time appears the first dawn of conscience. And so, with their regularly alternating analysis and synthesis, Rosmini would have gone on sketching for us the characteristics of the succeeding orders. But here, to our misfortune, the treatise terminates, and we have nothing but rough notes and hints as to what would have followed. We must not, however, forget the warning which Rosmini gives us, more than once, concerning his stages of cognition. He only gives us the order in which they commence; but, when once commenced, they go on through all the other periods, increasing in power and widening in application. Moreover, the acts of the understanding are always excited by some stimulus external to themselves, and depend on this stimulus; and hence, when particular stimuli come late, we shall find the corresponding cognitions belonging to earlier orders coming into being alongside of cognitions belonging to the later orders.

But what of the practical application of all this? some of our readers may ask. Well, Rosmini himself answers, "I am a thinker, a psychologist. You good people of practice and experience must make the practical application of my principles for yourselves." But being human, as well as a psychologist, he cannot altogether refrain: he gives us some of his own 'practical applications;' and of these, some are very striking and suggestive, and some of — well, very moderate utility. "The object of instruction," Rosmini tells us, "is to bring the young to know, and it may therefore be called the art of properly directing the attention of the youthful mind." "There are always three distinct parts of instruction," he tells us elsewhere: "(*a*) that which serves to increase in the mind of the pupil the number of cognitions he has gained in the preceding order, and to make them more perfect; (*b*) that which enables the pupil to pass from the order of cognition in which he is, to the next higher order; and (*c*) that which serves to exercise and perfect the pupil in the knowledge belonging to the order he has just reached." He adds that it is evident that the language and style of the teacher should vary according to the order of cognition attained by the child. All language that goes beyond that order is wasted; or, worse still, it will produce confusion. In treating of the first order of cognition, he points out that nature has placed perception as the foundation of the whole immense pyramid of human knowledge, and that perception therefore should be the foundation of all human education. "Nature herself leads the child to observe every thing, and to experiment on every thing; but all these experiments and perceptions are unconnected and desultory. The earliest office of the educator, therefore, consists in regulating the child's observations and experiments, so as to lead him to perceive and to perfect his perceptions." The application of this is little more than hinted at, but enough is given to show how strikingly alike Rosmini and Froebel were with regard to the earliest childhood, though each worked independently and in complete ignorance of the views of the other. Indeed, one of the chief advantages of studying Rosmini's system is the added strength and clearness and meaning which it so frequently gives to the plans of Froebel, who, as a practical teacher, stands a head and shoulders taller than his Italian contemporary. Nor is Rosmini's psychology always equal to Froebel's. He has, for instance, some strange views on language, which, but for Prof. Max Müller's championship of very similar ones, would come upon us not only as novel, but also as startling. Rosmini holds that "by language we form our ideas," and that "man could not have invented that part of language which expresses abstractions." But, what is far more disconcerting to a teacher, is to find him stating that "one of the fundamental principles which should govern the instruction given, from first to last, is to consider language as the universal instrument provided by nature for the intellectual development of man," and to see, in the application, that this means that education is to be mainly a training in the use of words. Still, undoubtedly many of the practical hints he gives for the teaching of reading and writing will be found valuable, though they are applied somewhat prematurely; and much that he says on the use of music, and on picture-teaching, is highly suggestive. On the whole, however, we are inclined to think that teachers will be most struck with, and set most value on, the exposition given of the gradual development of the moral sentiment, — "based as upon a rock, on the great fact, that, rooted in the depths of the child's nature, there is a primary necessity of growing respect and love to whatsoever intelligent being he comes to know," — and with this, step by step, the corresponding gradual training. We have met with nothing elsewhere so soundly reasoned, so clearly expressed, and so practically suggestive; though here, again, the general line pursued is the same as that pursued by Froebel.

For the present we will say no more. But we hope we have said enough to prove to teachers that 'The Ruling Principle of Method' is a book to be studied with pleasure and profit. And, though some of us may be inclined to pronounce the system as rather logical than psychological, we shall all of us gain by coming in contact with a mind so eminently clear and reasonable, and so full of human kindliness.

T. Macci Plauti Captivi. With Introduction and Notes. By W. M. LINDSAY, M.A. Oxford, Clarendon Pr. 16°.

Anglice Reddenda; or, Extracts for Unseen Translation. (Second Series.) Selected by C. S. JERRAM, M.A. Oxford, Clarendon Pr. 16°.

FROM the Clarendon Press comes a very neat little edition of the 'Captivi' of Plautus, by Mr. W. M. Lindsay, intended as a companion to the 'Trinnummus' of Messrs. Freeman & Sloman of the Westminster School, where the plays of Plautus have been frequently exhibited by the scholars with much dramatic and archæological success. The only fault to be found with those exhibitions, however, is their practice of ignoring the musical element, that must undoubtedly have been an important feature in the original production of the Plautine plays. In fact, the ancient divisions of the comedies were effected solely by the musical passages, or 'Cantica;' and in the manuscript the name of the musical performer at the first exhibition of the play is often given in the title, or, rather, after it. In the present edition of the 'Captivi,' Mr. Lindsay has very properly called attention to this fact, which even careful students of the Roman drama are too apt to overlook; and his remarks, although unduly brief, will be instructive to the young student, for whom this little book is intended. Within the limits which the editor has marked for himself in the preface, he has done very excellent work, availing himself of the most recent German research, and giving notes, that, while useful to the schoolboy, are often very suggestive to the more mature scholar. Mr. Lindsay properly regards the Plautus lecture as affording "the best opportunity for teaching the etymology and structure of Latin words," and he has therefore given this side of the subject particular attention in the notes. The book may be unreservedly commended as being precisely what it professes to be, — an edition of the 'Captivi' that will "enable boys of the higher forms to read with intelligence and interest a play which, more than any other of Plautus, may suitably be put into a school-boy's hands."

The reading of Greek and Latin at sight is deservedly becoming an important part of the preparatory training for college, both in England and our own country. The advantages of an ability to read an ordinary classical author without the aid of a dictionary are so obvious as to need no comment, and, as they impress themselves more and more upon our instructors, a much-needed reform will gradually come about. One may hope to see the day when college-examinations will test not only the memory, but the genuine knowledge, of the student, and when the object will be to discover not merely how much he knows of some particular author, or portion of an author, but of the language as a whole. Already sight-reading of easy Greek and Latin has become a part of the required entrance-examinations at Yale and Harvard, it has for some time held a prominent place in the classical instruction at Columbia, and the time is not far distant when it will form one of the important tests of all our leading colleges. Mr. C. S. Jerram of Trinity College, Oxford, already well known as the author of several useful publications, has just sent forth a volume of extracts for sight-reading, bearing the imprint of the Clarendon Press, and entitled 'Anglice Reddenda.' It supplements a much simpler work issued some years ago, and is intended for students who may reasonably be supposed to have acquired a somewhat extensive vocabulary. The extracts are about equally divided between Greek and Roman authors, and are admirably selected so as to interest and entertain as well as to instruct. It may be doubted, however, whether such excerpts as odes from

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 Coinages 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