

the developing solution without allowing this to touch the back of the print. An under-printed proof must be left longer, but the object should be to keep the image as much on the surface of the paper as possible.

A Course of Elementary Practical Histology.
By William Fearnley. Pp. xi, 363, 45 figs.
Macmillan & Co. 1887.

THERE exists no work in any language which describes and figures the fine or histological structure of all the organs and tissues of the human body, nor is there any work which gives the methods especially applicable for the investigation of this subject. Following Kölliker, works which purport to be human histology give figures and descriptions of structures from man, fish, frog, rabbit, dog, or some other animal the name of which is sometimes not given. The inevitable impression upon the mind of the student is, that if he knows the structure of any tissue or organ in fish, frog, or other vertebrate, he knows the structure of the corresponding organ or part in man. That this is true in a very general sense is not denied, but no one knows more surely than the morphologist that there is a marked individuality in the histological as well as in the gross structure of the animals forming the great groups. The book or books which should bring out clearly the histological structure of one entire animal and describe the necessary methods of study, would be welcomed by the large and constantly increasing body of teachers and students of human and comparative anatomy who realize that exact knowledge of one animal in its entirety forms the best and safest standard of comparison. To all such the present work will be disappointing, for it is in line with the numerous guides that have preceded it, including directions for the study of objects from the yeast plant up to man. It has no definite aim, but is designed for medical students and others who care to study histology and can afford the necessary apparatus and material.

It is divided into two parts—1, the theory and use of the microscope, and the methods of histological study (pp. 1-207); and 2, headings followed by blank spaces, equal to six printed lines, for the definition of terms and the description of preparations (pp. 209-356). This second part contains the only new feature in the book. At the beginning of it the author directs the student that "he should fill up these spaces before commencing to study the preparations, using a good text-book," etc. After this process the average student would, no doubt, be able to see in his preparations all the structures described, although a histologist might not be able to make out a single one of them clearly. None but those who have trained their unaided eyes to see things as they are, can realize the amount of self-restraint required to see no more and no less than is actually present in the field of a microscope; and they must deprecate any method which does not distinctly and emphatically tend to cultivate self-restraint, self-reliance, and thoroughness.

The directions for the choice and use of a microscope are simple and usually good; but the discussion of the reason for the various processes and of the optics of the microscope is so inadequate that the student could hardly fail to be puzzled and discouraged. Some of the statements are not only inadequate, but ambiguous and incorrect. For example, it is stated that, "if a vulgar fraction having 1 for its numerator be made of the focal distance of the lens, we only require to put a 0 after the denominator to ascertain the magnifying power of the lens" (p. 8). The statement is inaccurate, however interpreted, and the difficulty of applying the rule, admitting its accuracy, will be apparent to any one who attempts to apply it to a lens whose focal distance in inches is represented by a number greater than unity, or a fraction whose numerator is greater than one. Although the author evidently intends to use the metric measures, the English and metric systems are badly mixed up in the description of the apparatus, materials, and processes. On one page the temperature is given in degrees Fahrenheit, and on another in degrees Centigrade. In one place lengths are expressed in centimetres, and in another in inches; and sometimes the student is in the same sentence bade to take a certain number of ounces of one ingredient and a certain number of grammes of another.

In addition to the confusion and obscurity, the diction is too often commonplace, as when the student is instructed to "carefully remove the 'pluck' entire"; and in giving directions for obtaining material from the lower animals the common names are applied to the objects, no reference being made to the names of the homologous parts in man. There are also many repetitions, and very few cross references. As the index and table of contents are both very meagre, the book is exceedingly difficult to use unless one is thoroughly familiar with the entire work. Thus, the student is told (p. 153) to "catch a rat." On a previous page very good directions are given for this, but as the word "rat" does not appear in either the index or table of contents, and no cross-reference is given, the student, unless he had previously read and remembered the directions, would probably conclude that he was expected to follow his own devices in performing this somewhat delicate operation. In short, no student could successfully pursue the study of histology by the guidance of this work alone, and the competent teacher would find it quite unnecessary, if not an actual hindrance, and inferior to the majority of those which have preceded it.

How to Make a Saint; or, The Process of Canonization in the Church of England. By the Prig. Henry Holt & Co. 1887.

