and when the environment in general is conducive to prosperity. Since the evil effects of inter-breeding become more marked as the environment becomes less favorable, and as male births are then in excess, he believes that the excessive production of males is an adaptation which has gradually been acquired by natural selection, for the purpose of preventing close inter-breeding at the time when it is injurious; but. as an injurious property cannot be established by natural selection, the evil effects of inter-breeding cannot be primary. The end which is advantageous, and which has been secured by natural selection, is the crossing or sexual union of individuals which are not closely related. As the object of crossing is to secure variability, it is most necessary when change is needed; that is, when the conditions of life are unfavorable.

Natural selection has accordingly acted to secure this by rendering the offspring of a cross more able to resist an unfavorable change than the offspring of closely related parents, or the parthenogenetic children of a single parent; and the excessive production of males under an unfavorable environment is for the purpose of securing variation, rather than the prevention of inter-breeding.

This very suggestive topic opens many fields for research where our information is very scanty; and any readers of *Science* who are able to contribute information regarding the number of births of each sex in wild or captive or domestic animals will help to a clearer insight into an extremely interesting and important problem. The writer will gladly receive and tabulate information upon this point, and will give proper credit to contributors.

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CONTEMPORARY SOCIALISM.

Contemporary socialism. By John Rae, M.A. New York, Scribner, 1884. 13 + 455 p. 8°.

Among the merits of this volume may be mentioned the spirit with which the subject of socialism is approached. The author, understanding that his position is not that of an advocate either of existing society or of any proposed future social form, attempts to present an impartial but critical account of the schemes which contemporary socialists assure us will inaugurate an earthly paradise. Mr. Rae indulges neither in abuse nor declamation nor frightened outcry, but manifests a judicial calmness of temperament, befitting a man of science.

The scope of this work is indicated by the titles of the chapters, which are the following: Introductory, containing a preliminary survey of the field; Ferdinand Lassalle; Karl Marx; The federalism of Carl Marlo; The socialists of the chair; The Christian socialists; Russian

nihilism; Socialism and the social question; Progress and poverty; Henry George.

The arrangement of topics is not at all what one might expect, and is due, perhaps, to the fact that the book consists, in part, of articles previously published in the Contemporary review and the British quarterly. These have been enlarged, and supplemented with additional chapters, and the old and new are not well joined together. It exhibits more or less of the character of patchwork in many places; each chapter not leading naturally to the following, nor being an outgrowth of what has preceded. Thus Lassalle, who built on Marx and Rodbertus, and who simply interpreted their doctrines to the common people, kindling in their breasts a fire of enthusiasm not yet extinguished, is treated in the second chapter; while Karl Marx, his logical predecessor, follows. Rodbertus, the father of scientific socialism in Germany, of whom Marx is only a further evolution, receives no separate treatment at all, and is barely alluded to in the chapter on Marlo. The greatest figure in modern socialism is thus passed by in scarcely half a dozen words, in a work professing to give a picture of contemporary socialism. French socialism fares scarcely better, receiving only three or four pages in the introductory chapter, and that in a work of four hundred and fifty-five pages. This is certainly inadequate. Henry George, on the other hand, who, it is acknowledged, is not a socialist in the ordinary acceptation of the term, receives seventy-seven pages.

The book is a disappointment; because it is a series of detached essays, instead of a connected whole, and is not what a perusal of the author's articles in the Contemporary review might reasonably have led one to expect. The entire work betrays either indolence, or lack of sufficient time for the adequate performance of the author's task; for it ought to have been re-written, the style improved, a more philosophical and symmetrical arrangement secured, and more careful attention given to the most recent phases of contemporary socialism. Parts of the book were written several years ago, and, though perhaps true then, are not accurate now; and, even in the apparently more recent additions, there is an oversight of what is transpiring at the present time. Thus, on p. 56, Mr. Rae uses these words: "England is the only great country where socialism has at present neither organ nor organization that reaches the public eye or ear." This sounds strange, for in this country we hear frequently

of the 'democratic federation,' and at least three periodicals of a radically socialistic nature are supported, — viz., the monthly Today, and the weeklies Justice and Christian socialist, — while Hyndman's books, 'England for all,' 'The historical basis of socialism,' etc., have certainly attracted wide discussion, as have also the contributions of the poet Morris to the literature of socialism. American socialistic movements likewise receive entirely inadequate attention; and the impression is conveyed that there is practically no American socialism, — a most radical error.

One of the peculiarities of modern socialism is its unexpectedness wherever it makes its appearance. This is brought out in several places by Mr. Rae. Referring to German socialism, on p. 61 he says, "Professor Lorenz von Stein of Vienna, . . . who wrote an acute and thoughtful book on French communism in 1842, says in that work, that Germany, unlike France, and particularly England, had nothing to fear from socialism because Germany had no proletariate to speak of. Yet in twenty years we find Germany become suddenly the theatre of the most important and formidable embodiment of socialism that has anywhere appeared." This is a correct statement. Again and again it was said that communism was a French disease, from which Germany had nothing to fear; as her peace-loving, laborious, frugal, and contented laborers could never become infected with the poison of discontent. Now, to use a socialistic phrase, she leads the labor battalions of the world. Less than ten years since, Englishmen boasted that socialism was a continental plague, from which the free institutions of England, and the manly, self-reliant character of her sons, forever exempted the British Isle: now it is doubtful whether socialism has anywhere a more respectable following, and even the government is influenced by socialistic ideas. A tinge of socialism is diffusing itself over the institutions of England, the classic land of laissez-faire. And in America how proud has been our self-confidence! what satisfaction have we pointed to our broad prairies, offering homes to all! With what contentment have we talked about the prosperity of the American laborer! With what scorn have we referred to the pauper labor of Europe! Surely no sane man could expect a social disease like socialism in the United States. But here it is, and it is nowhere making more rapid strides. The proof of this is on every hand. It is but necessary to open one's eyes, and watch the movements of the laboring

classes. Their parades, mottoes, labor-unions, newspapers, conventions, and congresses tell the tale; but of all these, Rae has little or nothing to say.

The book is timely, and it is unfortunate that our author did not do himself better justice in a more carefully prepared treatise.

THE FACE OF THE EARTH.

Das antlitz der erde. By E. Suess. Abteilung i. Leipzig, Freytag, 1883. 310 p., illustr. 4°.

Dr. Eduard Suess of Vienna, well known among geological readers for his original writings on the structural relations of earthquake disturbances and on mountain building, has in preparation a more general work on the 'Face of the earth,' in which he attempts, by a



OVERTURNED FOLD IN THE MAMRANG PASS.

critical review of recent studies, to correct a number of surviving errors, and prepare the groundwork for an unprejudiced view of dynamical geology. The first part of the work, already published, contains a discussion of motions in the outer crust of the earth, and of the structure and course of some of the larger