

them, that a new text-book is like a new pair of shoes, which have to be broken in before they can be called a comfort to their owners. There can be no question that this process is likely not to be a very rapid one. It is clear that this book has stood this preliminary test. It is written by several authors, but is fairly homogeneous. The aim is to disregard microscopic anatomy and to offer a text-book which shall present the facts of gross anatomy both in a practical and in a scientific way. It is needless to say that the latter requires references both to embryology and to comparative anatomy. The section on the bones by Sutton is remarkably well done. When we say that the joints are the work of the editor we have said enough to vouch for excellence—to all, at least, who know his earlier monograph (now unhappily out of print) on that subject. The peritoneum is the work of Treeves, which, again, is saying enough. We mean no slight to the other able writers whom we do not more particularly mention. The first edition concluded with a section on surgical and topographical anatomy which cannot but be welcome. In the present edition this is followed by a too short chapter on vestigial and abnormal structures. Variations of the muscles, of the vessels, and some of those of bones are considered in their respective sections. The book is a very good one. We could, perhaps, find flaws here and there, but a search for them is uncalled for, as most of our readers are not professed anatomists. We have but one serious criticism to make, namely, that in the section on the nervous system the most recent (but generally accepted) fundamental doctrines of the structure of that system have not received due recognition.

The illustrations are a most important part of a text-book on anatomy. We are happy to give these very high praise. We were on the point of making special mention of those of certain sections, but they are so good as a whole that we refrain.

To what extent this book will displace old and established favorites the future will show. It is a matter eminently unsafe to prophesy about, but the success already attained is, no doubt, an earnest of future progress.

THOMAS DWIGHT.

#### GENERAL.

THE proceedings of the forty-seventh meeting and fiftieth anniversary of the American Association for the Advancement of Science have been sent to members by the Permanent Secretary, Dr. L. O. Howard. The volume, which contains introductory matter extending to 83 pages and 658 pages of text, appears very promptly, the address of President Eliot given before the Association on 'Destructive and Constructive Energies of our Government compared,' being here printed before the January issue of the *Atlantic Monthly*, which also contains it.

LADY WELBY has printed for private circulation a pamphlet extending to 61 pages, entitled 'The Witness of Science to Linguistic Anarchy.' The introduction opens with the statement: "The following collection of extracts, chiefly from *Nature*, *SCIENCE* and *Natural Science* have been selected from a much larger number, with the object of bringing together, in convenient form, evidence of an almost incredible state of things in the scientific world." We find an interesting collection of quotations on scientific nomenclature, showing a certain amount of diversity and conflict. Still they scarcely bear witness to a 'paralyzing nightmare of impotence,' and it does not follow as suggested by Professor Foster that an international tribunal should 'stamp the coin of science' by defining every new name. New words must come and language must be flexible if science is to grow. Certainly men of science should realize their responsibility and be careful in their use of terms, but words were made for science and not science for words. Those interested can probably obtain a copy of Lady Welby's pamphlet by addressing her at Denton Manor, Grantham, England.

WE have received for review a copy of 'Life's Comedy,' Third Series (Charles Scribner's Sons). *Life*, from the issues of which this Christmas book is a reprint, does not hesitate to leave its own field and display ignorance by attacking men of science who practice vivisection, which should warn us against trespassing on foreign territory. As *Punch* treats the anti-vivisectionists from the point of view that commends itself

to men of science, we may be prejudiced, but it does seem that 'Mr. Punch' is always a gentleman, whereas *Life* is on occasion distinctly vulgar.

THE Rev. J. G. Hagen, of the Georgetown College Observatory, announces that the first series of charts of his Atlas of Variable Stars is nearly printed and will be issued in a few weeks. The cost of engraving and printing the whole Atlas will be about \$7,000 and, though one-fourth of this sum has been given by Miss Catherine Bruce, it is necessary that one hundred subscribers to the entire series be obtained in order that expenses of engraving and printing can be guaranteed and its completion secured. The present series contains twenty-four charts and is sold to subscribers to the whole series at one Mark per chart. The work is published by Herr. F. L. Dames, of Berlin, but subscriptions may be sent through the Harvard College Observatory or through the Georgetown College Observatory.

#### SCIENTIFIC JOURNALS AND ARTICLES.

*Terrestrial Magnetism* for December, 1898, contains the following articles: 'Report of the Permanent Committee on Terrestrial Magnetism and Atmospheric Electricity to the International Meteorological Conference'; 'The Toronto Magnetic Observatory,' R. F. Stupart; 'The Attitude of the Aurora above the Earth's Surface' (concluded), C. Abbe; 'Bigelow's Solar and Terrestrial Magnetism,' reviewed by Arthur Schuster; 'Notes on the Magnetic Storm of November 21st-22d, and on the Secular Motion of a Free Magnetic Needle,' by L. A. Bauer. Mr. Stupart in his article describes the new Toronto Magnetic Observatory, situated at Agincourt, nine miles northeast of the old and disturbed site. Beginning with March, 1899, the name of the journal is to be changed to *Terrestrial Magnetism and Atmospheric Electricity*. It has been found necessary to enlarge the periodical somewhat, and, in consequence, the subscription price has been increased from \$2 to \$2.50. It will be conducted, as heretofore, by L. A. Bauer and Thomas French, Jr., both of the University of Cincinnati. The editors will be assisted by Messrs. Eschenhagen (Pots-

dam), Moureaux (Paris), Littlehales (Washington), Schuster (Manchester), Elster and Geitel (Wolfenbüttel), McAdie (New Orleans), and by an international council consisting of Rücker (England), von Bezold (Germany), Mascart (France), Rykatschew (Russia), Mendenhall and Schott (America).

*The American Journal of Science* for January contains the following articles:

'Thermodynamic Relations of Hydrated Glass,' by C. Barus; 'Platinum and Iridium in Meteoric Iron,' by J. M. Davison; 'Studies in the Cyperaceae,' by T. Holm; 'Regnault's Calorie and our Knowledge of the Specific Volumes of Steam,' by G. P. Starkweather; 'Estimation of Boric Acid,' by F. A. Gooch and L. C. Jones; 'Descriptions of imperfectly known and new Actinians,' with critical notes and other species, II.; by A. E. Verrill; 'Mineralogical Notes,' by W. F. Hillebrand; 'What is the Loess?' by F. W. Sardeson; 'Absorption of Gases in a High Vacuum,' by C. C. Hutchins.

*Appleton's Popular Science Monthly* for January gives as a frontispiece a portrait of August Kekulé and a sketch of his life and contributions to science follows. Among the other articles in the number are 'The Mind's Eye,' by Professor Joseph Jastrow, illustrating the part played by mental processes in visual perception; an argument by Professor G. T. W. Patrick, maintaining that children under ten should not be taught to read and write; and nature study in the Philadelphia Normal School, by Mrs. L. L. W. Wilson.

#### SOCIETIES AND ACADEMIES.

##### THE NEBRASKA ACADEMY OF SCIENCES.

THE ninth annual meeting of the Nebraska Academy of Sciences was held at Lincoln, November 25 and 26, 1898.

The address of the retiring President, Dr. H. B. Ward, was upon the 'Fresh-water Biological Stations of the World.'

These were divided into individual resorts for independent investigation, periodical resorts where groups of scientists go for a portion of the year, and permanent stations where work is carried on throughout the year by resident investigators. The best results can only be expected in the latter class, which are necessarily under government protection.