

not include the cord and brain in one common scheme, and, beginning with the zones of His, unfold the matter from the starting-point of embryology. He has not ignored this method—he follows it in dealing with the pia and its offshoots—but he has not made it as prominent as we could have wished. The statement in former editions that the choroid plexuses pass through the foramen of Monro has happily disappeared; but the reviser seems to have felt that so venerable an error had to be ejected with a certain semblance of respect, and we are not sure that we are finally rid of it. Of the velum interpositum he says: "Its anterior extremity or *apex* is bifid, each bifurcation lying close to and behind the corresponding anterior pillar of the fornix, and hence 'in,' but covered by epithelium, the foramen of Monro." It seems to us that if the foramen of Monro be simply a constricted portion of the general vesicular structure from which the brain develops, its boundaries must be the epithelium into which its innermost cells are transformed, and that nothing external to this can possibly be "in" the foramen. Many illustrations have been added with great profit.

Dr. Brockway has chosen the developmental method in treating the peritoneum and has succeeded well. The description of that complicated membrane is perhaps as clear as can be expected. We are also much pleased with his description of the abdominal viscera, which is thoroughly up to the times. He gives particular attention to relations and describes them clearly and well. Our only serious criticism of Dr. Brockway's work is the introduction of mere lists of the parts in relation with each organ, which not only is needless after the description, but smacks of the compendium, and is beneath the dignity of the book. He seems so anxious that no relation shall escape him that he admits several that have no claim to be recognized. Thus we see no reason for saying that the posterior surface of the liver is in relation with the tenth and eleventh dorsal vertebrae, when the diaphragm is between them. Some of the illustrations that have been added to this section are particularly valuable.

To sum up, the book is better than ever, and deserves warm commendation. It is so good that we cannot suppress a wish it were still a little better.

T. D.

THE PHYSIOLOGY AND PATHOLOGY OF THE CEREBRAL CIRCULATION: AN EXPERIMENTAL RESEARCH. By LEONARD HILL, M.D. Large 8vo., pp. xvi., 208. London: J. & A. Churchill, 1896.

"In fiction," says Macaulay, in his fine essay on "History," "in fiction the principles are given to find the facts; in history the facts are given to find the principles; and the writer who does not *explain* the phenomena as well as state them performs only one-half of his office. Facts are the mere dross of history. It is from the abstract truth which interpenetrates them and lies latent among them, like gold in the ore, that the mass derives its whole value."

Tested by this standard, the book of Mr. Hill stands at a high level. One of the most dreary tasks we sometimes undertake, but more often shirk, is to look through (we dare not say read through) a book of

experiments in which with tiresome iteration and exasperating minuteness all the details of numberless experiments are described, and then the inferences that under certain physiological conditions certain other physiological consequences will ensue. "Very well," we say, "and what if they do?" What necessary consequences follow of which the surgeon, the physician, the obstetrician, the various specialists should take note? What dangers does it help them to avoid? What hints does it give toward the "final cause" for which all doctors exist—the saving of life and the lessening of suffering? And to these questions the book usually gives no answer. In other words, the book is strictly a scientific determination and massing of facts, and in Macaulay's sense this is the mere dross of science.

The author of such a book and of such experiments presumably has reflected much on their relative value, their relation to many other facts already known, their importance in correcting errors of practice and in instituting new methods of treatment. He should, therefore, embody these reflections in such proportions as will set forth their bearing upon these points so that the general medical public, who have not either the time or the patience to follow all the steps in his often weary ascent, shall learn what the prospect is from the top and how their progress should be guided. Not but that all the details must be given for revision by his peers and fellow-workers, but with the milk give us the cream.

