A MANUAL OF HYPODERMATIC MEDICATION: THE TREATMENT OF DISEASE BY THE HYPODERMATIC OR SUBCUTANEOUS METHOD. By ROBERTS BARTHOLOW, A.M., M.D., LL.D., Emeritus Professor of Materia Medica, General Therapeutics, and Hygiene in the Jefferson Medical College of Philadelphia, etc. Fifth edition, revised and enlarged. Philadelphia: J. B. Lippincott Company, 1891.

THE fifth edition of this work has grown to a book of 540 pages, as many of the articles have been rewritten and new matter has been added. An interesting historical sketch of the hypodermatic method begins the work. The author uses the term hypodermatic in place of hypodermic, as the term hypodermic is not sanctioned by scholars; but the use of the less exact word is now so firmly established that it will be difficult to substitute the more proper one for it.

Under the group of remedies affecting nutrition there are given valuable suggestions in regard to the subcutaneous use of mercury, of pilocarpine, and of iron; and various methods of transfusion are briefly considered. Then follows a group which is classed as agents having the power to destroy pathogenic microorganisms, among which are found a

number of antiseptics and antipyretics.

A large portion of the work is devoted to morphine, the treatment of the opium habit, and the antagonisms between atropine and other alkaloids. Following this, and also among the remedies which affect the nervous system, are strychnine, the digitalis group, cocaine, caffeine, and ergot. The subcutaneous use of quinine is, of course, taken up, and the peculiar advantage of the subcutaneous method of administering it is insisted on. Of the remaining topics, those of amylhydrate, nitroglycerin, and apomorphine are among the more important.

Besides a consideration of the subcutaneous use of the remedies, their history, properties, physiological action, and uses are given. The work has many suggestions of practical value, but things of secondary import-

ance are also included in a work which aims to be complete.

Dr. Bartholow recommends the hypodermatic use of atropine in asthma. Morphine is treated very fully, and the author takes the ground that it is not so much used as it deserves to be in relieving pain after operations and injuries, especially during the first few hours after fractures or dislocations.

So far as the reviewer is aware, this work is the largest and most comprehensive which has been written on this subject, and the well-known and distinguished author has evidently taken great pains to include all that has a bearing upon the subject of hypodermatic medication.

F. H. W.