

solution of which must rest the first attempt at a truly scientific classification of mental disorders. This review would be incomplete without a reference to the great service rendered by Dr. James MacDonald in presenting so admirable a translation to the many students of Professor Bianchi who are unable to read his work in the original tongue.

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*Physiological Economy in Nutrition, with special reference to the Minimal Proteid Requirement of the Healthy Man: an Experimental Study.* By RUSSELL H. CHITTENDEN, Ph.D. London: Heineman, 1905. Pp. 473. Price 14s. nett.

This important work on nutrition, how best to maintain the human body in health and strength with the least expenditure of energy, has been produced to show by scientific investigation what the physiological necessities are. The experiments were conducted with professional men, with volunteers from the United States Army, and with University athletes. Photographs of the subjects are given, and exact details of the conditions observed. The subject is not new, and the usual dietetic error of overfeeding has been attacked by many before and since Cornaro. It is not from the merely personal standpoint that Professor Chittenden states the case; it is rather as the result of accurate experimental research. It is apparent that the products of proteid metabolism constitute a menace to health, and the aim of those who desire the highest efficiency must therefore be to attain that efficiency on the smallest amount of food. Professor Chittenden, by careful analysis of the dietary, and of the excreta, justifies the general conclusion that a professional man can live on a much smaller amount of proteid food than is usually considered essential without loss of vigour; that soldiers require less than 50 grammes of proteid daily instead of 105 grammes. This economy led to an improvement of the neuromuscular apparatus with less sense of fatigue, under observation of five months' duration.

In short the work is an appeal for temperance, for "moderation in diet, especially in the taking of proteid foods, which means a great saving in the wear and tear of the bodily machinery."

Some years ago, in 1893, a committee of the Medico-Psychological Association reported upon Asylum Dietaries. In view of the work accomplished by Professor Chittenden since that time, and the increased importance of metabolism recognised as a factor in the causation of insanity, it is apparent that the time has arrived to reconsider our position. Dr. L. C. Bruce urges that milk and plentiful hot drinks are demanded in the treatment of certain forms of mental disorder. Professor Meyer, of Göttingen, found that artificial feeding was rarely required, and Dr. Jules Morel, of Mons, has also been sparing of the stomach tube in his practice. The vulgar notion that every sick person should have a plethora of nourishing food is no longer tenable; and it is therefore of the utmost importance that we should make further inquiry into asylum methods in the light of strict experimental research. The value of Professor Chittenden's work has been widely acknowledged, and it should not be allowed to remain a dead letter for us.