siderable service. Practically all one can say to a traveller is that he should collect full information about everything, and books of this kind are valuable in suggesting topics for inquiry.

Catalogue of the Lepidoptera Phalaenae in the British Museum. Vol. iv. Catalogue of the Noctuidæ in the Collection of the British Museum. By Sir George F. Hampson, Bart. Pp. xx+689, plates lv.–lxxvii., and 125 woodcuts. (London: Printed by Order of the Trustees.) Price 15*s.*; plates 16*s.*

THE previous volumes of this important work appeared in 1898, 1900, and 1901 respectively, and we have now to record the publication of vol. iv., which includes the Agrotinæ, the first of the fifteen subfamilies into which the great family of Noctuidæ is divided; 1139 Agrotinæ are described in the present volume, out of the 10,000 to 12,000 known species of Noctuidæ.

As the Agrotinæ are well represented in Europe and North America, this volume will perhaps appeal to a larger number of lepidopterists than its predecessors, which treated of more showy, but principally tropical, moths. For the plates of Agrotinæ trichromatic photography has been employed, as more suitable to represent the generally dull colours of the Noctuidæ than chromolithography, which is considered better adapted to bright coloured moths, such as Arctiadæ.

Most of the leading lepidopterists of Europe and America have helped to make Sir George Hampson's work more complete by the contribution of specimens, or coloured photographs of unique types, and the loan of co-types.

Descriptions of the known larvæ of Agrotinæ are added from various authentic sources, those of North American species being mostly contributed by Dr. Harrison G. Dyar.

The general arrangement of the book is in all respects similar to that of previous volumes, and the execution of the plates is excellent, though one or two figures may perhaps be somewhat undercoloured—not a very serious point, however.

There are small matters on which we think information, when attainable, might have been added, such as the elevations between which mountain species occur (which is only rarely mentioned) and the latitudes at which Arctic species have been found.

As we may reasonably assume that the increase of our knowledge of moths will be still more rapid in the future than it has been in the past, we can hardly expect Sir George Hampson to complete the Noctuidæ in less than ten or twelve volumes. At a rough estimate it is probable that out of the 1139 species described in vol. iv. less than 300 may have been included in Walker's catalogue of 1856–1866. Rather more than 100 species of Agrotinæ have been described by Sir George himself, either for the first time in the present volume, or in previous publications.

Proceedings of the London Mathematical Society. Vol. xxxv. Pp. 476. (London: Francis Hodgson, 1903.)

A SPECIAL interest attaches to the present volume from the fact that it marks the retirement from the secretaryship of Mr. R. Tucker after thirty-five years of office. Mr. Tucker was elected a member of the Society on October 16, 1865, and two years later he succeeded G. C. de Morgan as secretary. Mr. Tucker has been responsible for the greater part of the editorial duties connected with the issue of the *Proceedings* from part xii. onwards, and he has succeeded in producing a series of English mathematical transactions of which he may well feel proud.

Among the subjects treated in this volume we note Dr. Hobson's presidential address on the infinite and the infinitesimal in mathematical analysis, and papers by Mr. Conway on light propagation in a uniaxial crystal, by Prof. A. C. Dixon on summation of series and expansion of functions, by Prof. Hill on power series, by Prof. Lamb on wave motions, by M. Picard on existence theorems for differential equations (in French), by Mr. Whittaker on harmonic analyses, by Mr. W. H. Young on sets of points and intervals, and many other papers of equal interest.

Insist on Yourself. The only Law of Success. Pp 45. (London: Gay and Bird, n.d.) Price 1*s.* net.

THIS little book is intended to set forth concisely many of Emerson's utterances on the importance and power of individuality. The "thoughts" selected are attractively arranged and nicely printed.

LETTERS TO THE EDITOR.

[*The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts intended for this or any other part of* NATURE. *No notice is taken of anonymous communications.*]

The Unusual Sky Colours and the Atmospheric Circulation.

PROF. F. A. FOREL writes me concerning my letter in vol. lxviii. p. 623, that although he did not himself observe the coloured ring around the sun prior to the first of last August, yet he has been informed that it was seen in Europe much earlier. The observers and dates quoted by M. Forel, arranged by localities from north to south, are as follows:—Director Rykatcheff, of the Central Physical Observatory at St. Petersburg, noted an opalescent veil surrounding the sun on October 5 and November 9, 1902, January 21, February 10, 18 and 23, March 17, April 5, May 29, and July 26, 1903. Dr. Busch, at Arnsberg, Westphalia, saw the same thing on November 19, 1902, March 21 and 22, 1903, and Prof. Wolf, at Heidelberg, during January, 1903. Dr. Maurer, at Zurich, observed the ring also in January, on March 27 and 28, June 7, 8, 9, and at the end of July, 1903. Therefore, M. Forel says, very properly, that since the phenomenon was observed practically simultaneously in Europe and America, no hypothesis as to why it appeared first in the last named country is needed. While admitting the truth of the statement, I would remark that a faint whitish ring around the sun was recorded by me here as early as June 26, 1902, although it was not noticed again until the close of the year. The equally early appearance over southern England of a large brownish corona, which became smaller but more conspicuous during the summer and autumn of 1902, is described by Mr. T. W. Backhouse in NATURE (vol. lxvii. p. 174).

M. Forel pointed out in the *Comptes rendus* of the French Academy of Sciences for August 10 that in view of the intermittent character of the brilliant colours of the western sky after sunset during the preceding year, produced, he assumed, by the breaking up of the continuous ring of volcanic dust into separate cloud masses which passed successively over Europe, it became of interest to ascertain whether the present Bishop's ring, unlike its predecessor, was always visible in favourable circumstances. The data mentioned, as subsequently sent M. Forel, proved that the new Bishop's ring was visible only at irregular intervals, as he had surmised. Now, if this phenomenon, as well as the discontinuous sunset glows, were caused by the passage of isolated masses of volcanic dust, it seems possible, by comparisons with observations at distant stations, not only to trace the direction of their drift, but also to determine their approximate velocity. Accordingly, the records at Blue Hill of the occurrence of Bishop's ring and of abnormal glows after sunset during the past year were examined, and the tendency of both phenomena to occur intermittently, but not necessarily simultaneously, was established, even though the transparency of air remained nearly constant.