Mr. Hill has experimented with minute and painstaking care by many methods and means and drugs upon the various phases of the cerebral circulation. We have only space to refer to one—and a much-neglected one—the effect of gravity upon the circulation. That means to the physician or surgeon the effects of posture—standing, sitting, lying, and the Trendelenburg posture—on the phenomena of the circulation. It means the importance of posture in syncope, in the weakness of diphtheria, in cardiac disease, in dyspnoea, in threatened death—the threat too often ending in reality—from anaesthetics. After a sufficiently full account of his experiments, illustrated by excellent diagrams of the record-curves of pressure, at the end of his chapter he not only summarizes his conclusions from the scientific point of view as the result of the discussion of his experiments on the effects of gravity, but gives us the practical applications derived from his studies.

Thus he has shown that the important duty of compensating for the simple hydrostatic effects of gravity in changes of posture resides in the changes that take place in the abdominal vessels, especially those of the viscera, and hence it is that ordinarily we feel no effects from the change from a recumbent to a vertical position. Either slowly and to a less degree, and chloroform rapidly and to a much larger degree, destroy this compensation by destroying the splanchnic vascular balance, and then posture is the prime factor in determining life or death; the standing or sitting posture in such a case is most dangerous for the reason just given. Hence chloroform especially should never be given to a patient in the sitting posture. The graphic picture given a few years ago of a rescue from death by chloroform by placing the patient head down—by Marion Sims, if we remember rightly—was no mere dramatic play of the fancy, but a true scientific remedy. The Trendelenburg position is, therefore, of great value, but to too great a degree or too long continued it may overwhelm the heart. Compression of

the abdomen best compensates for the vasomotor paralysis produced by chloroform, but the rhythmic alternate compression of the abdomen and the chest is the best remedy in chloroform-poisoning.

We do not wonder at the many deaths from chloroform one sees recorded in European journals. It is given with a carelessness which to most Americans is astonishing, and often "pushed," which, Mr. Hill shows so graphically, is particularly dangerous. Such recommendations as his are needed here, but are especially needed there, and we hope they will be heeded.

Every one of the chapters is replete with such sound applications of the scientific results of his admirable investigations. The book is a small one, only 200 pages, and is printed in large type. Let us hope that it will be printed in still larger type in the mind of every surgeon and every physician. The only fault we can find with it is the use of "parese" as a verb, a liberty which Americans (who are so often accused by our English brethren of unwarranted tampering with their mother-tongue) would not dare to take, and that its few illustrations, apart from pressure-curves, are not up to the standard of the rest of the book.

W. W. K.

FOOD IN HEALTH AND DISEASE. By I. BURNEY YEO, M.D., F.R.C.P., Professor of Therapeutics in King's College, London. Second edition. Pp. viii., 592. Philadelphia and New York: Lea Brothers & Co., 1896.

To those familiar with the first edition we need say nothing. The compact little volume, full of practical suggestions based upon laboratory-work and extended observation, to which are added the logical deductions of the author, has so frequently been of valuable service that no reviewer's criticism can change the position which it occupies in the esteem of the practitioner. The second edition is before us, revised to meet more recent theories and in general presenting the same careful editing which marks all of the works of Yeo. Unlike many books upon this subject, it is eminently practical, readable, and withal scientific. In a book so generally excellent it is difficult to select a portion especially so, but the chapter which seems to be worthy of particular mention is that upon the "Food in Diabetes." Of course, all books upon food must be based upon the work of Parkes, Bauer, Roberts, Dujardin-Beaumetz, Sée, and others; and here the indebtedness is acknowledged. Facts are often for the confusion of the unwary, but the careful study of this work shows that they have not been allowed to lead its author into unprofitable and dangerous conclusions. Even in spite of great care errors are present, fortunately none of great seriousness. We are of the opinion that the marked difference in diastolic capacity between the solid and liquid malt-extracts should have been pointed out (p. 487), the limitation of fluids during the mastication of starchy foods by patients suffering from amylaceous dyspepsia insisted upon, and the foot-note of p. 426 deserves a better position in that it presents a fact known to careful observers long before the method described in the note to Chapter VI. came into vogue. We are disposed to go much further than the author, for we have seen a large number of gouty patients, who had been unsuccessfully treated by the