

the first book of Horace, fragments of the fourth Æneid, passages from the *Metamorphoses* and *Fasti* of Ovid, and the first eclogue of Vergil, will possess the requisite novelty to the class of students for whom this book is professedly intended.

Common Sense Science. By GRANT ALLEN. Boston, Lothrop, 12°.

Studies in Life and Sense. By ANDREW WILSON. London.

IF the question, 'What is the ideal method of popularizing science?' were raised at any of our large scientific meetings, about as many minds as men would probably be heard. Everybody admits the importance of the topic; everybody recognizes that science is all along getting popularized and gradually rendered digestible by the average man: but there is much difference as to the relative value of the several agencies by which this result is being produced, and the direction which these efforts should take in the future. There is a great deal of false popular science, — a class of writing in which the difficult points are always skipped, and the light and temporarily interesting ones unduly magnified; in which the interest is attracted towards certain minor points, and the whole doctrine set forth in a perverted perspective. One can dress up the facts of science in as attractive a garb as one likes; but the aim must be to bring home the fact, and not the study of the costume. The spirit of accuracy by which science is differentiated from uncritical knowing is the *sine qua non* of a real interest in scientific work.

Into what category of 'popular-science' writing one will put this work of Grant Allen's will depend largely on one's conception of the purposes of such literature. The geniality and attractiveness of his style are well known. They are important factors in the success of his works. The present series of essays exhibit the strength and the weakness of this class of writing. Its strength consists in its power to bring home simple truths in a way that suggests their real significance to the average mind; its weakness, in the fact that so much of it is not 'common-sense' science, but 'common-place' science: it says very little for the amount of words.

A striking feature of this and other recent general works is the great rôle which psychological subjects are now playing in science. Of the twenty-eight essays here printed, ten are distinctly psychological, and many others partly so. The main reason of this increased interest in the scientific study of mental phenomena is the recognition of their intimate relation with education. We are beginning to appreciate that the requisite for rationally educating the mind is to accurately know it.

It is only just to Mr. Allen to give a sample of some of the essays. A very typical one is that on self-consciousness, the tone of which will be readily gathered from the following sentences: "A philanthropist who had it in his power to abolish, if he chose, with a single wave of his hand, either small-pox or self-consciousness, would probably do more in the end to diminish human suffering and to increase human happiness if he elected to get rid, by an heroic choice, of the less obtrusive but more insidious and all-pervading disease; for small-pox, at the worst, attacks only a very insignificant fraction of the whole community; while every second person that one meets in society, especially below the age of fifty years, is a confirmed sufferer from the pangs of self-consciousness." The essay on memory sets forth in apt illustrations the complexity of human knowledge; that on the balance of nature, the inter-relation between the various classes of organic life. Under the title 'Big and Little,' is a lesson on the relativity of knowledge. The 'Origin of Bowing' traces the gradual refinement of a savage's slavish obeisance into the modern gentlemanly courtesy. 'The Pride of Ignorance' teaches an admirable lesson, as also does the essay on home-life. Other sufficiently suggestive titles are 'Holly and Mistletoe,' 'Sleep,' 'Amusements,' 'Evening Flowers,' 'Genius and Talent,' and so on.

Like all his works, this collection of papers will doubtless find a large and appreciative public. To those who do not already know the facts which it contains, it will offer an attractive method of acquiring them.

The spirit of Dr. Wilson's book is quite a different one. There are many who will listen to Mr. Allen who would not listen to Dr. Wilson; but those who choose the latter will not be sorry for their

choice. There is in these essays an unusual amount of information, well and attractively put together. It needs to be read attentively, but leaves the reader with the same feeling of satisfaction that one experiences when rising from a good and substantial meal. There will follow a process of healthy digestion, and the food will contribute some little to the making of its partaker.

Dr. Wilson is a biologist, and the sixteen careful studies contained in this volume touch portions of the entire field, from the 'Inner Life of Plants' and 'The Past and Present of the Cuttlefishes,' to the 'Body and Mind.' In each topic the author writes as one perfectly at home; avoiding the fault of attempting to tell too much, as well as of having too little to tell. It is popular-science writing, a very good type indeed.

Like the former book, this, too, is characterized by a preponderance of psychological subjects. Seven of the essays treat entirely or mainly of mental phenomena, while several others touch upon such topics. 'The Old Phrenology and the New' is an unnecessarily painstaking refutation of the claims of the 'cranial-bump examiners,' with a brief account of the evidence for the modern doctrine of the localization of function in the cortex of the brain. The old phrenology serves as an excellent type of the shoals, on which the hasty wanderer, leaving the straight but slow path of scientific advance, is likely to be wrecked. The nature of the relation between nerve-tissue and mental phenomena is outlined in the paper on body and mind; the main point being to show by striking examples the strange effects produced by intense expectation and concentration, which furnishes the kernel of truth in the claims of the mind-cure. 'The Mind's Mirror' explains the development of the expression of the emotions in animals and men, while 'The Coincages of the Brain' is a timely account of the part played by hallucinations in such happenings as our psychic-research societies are likely to record.

The more strictly biological essays treat of the economies of nature, showing, that, as conditions vary, nature utilizes every trifle, and avoids waste, or scatters tons of pollen over a barren soil. There are two excellent chapters on the zoölogical position of monkeys and elephants; while the volume closes with 'An Invitation to Dinner,' which gives occasion to a lesson on the physiology of digestion.

In the present case the proverbially odious comparison can hardly be avoided. Dr. Wilson's is in every way the better book; but Mr. Allen's will have the wider public, and, it is to be hoped, will incite an appetite that will lead to the searching for the more substantial food.

NOTES AND NEWS.

THE American committee of the International Congress of Geologists — a committee appointed by the American Association — will present a report at the meeting of the American Association in August concerning the positions to be taken by the representatives of American geologists at the next session of the congress in London (1888), upon the more important questions of nomenclature, classification, and coloring, which will there be discussed. It requests that Section E set apart a day for the purpose of considering these questions to be submitted by the committee, and of aiding that body to ascertain the direction of American opinion thereon. In order the better to accomplish this object, it requests Section E to issue an invitation to all American geologists (whether members of the American Association or not) to attend this session and participate in the work. The American committee also request that members of the association be informed of the opportunity offered for obtaining the great geological map of Europe, now preparing by a special committee of the International Congress. This map will be issued in 49 sheets, which, combined, will cover a space about 11 by 12 feet. The price is \$20 a copy, with additional charges of duty and expenses amounting to about \$6. Incorporated scientific institutions are of course exempt from duty-charges. For further information address Dr. Persifor Frazer, secretary of the American Committee, 201 South Fifth Street, Philadelphia, Penn.

— The Entomological Club of the American Association will meet on the day prior to the meeting of the association, at 2 P.M. The