

The excellence of the work, and it is great, lies in the histological and bacteriological portions, and in the numerous and ingenious theories and suggestions; but the necessity of finishing the book soon, and of keeping it within reasonable size, appear to be responsible for the less satisfactory accounts of the morbid anatomy and of the etiology of the lesions in certain of the sections. This, however, will probably be remedied in later editions.

OUR BOOK SHELF.

The Mechanism of Weaving. By T. W. Fox. Pp. 464. (London: Macmillan and Co., 1894.)

ONE result of the application of the "beer money" to education is the increasing production of technical hand-books similar to that before us. Technical Instruction Committees found, very soon after their responsibilities were thrust upon them, that there were few competent teachers of technology, and that the literature of arts and crafts was very limited. Many books have been made for the purpose of supplying the need, some good and others of doubtful utility. The new conditions have been favourable to the development of technological books and teachers, and we must not complain if a few monstrosities occur in the case of each, for they are more than counterbalanced by many admirable examples on the other side. The book under review is one of these new guides to industries, and nothing but good can be said of it. It deals with a branch of weaving that has been almost ignored by previous writers. Much has been written on designing and fabric structure, but practically nothing on the mechanical processes of the weaving trade, though new machinery and new processes have been increasing ever since the power-loom supplanted the hand-loom. This gap is admirably filled by Mr. Fox's treatise. The leading types of weaving machinery are clearly described, and the numerous illustrations (256 in all) of machines, appliances, and constructions pertaining to the textile industry are most instructive. We have no hesitation in saying that Mr. Fox, who is the lecturer on textile fabrics at the excellent Municipal School at Manchester, has produced a practical handbook of great value.

Memorials of Old Whitby. By Rev. J. C. Atkinson, D.C.L. Pp. 326. (London: Macmillan and Co., 1894.)

FICTION, "like the baseless fabric of a vision, leaves not a wrack behind," because it has no foundation in fact. Stories that are commonly classified as "fabulous" usually have, however, a nucleus of scientific import. In the words of Canon Atkinson: "The myth, the fable (of the mystic sort), the legend, has always a base, a substratum or foundation of some sort. Like the Pentacle, with its mystic application and use, or the Svastika, Fylfot, or Hammer of Thor, the Monolith or Standing-stone—from Jacob's stone at Bethel, and before and since—it has always had its own something to rest upon, to spring from its actual material 'base' or occasion." Scientific inquiry is required to reveal this base; but by this we do not mean that facts of physical or of natural science are necessarily involved in every marvellous story, but rather that the investigator of legendary lore should conduct his research in a scientific spirit, discarding speculative evidence, and reducing the problem to its simplest appearance. This is the spirit in which Canon Atkinson has investigated the myths, legends, and traditions connected with Whitby. His treatment of the Caedmon legend is worthy of special mention. It will be remembered that Caedmon produced his great sacred poem at Whitby. According to Baeda, he was a common cowherd or oxherd, to whom the gift of poesy was miraculously, or at least suddenly, given, and this story has been generally accepted in spite of its great

improbability. Canon Atkinson rids the story of its miraculous element, and justifies the dictum *poeta nascitur, non fit*. He shows that it is largely mythical, and that Caedmon was probably a homely native poet of some genius, but undeveloped, before the Abbess Hild took him up. This view is practically clinched by the evidence that Caedmon's name is of Celtic origin, and that therefore he doubtless possessed the fervid imagination and vivid fancy of the Celtic temperament. It need hardly be said that the miracle described by Baeda would have been eliminated from the story at once by a man of science. To us it seems that Canon Atkinson comes to the only conclusion possible after a careful consideration of historical records, and a common-sense view of the case. Other stories and customs connected with Whitby are discussed with a similar broad-mindedness, and in a manner which local historians generally would do well to follow.

Die Schöpfung der Tierwelt. Von Dr. Wilhelm Haacke. Pp. 552. (Leipzig and Vienna: Bibliographisches Institut, 1893.)

IT is just as well to state at once that this is a scientifically-arranged description of the animal kingdom, profusely and beautifully illustrated with twenty coloured plates and 469 figures in the text. The illustrations are certainly among the finest of their class, and one cannot help regretting that, as the text is in German, the work can only have a limited sale in England. We can console ourselves, however, with Mr. Lydekker's "Royal Natural History," now being published, and which is rather more popular than the volume under review. The order in which Dr. Haacke treats his subject is uncommon. The book is divided into two parts, one dealing with the various forms of animal life from the point of view of their development, while in the second part the characteristics of different groups of animals are described. The first part is thus chiefly concerned with embryology and palæontology in their relations to zoological affinities; with the functions of organs and the influence of environment; and with the distribution of animal life upon the earth. In the second part, invertebrated and vertebrated animals occupy two separate sections, and life is traced from the protozoa up to the higher forms. From this brief sketch it will be seen that the book has the theory of evolution as the basis of its construction. It is therefore a work in which the facts of natural science are presented in scientific order, and as such deserves high commendation.

The Vaccination Question. By Arthur Wollaston Hutton, M.A. Pp. 128. (London: Methuen and Co., 1894.)

MR. HUTTON is among the mistaken people who distrust vaccination, and advocate the repeal of the compulsory laws relating to it. His book is in the form of a letter addressed to Mr. Asquith, in the hope of converting him to the opinion that compulsory vaccination is indefensible. It would be futile for us to discuss the subject, or to attempt to show the fallacy of much of the evidence adduced against vaccination. We may, however, point out that, to be consistent, the anti-vaccinationists must oppose the treatment of diphtheria by anti-toxic serum; but this they are doubtless ready to do.

Dr. William Smellie and his Contemporaries. By John Glaister, M.D. Pp. 360. (Glasgow: James Maclehose and Sons, 1894.)

DR. GLAISTER'S book throws some new light upon the history of obstetrics in Great Britain and France, during the eighteenth century, in addition to tracing the career of one of the founders of scientific midwifery.

Smellie's work, however, was so purely medical in character, that a review of it would be of little interest to most of the readers of NATURE.