The work is open to the general criticism, which appertains to all such undertakings, that some subjects are treated in too little detail, whilst others—but this is much less frequently the case—are given a relatively larger consideration.

The literary side of the work is of high character, and the numerous illustrations are for the most part admirably produced. The typesetter has made a curious mistake in an English quotation on the female voice, p. 840, but this exception only emphasises the general correctness of the letterpress.

The work is of such importance that every alienist physician should study it and every psychologic library possess it for reference.

## Part III.—Epitome of Current Literature.

#### 1. Neurology.

## A Proof of the Existence of Neuro-fibrils in the Living [Una prov dell' esistenza della neuro-fibrille nel vivente]. (Riv. di Pat. Nerv. e Ment., fasc. iv, April, 1909.) Lugaro, E.

Neuro-fibrils have often been suspected of being artificial productions due to the action of precipitation, by histological reagents, of cellular colloids. This suspicion has been strengthened by the fact that, outside of the body, appearances similar to the neuro-fibrils may be obtained by precipitation of organic and inorganic colloids. Lugaro is of opinion that, in view of these suspicions, it ought primarily to be demonstrated that neuro-fibrils exist in the living, and proof afforded that they are not artificial products of our manipulation or of *post-mortem* coagulation.

Pighini, in a recent work, pointed out that he has subjected extracts of nervous substance to the several treatments which pieces of nervous tissue receive in the fibrillary methods of Cajal and Donaggio. He holds that he has attained from these methods networks which were a specific product of the technical process adopted, inasmuch as they were not obtained by other methods, *e.g.*, by the action of alcohol, formol, or perchloride of mercury. Lugaro draws different conclusions from the data of Pighini, and holds that experiments of the kind are not able to solve the question. It would be too much to say that in living organism structures do not exist solely because it is possible to manufacture them artificially by precipitation.

With the object of proving that neuro-fibrils exist in the living and in order to eliminate every doubt, Lugaro has made the following experiments in three young rabbits and two young cats, and without using narcosis. The lumbo-sacral medulla was exposed and deprived of its dura mater. On the medulla *in situ* and still living was poured slowly a litre of boiling physiological solution (chloride of sodium) at a temperature that varied in the different experiments between 80° and 100° C. The coagulation of the spinal cord in this way was extremely rapid, the surrounding tissues being also coagulated to a depth of 7–8 mm. In all the animals, including one in which the spinal cord was boiled for five minutes, the preparation after the use of fluoride of silver showed very fine reticulated neuro-fibrils in the elements of the cord, as it did also in the pieces taken from animals which had been killed.

The positive finding thus obtained appears to Lugaro to demonstrate in an indisputable manner that neuro-fibrils exist in the living, that they are a true organic part of the cell, and that, therefore, it is permissible to formulate hypotheses about their function.

Lugaro purposes describing more particularly and later the results of a methodical and complete study of the researches which he has undertaken to prove his thesis. HAMILTON C. MARR.

### Complete Survey of the Cell Lamination of the Cerebral Cortex of the Lemur. (Proc. Royal Soc., B, vol. lxxx, 1908.) Mott, F. W., and Kelley, A. M.

In this communication, the authors give notes on the material and method used in their investigations, and then a short account of the lemur and the correlation of its mode of life and habits with the cortical development of the brain. This is followed by a general description of the brain and a histological description of the cortex.

The brains of four lemurs were used, *lemur brunneus, lemur mongoz*, and two specimens of *lemur catta*. They limited themselves to mapping out the main types of the neopallium, namely, the motor, frontal, temporal, post-central and visual types, to pointing out variations in these types, and to giving some description in the text of the intermediate areas. Essentially there is little difference between their results and those of Professor Brodmann (who made his researches with the brain of *lemur macaco*), except that he has defined more subdivisions of the cortical types, and in their diagram they have given a broader band for the motor area, carrying it further back, especially in the lower part; and they have not carried the visual area so far forward on the dorsal surface. A. W. WILCOX.

## 2. Physiological Psychology.

# The Psychology of Puberty [La Psychologie de la Puberté]. Marro, A.

This paper of Dr. Marro was a communication to the International Congress of Psychology held at Amsterdam in 1907. The first part deals with the normal psychology of puberty, and the second part with the morbid psychology. The evolution of puberty is accompanied by remarkable physical and biological modifications, which act on the sentiments, thoughts, and actions of young people of both sexes. First, there is an increase of sensations, which increase the excitability of the individual and make him sensitive to the attractions of sensuality and consequently inclined to amorous emotion. Secondly, there is a greater energy of reaction, which affects the excito-motor centres as well as the representative centres multiplying associations, which unite and give to the individual means to assure the function of reproduction. The hyper-excitability manifests itself with analogous effects, though not with equal intensity, in both sexes.