

This classification seems to be an excellent one. For its further development we must refer to the paper itself.

A paper on the septic glands of the stomach by Dr. Rollet follows the former, and is most exhaustive in character, and the fact that the methods by which the results have been arrived at are most carefully described is especially to be commended. A new carmine solution is recommended which we have tried with excellent results. It has the advantage of being neutral, and of allowing of the addition of a certain amount of acid without suffering precipitation. It is prepared by boiling for five hours 35 grains of carmine with 270 cc. of dilute sulphuric acid (one volume of concentrated acid to fifteen volumes water), the volume being kept constant by the addition from time to time of water. The resulting solution is filtered and diluted with four times its volume of water. The sulphuric acid is then neutralised with carbonate of barium, and the solution quickly filtered. As soon as the filtrate has run off, a fresh quantity of water is poured on the precipitate, and comes through strongly coloured. Four or five filtrates may thus be obtained. The first two do not keep well, the third, fourth, and fifth do. From these solutions may be obtained what is called by Dr. Rollet carmine-red, which is soluble in distilled water.

It is too much the fashion amongst English histologists to aim at staining the nuclei only of the cells of tissues, whereas what is far more valuable is a clear definition of the boundaries of the cell itself. This result is in most cases only to be obtained by using a perfectly neutral solution of carmine such as the one just described. Dr. Rollet has found it yield very good results in cases where carminate of ammonium had failed. It would probably be found very good for silver preparations.

In a short notice it is impossible to do justice to such a paper as this. Dr. Rollet describes the glands of the rabbit, cat, dog, ox, sheep, pig, hedgehog, and other animals. He has also compared the appearance presented by the glands of the hibernating and active bat. The journal contains also an account of a "Commutator for Batteries in Physiological Laboratories," invented by Dr. Rollet; a paper on the "Development of Spermatozoa," by Dr. Victor V. Ebor, of great importance; another, on the "Glands of the Larynx and Trachea," by Dr. Mathias Boldyrew, who describes glands in all respects resembling pyers glands, as occurring occasionally in the larynx of the dog; and "Remarks on the effects of the administration of small quantities of curare in successive injections," by Julius Glase. The results are very remarkable. The animal becomes at each injection more and more sensitive to the poison, and finally reaches a state in which an extremely small quantity produces immediate convulsions and even death. Moreover, the injections may be intermitted for days and yet the animal remain as sensitive as before. The author believes that the system becomes adapted to the poison in such a way as to absorb it more rapidly, or that an actual change in some of the nervous centres occurs. Of course we cannot consider this a case of so-called cumulative poisoning, since the animal remains apparently perfectly healthy between the doses. The last paper is one on the "Ciliated Epithelium of the Uterine Glands." The author, Dr. Gustav Sott, has observed cilia in motion in the uterus of the cow, sheep, pig, rabbit, and moose.

H. N. M.

#### OUR BOOK SHELF

*A History of British Birds.* By the late William Yarrell, V.P.L.S., F.Z.S. Fourth Edition, revised by Alfred Newton, M.A., F.Z.S. Parts 1 and 2. (London: Van Voorst, 1871.)

"YARRELL'S *British Birds*" is without doubt one of the best known and most widely appreciated books on Natural History ever published in this country, and has probably done more than any other work to excite and augment an interest in one of the most attractive branches of zoology. At the same time, "*Yarrell's Birds*" is neither cheap nor popular in the ordinary sense of these terms, and the fact of three large editions of it having been sold, and a fourth being now called for, is a sterling proof of its extraordinary merits. The third edition of the work was issued in 1856, a few months before the author's death. For the editorship of the present (fourth) edition the publisher has secured the services of Prof. Newton of Cambridge, than whom no one is better qualified for the undertaking. Moreover, what is of still greater consequence, it may be added that, so far as we can judge from the parts of the work that have as yet reached us, Prof. Newton has set about the task entrusted to him in a very thorough way. As has been observed in the prospectus of the new edition, the literature of the subject has been nearly doubled within these last thirty years—that is, since the date of the publication of Mr. Yarrell's original work, while even since the issue of the last edition an extraordinary augmentation has been made of our knowledge of *British Birds*. "Very many of the species respecting which little was actually known in 1856 have been traced by competent observers to their breeding-quarters, and their habits ascertained, and in some instances minutely recorded." Mr. Yarrell's later editions having been little more than reprints of the original, with the intercalation of certain species recorded from time to time in the "*Zoologist*" and similar periodicals as "*new British birds*," it follows that a good deal of alteration and addition was necessary to bring the work up to the present standard of ornithological knowledge. This the new editor has apparently determined to effect, in spite of the vast amount of labour involved in so doing, which, on the whole, will fall little short of that of preparing an entirely new work on the subject. Such articles as those on the Griffon and Egyptian Vultures and the Greenland and Iceland Falcons in the first number require to be entirely rewritten, while material additions have to be made to the history of even the commonest species, particularly as regards their geographical range and their representation by allied forms.

The woodcuts of the present edition are mostly the same as those prepared for the original work.

It is certainly a decisive proof of the present popularity of ornithology, so far at any rate as regards the knowledge of our native species, that while Mr. Gould's "*Birds of Great Britain*" is still unfinished, and Messrs. Sharpe and Dresser have lately begun an entirely new work occupying nearly the same ground, a fourth edition of Mr. Yarrell's "*History of British Birds*" should be commended with every prospect of permanent success.

P. L. S.

WE have lately received the last published Report on the progress of Entomology prepared in connection with the *Archiv für Naturgeschichte*. In the space of 226 pages it includes a review of all the works and papers published in 1867-68 on the subject of Entomology, taking that word in what may be called its Linnean sense, namely, as embracing the study of Insects, Arachnida, Myriopoda, and Crustacea. Of these reports, commenced by Erichson, continued by Schaum, and after his illness by Gerstäcker, it is impossible to over-estimate the value, for although the information contained in them upon the species and sys-