

OUR BOOK SHELF

Natural History, its Rise and Progress in Britain, as developed by the Life and Labours of Leading Naturalists. By Alleyne Nicholson, M.D., D.Sc., Regius Professor of Natural History in the University of Aberdeen. British Science-Biographies. (London and Edinburgh: W. and R. Chambers, 1886.)

THIS little octavo volume of about 300 pages is a readable book, and accurate in its information as far as it goes. But, besides being sketchy—which is no doubt a fault incidental to the form of the series—it is strangely ill-balanced. In the first place, the author has travelled beyond the limits of his title by giving biographical sketches of Aristotle, Linnæus, Lamarck, and Cuvier—together constituting more than a third of the whole number of “British Science-Biographies” with which they are intermingled. In the next place, as regards the “British Science-Biographies” which are given, there is no proportion observable between the relative magnitudes of these British biologists and the amount of notice which is respectively bestowed. Running the eye over the table of contents, we find that separate chapters are devoted to eleven “leading naturalists” of this country. These, of course, must be understood by his general readers, for whom the book is designed, as representing what, in the author’s opinion, are the eleven greatest names in the records of British biology. Yet six of these names are Sir Hans Sloane, Gilbert White, Alexander Wilson, William Swainson, Edward Forbes, and Robert Chambers! To take only the first and last of these names, surely when a whole chapter, with a portrait, is devoted to Sir Hans Sloane, it is remarkable that no mention at all should be made of Sir Joseph Banks; or that, when another whole chapter is assigned to Robert Chambers, we should nowhere encounter the name of Robert Brown. It appears to us that when a Professor of Natural History undertakes to popularise his science, his aim should be to place before what this writer calls “unprofessional readers” a true conception of the merit that attaches to solid work in science, as distinguished from the celebrity that belongs to a graceful writer or to an interesting personal character. He should endeavour to raise the popular mind to a just appreciation of *naturalists*; he should not pander to the already accomplished popularity of *authors*. Now, if this has been the aim of Prof. Nicholson—and in his preface he says as much—in our opinion he has shot wide of his mark. But, as before observed, if his object has been to produce a readable assemblage of short biographies, calculated to suit the popular taste, we should say he has every reason to be satisfied with the result.

The Journal of the Royal Agricultural Society of England. Part II., 1886. (John Murray, Albemarle Street.)

THE current number of this *Journal* furnishes an excellent illustration of the wide limits of agricultural science, and the varied knowledge required of its professors. There is perhaps no art or occupation which so directly requires elucidation from so many sciences; hence the varied nature of the bill of fare provided by the *Journal* Committee of the Royal Agricultural Society. In proof of this assertion we may take the contents of the entire volume for 1886, the second part of which lies before us. Pathology is treated of in papers upon foot-and-mouth disease; Pasteur and his work; lung parasites, by the late T. Spencer Cobbold, M.D.; and abortion in cows. Anatomy and physiology are the topics in Prof. Brown’s paper upon organs of the animal body, their forms and uses. Chemistry and botany are amply represented in reports by Mr. Carruthers and Dr. J. Augustus Voelcker. Entomology in the form of papers on the recent appearance of the Hessian fly is the theme of Miss E. A.

Ormerod. Social science is illustrated by Mr. H. M. Jenkins’s report upon farming and agricultural training in reformatory and industrial schools, and engineering in the report of the Judges on the Exhibition of Implements at Norwich.

The more immediately agricultural information is embodied in many interesting papers, among which may be mentioned continued reports upon field and feeding experiments at Woburn; experiments on ensilage conducted at Crawley Mill Farm, Woburn; report on the prize-farm competitions in Norfolk and Suffolk, 1886; the report on the Exhibition of Live-Stock at Norwich; and lessons from the winter of 1885-86.

The number issued during the past month also contains the examination papers on agricultural education set during the present year, and much statistical information useful to agriculturists. With such a large mass of material at hand, it is by no means easy to compress remarks into the limits of a short notice. The names of the authors of the various contributions is a guarantee of their value, and any person who desires to keep pace with scientific agriculture, whether actually engaged in agricultural pursuits or not, will do well to peruse these pages. The most interesting papers, and those containing the newest information on subjects of vital interest to us, are as follows:—(1) An inquiry into several outbreaks of abortion in cows, by C. J. B. Johnson, L.R.C.P., who traces most of the cases to the presence of ergot (*Claviceps purpurea*) in grass and hay. (2) Report on ensilage experiments, in which the results are less favourable to this innovation upon old-fashioned practice than some of the apostles of the movement could wish. Silage is found inferior to homely, honest hay and roots. It is true that silage made from green oats showed a distinct superiority, but the question still remains open whether these promising young oats, sacrificed while in the green stage, might not have developed into still greater value had they been allowed to bloom and fructify and bear their thirty, sixty, or perchance a hundred-fold. Promoters of ensilage have little to congratulate themselves on in this result of strict inquiry and accurate tests brought to bear upon their hobby. No doubt they will be equal to the occasion. The prize-farm competition is, as usual, interesting, but it is a matter of regret that, in such a noted county as Norfolk for farming, the best-known agriculturists, whose farming has been the admiration of their countrymen for generations, should apparently have held aloof from the competition. The first prize was awarded to a suburban farm close to Norwich, and but little can be learnt from management carried on under quite exceptional circumstances. It is also a pity that the able officials of the Royal Agricultural Society do not insist upon a greater uniformity in the reports of their judges in the matter of statistics. For purposes of comparison it would be well if some tabular statement could be made out, as for example as to the amount paid in rent, in labour, feeding-stuffs, and trade expenses; also as to the gross and net produce per acre in each case; the yield of corn in bushels, and of roots in tons; the uses made of straw; the amount of work expected per day from horses and men; the hours of labour; the rate of payment for day and for task work, &c. The reader looks in vain for any such comparisons. Statements regarding them he finds in respect of this or that farm, but any plan by which he may compare or note extremes and means he looks for in vain. Considering the many years in which prizes for the best-managed farms have been given, it is a matter for wonder that it is simply impossible to construct any comparative statement as to points of management in the numerous farms inspected and reported upon. Lastly, we must notice Mr. H. M. Jenkins’s report on the cultivation of tobacco in the north-west of Europe, a fairly hopeful paper as to the introduction of this cultivation into England. It would ill become the able secre-