charts would be improved if normal curves were introduced. The book is crammed with interesting facts and is very readable. It supplies a want and cannot fail to help forward the solution of the mongol problem.

R. M. Clark.

(1) Migraine and Other Common Neuroses: A Psychological Study. By F. G. Crookshank, M.D., F.R.C.P.

- (2) Man not a Machine: A Study of the Finalistic Aspects of Life. By Eugeno Rignano. With a Foreword by Prof. Han Driesch.
- (3) Man a Machine. By Joseph Needham.
- (4) Types of Mind and Body. By E. MILLER, M.A., M.B., M.R.C.S., D.P.M.

Psyche Miniatures. London: Kegan Paul, Trench, Trübner & Co., Ltd., 1926. Demy 18mo. (1) Pp. 101; (2) pp. 77; (3) pp. 111; (4) pp. 132. Price 2s. 6d. each.

A notice of these miniatures has been involuntarily delayed owing apparently to their great popularity, which resulted in their mysterious disappearance shortly after receipt and at the moment when their turn had come to be reviewed. They had been read and appreciated by more than one critic, but further copies were needed before they could be dealt with satisfactorily. In the meantime our review columns became very crowded, and reviews have been delayed.

Though late, our welcome to the advent of these tasteful and handy little books has not lost its heartiness. The size of a book is never an index of its interest or importance, and it is remarkable how some authors can express much meaning in a few words. This is very true of Dr. Crookshank's Migraine and other Common Neuroses, in which there is material for a whole course of lectures, though it only comprises two, which have appeared in Psyche and The Medical Press and Circular.

Dr. Crookshank's professed purpose is to protest against the false antithesis, so long insisted upon by teachers of medicine, between functional and organic conditions. His contention is that "the unprejudiced physician will find some physical defect in every functional case, and some psychical factor in every case of organic disease." He takes "migraine and allied paroxysmal neuroses" as his text and effectively drives his lesson home. At the same time we learn a good deal about psycho-pathology and mental mechanisms. The author writes forcibly and presents his subject in a striking manner, and gives us much to think about, productive, perhaps, of not a little heart-searching as we think of the pitfalls he teaches us to avoid.

Truly psychological medicine has not yet taken its proper place in the medical curriculum. If it had, this book would have been superfluous: as things are it should be read by all practitioners. This book has the distinction of being No. I of the Medical Series of these miniatures. In contrast to this useful addition to medical literature, Prof. Rignano's Man not a Machine is more of academic interest. It is No. 3 of the General Series, and has been provocative of a rejoiner by Mr. Joseph Needham, who writes on Man a Machine in No. 12 of the same series.

Prof. Rignano sets out to prove that the fundamental characteristic common to all vital phenomena in their most typical manifestations is their purposive, teleological or finalistic nature. Prof. Hans Driesch in his foreword maintains that Rignano demonstrates finalism even in the process of metabolism. He does not, however, agree that the theory of a specific kind of energy, set

forth by Rignano, solves the problem.

Rignano argues that assimilation is a "selection" of nutritive matter from a variety of substances for self-reconstruction, which is its "purpose," that ontogenesis aims at a predetermined end, and that growth has "prevision" of future needs. The "occult intelligence" or "entelechy" (not Driesch's "entelechy") directs ontogenesis as the mind of the engineer designs a machine. From the same point of view he deals with pre- and new adaptations, the behaviour of inferior organisms, reflexes and instincts, affective tendencies, mental activity and social manifestations. The expansion of life in general is due to the "passive" absorption of the urge of solar or thermic energy, which stimulates metabolism, but the tendency to expansion and intensification of one's individual life is "active" and due to internal forces, continuous and independent of the exterior: hence "activity" and "spontaneity" in the behaviour of living beings. He gives us leave to hope that "harmony of life" will gradually take the place of the "struggle for existence."

Mr. Needham protests against the rigid boundaries erected by the vitalists to separate organic and inorganic matter. He shows how scientific biology has gradually reclaimed much territory from philosophy and enters on a vigorous defence of mechanism. "The state of exact science where man is a machine is no mean city, even

though it be the city of a dream."

Those interested in the philosophical aspect of biology should not fail to read these books; in both are to be found noble thoughts, despite their antagonism. The authors would find, however, much food for reflection if they studied Prof. Spearman's Abilities of Man. In so far as scientific methods have been applied to this problem, which, after all, is the old one of "mind and matter," everything points to the hypothesis of "energy, engines and engineer" not being far from correct.

To regard man as either the creature of an outside force or a reflex physico-chemical machine is equally humiliating, but to stand him on his own legs as possessing his own energy (or intelligence), not merely reacting but also "acting back" to his environment, is the higher ideal, and more likely to help him to master the problems of life. Science in time will surely teach us that the idea underlying "mankind" as "sons of God" is not far wrong. Common sense

has always taught us so.

Dr. Miller's Types of Mind and Body is No. 4 of the Medical Series. The author has had a unique experience of functional nervous disorders and war neurology, and his close study of human nature under these handicapped conditions is revealed in this book. He deals with his subject under the headings of "Morphology," "The Physiological Background," "The Psychological Aspect" and "Cross-Currents." He follows Bleuler and Kraepelin in his conception of two main normal reaction types. He concludes that "the centre of gravity of our norm of human behaviour lies nearer to the cyclothymic reaction than it does to the schizothymic reaction." The demands which have to be met by these fundamental types in psychological development and disease either accentuate or produce "cross-currents" in this demarcation.

Of great interest are his analyses of the physical and mental "make-ups" of certain literary celebrities, especially as regards these "cross-currents." Micheal Angelo and Leonardo da Vinci have definite schizothymic marks and asthenic physiques. Rubens, Peter Brueghel and Frans Hals are syntonic and full-blooded; similarly, Verlaine and Beudelaire. Cross-currents have made their effects felt in the psychological characters of Milton, John Bunyan, Frederick the Great, Byron, Robespierre, Nietzsche, etc.

There is a good deal of original thought in this readable book, particularly in the last two chapters.

J. R. LORD.

Prescribing Occupational Therapy. By WILLIAM RUSH DUNTON, Jr., B.S., A.M., M.D., Springfield, Illinois; Baltimore, Maryland. London: Baillière, Tindall & Cox, 1928. Crown 8vo. Pp. vii + 142. Price, cloth, \$2.10 [10s.]; paper, \$1.35.

Something of a practical nature about occupational therapy from the editor of Occupational Therapy and Rehabilitation, the official journal of the American Occupational Therapy Association, is surely deserving of attention. Dr. Dunton is one of the pioneer writers on occupational therapy, his text-book, Occupational Therapy, first appearing in 1915. In 1919 it was followed by a work on Reconstruction Therapy—a very important outgrowth of the parent subject.

Though modern conceptions of occupations as a form of therapy took root in America before the Great War, occupational therapy received its greatest impetus and entered into a wider area of medical treatment when the great problem arose how best to deal with a host of young men, survivors in that struggle for civic and national liberty, the Great War, who were suffering in various degrees from disabilities of body and mind, which rendered them unfit to return to their previous occupations and civil responsibilities. There was an intermediate stage during the war when, at the war hospitals, considerable bedside occupational work was organized, chiefly by voluntary agencies, and painting, toy-making, basket-making, beadwork, etc., became a feature of the war hospital