History of Birds in Britain.

Early Annals of Ornithology. By J. H. Gurney. Pp. viii+240. (London: H. F. and G. Witherby, 1921.) 12*s.* 6*d.* net.

ALL who are interested in ornithology should read this book, which gives an excellent account of our knowledge of birds from the earliest times, and of the authorities whence that knowledge is drawn. Mr. Gurney, as he tells us in his preface, is more particularly concerned with Britain; indeed, if more than occasional references were to be made to such European authors as Aldrovandus, Belon, Clusius, and Gesner, the work would become of unmanageable size. After a preliminary survey of prehistoric records we have successive chapters dealing in order with the centuries from the fourth to the eighteenth.

The state of England naturally comes under consideration, and especially that of the Fens and of the Eastern counties, with which the author and his family are so closely connected. The undrained marshlands were formerly the haunt of many birds now rare or exterminated; the warrens and wolds were untouched and the sea coasts little disturbed.

Even during the Roman occupation of Britain we find various species of birds mentioned by early authors. The pheasant is supposed to have been introduced by the conquerors, while the turkey, peafowl, guinea-fowl, and swan become prominent as the years roll by. Fowls and pigeons are of much earlier date.

Falconry was a favourite pursuit of the ancients, which was practised by Saxon or Norman kings as eagerly as by their successors. The gannet, the eagle, and so forth are celebrated in the earliest poems, while we constantly find records of the falcons and hawks used for sport. Aviaries were fairly common things, favoured even by kings. Mr. Gurney considers as worthy of more extended notice the bittern, the bustard, the crane, the gannet, the great auk, and the spoonbill. The black-headed gull comes later into the same category. Swanneries and swan-marks are always a matter of interest, and they are treated very fully, while duck-decoys and similar devices are by no means neglected. Ornithologists are indebted for many pieces of information to the bills of fare of the great feasts of old, while the household accounts of certain families have carefully to be examined. Such are those of Lord W. Howard of Naworth and of the Shuttleworths of Lancashire; but by far the most important are those of the le Straunges of Hunstanton, which have been exhaustively examined by the present head of the family.

Throughout the book we find reference to the great writers of old on birds and science generally, such as Hector Boece, Sir Thomas Browne, Pennant, Pontoppidan, Ray, Turner, and Willughby, not to mention the lesser lights.

The only section of this admirable work where we feel inclined to criticise the author's treatment of his subject is the first chapter. Its title of "Prehistoric Birds" scarcely fits the text, for some of the species mentioned are still in existence, though known from prehistoric times. Again, although we should not expect full details of fossil birds, we should have liked a few words about the earliest known form of archæopteryx and its cretaceous successors. Another possible method would have been to omit all allusions to fossil birds and to start this most interesting chapter with the cave drawings, the Meidonn slab, Aristotle, and Pliny.

Chromium, Platinum, and Lead Ores.

Imperial Institute: Monographs on Mineral Resources, with Special Reference to the British Empire. (1) *Chromium Ore.* By W. G. Rumbold. Pp. ix+58. (1921.) 3*s.* 6*d.* net. (2) *The Platinum Metals.* By A. D. Lumb. Pp. ix+63. (1920.) 3*s.* 6*d.* net. (3) *Lead Ores.* By T. C. F. Hall. Pp. ix+127. 6*s.* net. (London: John Murray, 1921.)

THESE three additions to the Imperial Institute's series of Monographs on Mineral Resources deal respectively with the ores of chromium and lead, and the platinum metals. Those on chromium and platinum are naturally the most complete, for the lead ores are especially varied and widely distributed, and have a longer mining history.

(1) Chromite ores are of particular geological interest, since they are generally claimed to be of direct igneous origin. An account of such evidence as might be yielded by the microscopic structure of the ores as to their mode of formation would have added to the permanent value of the monograph. Mr. Rumbold adopts the view that the Rhodesian chromite ores, though very different in character from those for which the igneous theory was propounded, are not inconsistent with it. This statement of the evidence from all the chromium fields shows, however, that the chromites for which the direct igneous origin is probable form but a small proportion of the commercial ores. Most of the existing supply of chromium comes, not from segregations in dunite