To readers of "the Prig's" former books, it will be recommendation enough of this one to be told that in it his hand shows no loss of cunning. Even of him it would be too much to expect that he should not outdo even nod in the course of a hun-

dred pages; but, admitting more than one attack of drowsiness, it must be said that he is almost always amazingly alert and wicked. English High-Church vagaries have long been counted fair game for the satirist—as long ago as 'Pendennis' Thackeray gave us Mr. Smirke; but we doubt if there has been a more subtle and amusing drive at them. The little book opens with a fine touch: "'The Romanists have just beatified a number of English martyrs, and why shouldn't we do it too?' 'Mr. Maniple, those words of yours, 'Why shouldn't we do it too?' may be said to have been the initial impulse of every movement, in a Catholic direction, taken by the Church of England. . . . We have already done everything else; so I also say of this, 'Why shouldn't we do it too?'" The choice of a nineteenth-century saint—gallantly left to a "Ladies' Committee"—in the person of Hannah More is also delicious. "The Prig's" Roman Catholic sympathies are more pronounced than in his 'Bede'—the citations from Jerome and Augustine, for example, in support of the worship of the Virgin, being quite lugged in, and serving better the purposes of controversy than of jesting; but it is something to get so much pure fun from a Roman Catholic writer, if such "the Prig" verily is. A satire is necessarily but partial truth, and we are content to let this one go as such without alluding to those noble qualities in the satirized which one of "the Prig's" good sense would be the first to admit. Nor would he deny, we think, that the Roman communion needs something more than facilities for saint-making; what Janet says of Buddhism, "Il a fait des saints, il n'a jamais pensé à créer des citoyens," is perilously near being applicable to Roman Catholicism.

BOOKS OF THE WEEK.

- Battershall, J. P. Food Adulteration and Its Detection. E. & F.N. Spon. \$3.50.
Benjamin, S. G. W. Sea-Spray, or Facts and Fancies of a Yachtsman. Benjamin & Bell. 50 cents.
Brunetière, F. Études critiques sur l'histoire de la littérature française. 3e série. Paris: Hachette; Boston: Schoenof.
Burroughs, J. Birds and Bees. Houghton, Mifflin & Co. 15 cents.
Claretie, J. Candidat. Paris: Dentu; Boston: Schoenof.
Clarke, Mrs. C. M. More True than Truthful: A Novel. Harper & Bros. 20 cents.
Cluseret, Mémoires du Général Cluseret. 2e siège de Paris. 2 vols. Paris: J. Lévy; New York: Christern; Boston: Schoenof.
Daudet, A. La Belle-Nivernaise. Geo. Routledge & Sons.
Daudet, A. Tartarin of Tarascon. Geo. Routledge & Sons.
De Joo, D. Robinson Crusoe. From the original 1719 edition. Thomas Whitaker.
Desbeaux, E. Mattie's Secret. Geo. Routledge & Sons.
Donceux, G. Un Jésuite homme de lettres au XVIIe siècle. Le Père Bouhours. 8vo. Paris: Hachette; Boston: Schoenof.
Dowd Smith, J. Luella. Wind Flowers. Chicago: Chas. H. Kerr & Co. \$1.
François, Louise von. Phosphorus Hollunder. Boston: D. C. Heath & Co.
Geikie, A. The Teaching of Geography. Macmillan & Co. 60c.
Genung, Prof. J. F. Practical Elements of Rhetoric. Boston: Ginn & Co.
Grant, R. The Confessions of a Frivolous Girl. Boston: Ticknor & Co. 50 cents.
Greater America: Hits and Hints. A. Lovell & Co.
Griffin, W. Twok; A Novel. Hamilton, Ont.: Griffin & Kidner.
Halse, G. Weeping Ferry: A Novel. Harper & Brothers. 20 cents.
Hatch, Mrs. M. R. P. The Upland Mystery. Chicago: Laird & Co.
Wide Awake. Vol. W. Boston: D. Lothrop Co. \$1.75.

"Every child in America should have them."—*New England Journal of Education.*

"The Young Folks' Cyclopædia" should be in every juvenile library."—*From a Report of the Connecticut Board of Education.*

YOUNG FOLKS' } Common Things... \$2.50
CYCLOPÆDIA of } Persons and Places.. 2.50
HENRY HOLT & CO., Publishers, New York.

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