temporary, thus displaying the general caste of mind as well as the transient emotion by which the individual is excited. The subject thus developed by the author becomes quite extensive, and is exceedingly interesting. By studying it in animals and infants, in whom the higher mental control which often modifies involuntary changes of expression in adults is absent, by showing its practical application in enabling one to read character, and by drawing from the realms of art as well as nature for his illustrations, Dr. Warner has succeeded in bringing together an entertaining series of facts, and deducing from them some instructive conclusions. We all believe that we can detect the real feelings of others in their faces, and that we can successfully conceal from others our own thoughts. How difficult both processes may become, and yet how fully they repay some study, the readers of this very pleasing work will learn.

In the last chapter the author describes an ingenious piece of apparatus by means of which the motions of the hand may be graphically recorded in those diseases in which irregular movements occur. He has evidently made some study of such affections, as the facts recorded in chapter vii. show. How far such a chapter may be generally appreciated in a popular work is questionable, as the terms employed would be intelligible only to physicians. But the subject would have been incomplete had the changes of expression incident to disease not been alluded to. To those who are curious to go into the subject more deeply than is possible in a popular treatise, the bibliography on pp. 344-346 will be of service. The work is fully up to the high standard maintained in this series. and is by no means the least interesting of the volumes already published. M. A. S.

## REFORMS IN ENGLISH PUBLIC SCHOOLS.

THE public schools of which Mr. Cotterill writes are British, not American, and his starting-point is ahead of any thing that can be proposed as an immediate goal in other countries, — ahead, at any rate, in this, that English public schools already, as a matter of fact, are nurseries of *character* quite as much as institutions of learning. Mr. Cotterill's suggestions are mostly in the line of character. Health of character is for him the end of education. He is down on competitive examinations of a severe sort, would have a test of proficiency in bodily exercises introduced into those of the Indian civil service, believes in making out-door exercise compulsory on all boys three days in the

Suggested reforms in public schools. By C. C. COTTERILL, M.A. Edinburgh and London, Blackwood, 1885. 12°.

week, each boy 'changing into his flannels' for the purpose, would restrict the 'tuck-shop' facilities the boys now have, and disbelieves in giving them too much help, whether intellectual or physical. Translations, and aid from the teacher beyond a certain point, are in his eyes equally bad; and the boys ought to prepare their own cricketgrounds, and take care of their own play, with less professional aid than they now appear to get in the larger schools. He believes in 'manual training' thoroughly, for a variety of reasons, not least among which is that it widens sympathy among classes. The book is a refreshing example of the sort of spirit the English public schools. even in their present 'unreformed' condition, engender, and increases the reader's desire to see them imitated here on a larger scale than heretofore.

The government of Tasmania are, according to Nature, making arrangements upon a large scale for naturalizing lobsters, crabs, turbot, brill, and other European fishes in the waters of that country. The various consignments will be shipped at Plymouth, and transported through the medium of the steamship companies trading between London and Hobart. An exhaustive report has been published by the Government of Tasmania, setting forth the objects in view, and giving suggestions for carrying them into effect. The report adds, that, while the achievement of the acclimatization of European fishes would lay the foundation of new and very valuable fishing industries in Tasmania, it might also prove a highly remunerative commercial enterprise to the shipping firms under whose auspices the operations will be conducted. Applications have been made in various quarters for supplies of fish, which have been satisfactorily responded to. Special tanks are being prepared, as well as apparatus, in order to provide for the necessities of the fish en route, which, it is anticipated, can be transmitted with little difficulty. The success that has hitherto attended the acclimatization of certain European fishes in New Zealand has had the effect of inspiring the government of that colony with considerable enterprise in developing their fisheries. They are now about to collect the ova of Salmonidae from English waters in large numbers through the instrumentality of the National fish-culture association and other bodies, with a view to rearing the frv in New Zealand. A shipment of eggs will also shortly be sent to Australia, where great success has attended the introduction of our fishes, except in a few instances, when failure resulted more from misadventure than from the impracticability of the attempt.