OUR BOOKSHELF.

Interpretations and Forecasts: a Study of Survivals and Tendencies in Contemporary Society. By Victor Branford. Pp. v+411. (London: Duckworth and Co., 1914.) Price 7s. 6d. net.

"THE city," said Aristotle, "exists for the sake of the good life." But only by the good life is the ideal city, the perfect state, to be realised. In other words, social organisation is necessary for individual achievement, but individual achievement reacts creatively upon the social organisation. Mr. Victor Branford, one of the founders of the Sociological Society, has with his spiritual father, Prof. Geddes, done much to illustrate this essential interaction, and still more to infuse a sense of enthusiasm into our appreciation of it. He shows in these lectures the spirit of the medieval guildsmen, who knew themselves to be citizens of no mean city. On their work and ideals he writes a delightful and instructive essay.

The text of the whole book is Aristotle's theory of the city. The author well shows how, as a result of the statecraft of the Renaissance and subsequent centuries, a "capital literary fraud" was perpetrated upon that theory. Aristotle saw the city as "a process in which four types of social operation tended to co-adjustment. He saw the Labour of the People, who maintain the outer life of the city; he observed the Public Functions of the citizens, who direct the polity of the city; he perceived the Meditations of Philosophers, who study and compare the politics of cities in order to discover the ideal polity; he recognised the Efforts of Teachers to educate for citizenship. In proportion as all these—the four natural elements of civic life—work together harmoniously, the city comes into being and creates for its citizens the conditions of the good life." The fraud perpetrated upon this theory is the substitution of "state" for "city"; "politician" for "citizen"; "constitution" for "polity"; "political" for "civic"; and "for the science and art of Civics they have substituted Politics." A reaction towards the original and sounder view is to be seen in the decentralising movement of to-day. The author is familiar with the life both of North and South America, and his comparisons of the working of a new spirit in the western republics and in European countries are marked by insight. The place of education in developing the ideal and therefore most efficient relation between man and society, in its most practical because closest and best realisable form, the city, is very fully worked out.

The book is an eloquent example of the practical application of sociological theory.

A. E. CRAWLEY.

The Country Month by Month. By J. A. Owen and Prof. G. S. Boulger. Pp. x+492. (London: Duckworth and Co., 1914.) Price 6s. net.

TWENTY years ago Mrs. Owen, better known, perhaps, by her works under the signature "A Son of the Marshes," prepared, with Prof. Boulger, a series of twelve volumes in which the natural characteristics of the country month by month

were described. The series was published in a single volume in 1901, and was given an appreciative notice in these columns (vol. lxx., p. 125). The late Lord Lilford sent the authors a number of valuable notes which were added to the original work, and are also included in the present volume. The new edition has been revised, and is embellished with twelve coloured plates and twenty half-tone plates reproduced from photographs. The result is a very attractive book on popular natural history. Many similar books have been published in recent years, but for pleasantly-written description of country life, interesting alike to the general reader and the working naturalist, this volume is among the best. In its present form the book should be acceptable to a wide circle of readers.

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.]

Migration Routes.

ON November 27, 1913, NATURE published a letter from me in which the suggestion was made that birds when migrating may find it advantageous to follow coast lines or rivers, because of the up-air currents produced by the difference of temperature of the surface of the land and water.

Mr. McLean has recently flown up the Nile, and he tells me that the vertical air currents were frequently very marked. When the wind was only slightly different in direction from the line of the river there was a down current on the side from which the wind came and an up current on the other side. When, however, the river split up into several channels the air was generally descending over the whole neighbourhood and was disturbed. These down currents were at times so strong that his aeroplane when climbing at its greatest speed would descend steadily at 3 ft. per second. He estimates that the maximum rate of climbing of his machine in still air was 4 ft. per second. This observation is of great interest as showing that a down current may exist of about the velocity of 4.8 miles per hour.

HORACE DARWIN.

The Orchard, Cambridge, June 8.

Aeroplane Wings.

IN connection with the apparently growing practice of constructing the wings of aeroplanes so that their inclination can be modified (a scheme which I recommended in the first edition of my book, "The Problem of Flight," published in April, 1907), may I direct attention to my paper read at the Dundee meeting of the British Association in 1912? Therein I referred to the fact that the propeller axis (to which the inclination is, or should be, referred) does not run horizontal so that the propeller thrust has a vertical component. The use of a mechanism by which the wing inclination can be varied enables this vertical component to be annulled, i.e. the propeller axis can be kept horizontal, thus greatly increasing the efficiency.

With reference to the question of acceleration in the air and its effect on the reactions, which was discussed some time ago in NATURE in connection with Mr. Walkden's book, a recent paper of mine in *Flight* on oscillating wings may be of interest. It was shown therein that if the reactions during oscillation of the