

only is each interesting of itself, but their assemblage conjures up a picture of one of the remarkable personalities of "the Wonderful Century." With no less pleasure than formerly we read such essays as these on the Permanence of Oceanic Basins ("Natural Science"), the Origin of Species and Genera ("Nineteenth Century"), Human Selection ("Fortnightly Review"), and How to Nationalise the Land ("Contemporary Review"); but when we see them gathered under the name of a single author, we think perhaps less of their varied subjects than what manner of man he may be that can thus turn from "teeth" to "true marriage," from "valleys" to "variability," from "forests" to "free trade," and from "sportsmen" to "spiritualists."

A breadth of interest is obvious; yet not a catholicity. Mr. Wallace may, of course, have the deepest feeling for art and literature, but neither their technique nor their imaginings incite his pen, while they were equally absent from his appreciation of the nineteenth century. Metaphysical questions too appear not to trouble him. He takes the facts of nature and of human life as they present themselves to him, quite simply, and in an honest straightforward way he examines their relations and their causes. Within these limits there is abundance of choice, without any need to soar beyond the intelligence of the average reader. None the less is it a virtue in our author that, whatever his subject, he can always arouse interest. This he effects not by any distinction or picturesqueness of style or by any vividness of presentation, so much as by simplicity and sincerity of treatment. The "momentary fires" of wit are replaced by a calm illumination of the whole. There is never any excuse for not understanding Mr. Wallace. The fault, if any, lies rather in too much explanation; but in a collection of independent articles repetition is almost unavoidable.

An essential element of Mr. Wallace's lucidity is his logical method, which moreover begets confidence. Only it must be remembered that logic, no less than mathematics, is like a mill: what comes out depends on what you put in. Thus, in the arguments on organic evolution and the utility of specific characters, would the same conclusions have followed had some of the lower invertebrates been brought into the discussion along with "the higher animals"? The theory of "recognition marks," at all events, can scarcely apply to creatures without eyes: while the evolution of ammonites, for instance, is so strangely consonant with the laws of growth that "the distinction between specific and developmental characters" is reduced to vanishing point. But, to do Mr. Wallace justice, he does not shrink from labour in obtaining his facts; and in obedience to the facts that he has found, he has changed his views on subjects of such importance as the existence of a spiritual world. A keenness in the search for facts and a resoluteness in drawing inferences from them are two qualities of the truly scientific mind; but there are also needed a rigid logic and a delicate criticism. It is chiefly from differences in the valuation of facts that differences of opinion arise. Mr. Wallace endeavours, at any rate, to pierce back to the root of things, to the fundamental cause, and in the analysis of the problems discussed his faculty of discrimination is always in evidence. Nowhere is this seen to more advantage than in his remarkable economic studies on the Depression of Trade, and the Social Quagmire.

Seeking some underlying connexion between the scientific and the social studies, we may find it in a parallel between heredity as a physiological, and heredity as an economic, principle. A fighter for the non-inheritance of all physical characters acquired by the parents during their lifetime, a believer in progress solely through the selective action of the environment on the crowd of individuals, Mr. Wallace comes naturally to oppose the inheritance of material property and to demand that the hardships and the benefits of the social world shall meet all individuals alike, so that on the innate qualities of each shall depend his prosperity and the reproduction of his kind. The parallel is not urged as an argument, even the analogy is scarcely alluded to, for the coincidence is perhaps not logical but psychological. The sets of facts are different and

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ALFRED RUSSEL WALLACE.

"Studies Scientific and Social." By A. R. Wallace.  
2 vols. London: Macmillan. 1900. 18s.

MANY will be glad to have these contributions to the periodicals of the past thirty-five years, revised and re-issued in this permanent form, since not

are investigated independently ; but the inquiring mind is one, and its conclusions in the latter case unconsciously harmonise with those in the former.

Let not a previous remark be held to imply that Mr. Wallace has no imagination. On the contrary, originality and ingenuity are among his most salient characteristics. As his scientific friends know, he has always some way out of a difficulty, some valuable suggestion of method, or some ready explanation of an enigma. It is, for example, notoriously difficult to prove the transmission or non-transmission of the direct effects of environment on the individual, since all the evidence is capable of two interpretations ; but if this question is ever to be settled by experiment, then no better method could be devised than that suggested on page 510 of the first volume, namely, the synchronous evolution of a carthorse and a racer, on the one hand by selective breeding, on the other, if possible, by repeated training alone.

But perhaps the most admired trait of Mr. Wallace's character is his modesty, and of it these volumes furnish many examples other than the classical Darwin case. "Equality of opportunity" is his own phrase, if not entirely his own idea, and it forms the burden of many of his weightier essays ; yet from his address to the Spiritualists you would almost suppose that the credit for it was due to Mr. Kidd. This is not that mock modesty so oppressive in much modern writing. Mr. Wallace has the courage of his convictions and knows the value of his own opinion ; but his aim is to solve the problem, not to justify his share in its solution. There is no uncomfortable self-repression in his writing, rather an expansion of self in genuine sympathy with his subject and his readers. His modesty is but one facet of a thoroughly altruistic temperament : so imbued is he with the love of truth, of right, and of his fellow-creatures, that when he is most lost in his discourse then exactly it is that we come nearest to the man himself.