brought some unity and standardization into the military materia medica, generally produced drugs of good quality, watched over the quality of bulk drugs bought on the market, and did so relatively economically. This is not to say the laboratories were not above criticism, especially from the rivals of the Surgeon General, and from the pharmaceutical industry, which, had it not been too busy, might have taken stronger objection to this experiment in 'state socialism' than it did.

If there is a hero to this story it is John M. Maisch, a pharmacist who was brought in as civilian Chief Chemist of the Philadelphia Laboratory. Maisch is well known for his post-war role in organized pharmacy; here Professor Smith adds to his stature by attributing to him the success of the chemical and pharmaceutical operations of the laboratory. (Other pharmacists worked in these laboratories, and many trained pharmacists served as hospital stewards in the field, but as the author points out, any suggestion of developing a pharmacy corps in the Army evoked no response in official circles.)

The book also contains a running account of the medicines in use during the war, and the appendices give in detail an official medicinal Supply Table of 1862, and lists of the contents of an Autenrieth Medicine Wagon and of a Squibb pannier. Informative and well-written, this book is a valuable contribution to the medical and pharmaceutical history of the Civil War.

DAVID L. COWEN

Commentaries on the History and Cure of Diseases, by WILLIAM HEBERDEN, M.D., facsimile of London 1802 edition, with preface by Paul Klemperer (History of Medicine series, no. 18), New York, Hafner Publishing Co., 1962, pp. 483, \$3.00.

It would be an act of gross historical impertinence to criticise William Heberden's classical treatise on clinical medicine, which is here reproduced in facsimile in its English (1802) edition. In spite of his small literary output Heberden's name has retained until the present day the esteem in which it was held during the eighteenth century. His distinguished contemporary, Dr. W. C. Wells, physician to St. Thomas's Hospital, who first described the nodules of rheumatic fever, wrote to Lord Kenyon in 1799: 'No other person I believe either in this or any other country has ever exercised the art of medicine with the same dignity, or has contributed so much to raise it in the estimation of mankind'. Dr. Samuel Johnson, whom he attended in his last illness, called him 'Ultimus Romanorum; the last of our learned physicians'. Owing to Heberden's reluctance to employ the drastic treatments demanded by his patient, however, Dr. Johnson changed his appellation on this occasion to 'Dr. Timidorum Timidissimus' but retained his affection for him.

The vast clinical experience he accumulated over more than forty years 'in the chambers of the sick' he carefully recorded, and it was on the basis of these notes that he composed the *Commentaries* in 1782 for the use of his doctor son, William Heberden the younger, who published it in the year after his father's death. In this volume will be found his famous account of angina pectoris: 'A disorder of the breast', based upon a study of an hundred cases. In its concise brevity this account of an hitherto unrecognized malady has never been bettered. Chapter 28 consists of his famous account of 'those little hard knobs about the size of a small pea which are frequently seen upon the fingers', which now bear his name.

This beautifully written volume, replete with wisdom and commonsense, is now