

Some similar phrase would be the best formula for Charles Kingsley's book, now reprinted as one of Macmillan's 'Globe readings from standard authors.' The style it represents is not, to be sure, the old plain-dealing manner of Mrs. Marcet and her 'Conversations about common things,' where John and William demurely put hard questions, and Mr. A. or Mr. B. sedately answers; but it is the modern, rollicking, galvanized form of the same thing, where the preceptor calls himself 'Daddy,' where the pupil is addressed as 'My dear child' on almost every page, and 'My pretty boy' occasionally, where the plain facts about rocks or fishes must be garnished with all manner of metaphor and rhetoric, and where every chapter must wind up with a high-flown rhythmical passage composed of Ruskin-made-easy. To those who like that sort of book, it may be said, borrowing the words of President Lincoln, that 'this is just the sort of book they will like.' But we confess ourselves not to be of that opinion.

Unless we greatly mistake, the taste, even of children, has now changed for the better. It is not now thought necessary to write down to them; to pet them, so to speak, in printer's ink; to remind them in every other sentence of the fact they know best, namely, that they are not grown up. It has been discovered that what they need is merely the straightforward simplicity of language which even grown people like best. It is not necessary to take every common fact and turn it vivaciously into a metaphor; to personify two new intermediate agencies in the universe under the names of 'Madam How' and 'Lady Why,' and then to provide them with two grandsons, 'Analysis' and 'Synthesis' (p. 158); all these personifications being, after all, so ineffectual that the author has to bring in at last a higher creative power (p. 10), called the 'Master,' whom they all obey, and the reference to whom makes this labored mythology very superfluous. This is the head and front of our objection to the book,—that it is not truly scientific, because it is not simple. It tends to impair, not to foster, the spontaneous love that children have for the fascinating truths of out-door nature: it is an attempt to make sandwiches with sugar-plums, and to flavor bread and cheese with vanilla.

This fundamental defect pointed out, it must undoubtedly be admitted that this little book contains a great deal of valuable and interesting knowledge conveyed often in an exceedingly graphic way. Even here, however, there are two drawbacks. One lies in the character of

Canon Kingsley's mind, which was dashing, impetuous, and always ready for too sweeping conclusions. To say, for instance, almost at the beginning, "I never saw a valley however deep, or a cliff however high, which had not been scooped out by water" (p. 25); and to reiterate again and again that 'water, and nothing else,' has done all these things, without a word of reference to volcanic action, or upheaval, or subsidence, or lateral pressure,—is certainly a very loose and unguarded way of writing. Again: there is the minor objection that the book, being prepared specifically for English children, is very properly full of local references and illustrations that will mislead and perplex young Americans, just as the older men among us used to be perplexed in childhood by trying to identify the birds and plants around us with the very different species described in the English manuals. Many of the author's most important illustrations of the formation of mountains and valleys, for instance, are drawn from the features of those miniature cañons on the English coast—in the Isle of Wight, for instance—known as 'chines' (pp. 18–22). But what American child knows, or how many American teachers, indeed, know, what a 'chine' is? The word does not even appear in Worcester's 'Dictionary,' except as meaning a piece of an animal, or part of a vessel.

A MONOGRAPH OF BRITISH FOSSIL BRACHIOPODA.

With the present appendix (vol. v. part iii.) a monumental work has been brought to a close. The labors of Thomas Davidson, F.R.S., need no introduction to paleontologists of any part of the world. The quiet distribution of the concluding fasciculi of the 'British fossil Brachiopoda' should not be allowed to pass without notice.

Thirty years have passed since the publication of the general introduction to the first volume of this monograph. Coincidentally with, and largely induced by, its progress, a vast amount of precise knowledge has been acquired and made public, in regard to all that relates to the history and distribution of the brachiopods. Indeed, our knowledge of them, in any sufficient sense, may be almost said to date from about the time when the learned author began his labors; and the earliest known reference to them in any printed work dates only from 1606. The present appendix closes a series of researches, begun just half a century ago,

on the brachiopods of the British islands. During that period, Mr. Davidson has not only prepared the text of his monograph, and numerous collateral and frequently very important papers on the general subject, but has drawn with his own hand more than two thousand admirable and artistic plates by which that text has been illustrated and adorned. Seldom has fortune equipped more completely a student for his life-work than in the present case, when more than ordinary artistic talent, a liberal education, independent means, were joined to unsurpassed devotion in the pursuit of knowledge, and impartiality in the recognition of the labors of others in the same field.

The steady stream of information induced by the publication of successive parts of the monograph has necessitated supplement after supplement. The present and concluding part not only contains such material, but a catalogue of, and index to, the British genera and species, bibliographical and stratigraphical, and, more important than either for the general biologist, a summary of progress in our knowledge of the class up to the present time. This includes notices, under separate heads, of the test, the embryology, the affinities, the adult anatomy, habitat, and ranges in depth, of recent species, characters of the fossil genera, and classification discussed by families. Full space is allotted to the advocates of contending theories: Kowalevski's valuable paper on the embryology is given in full abstract, with excellent figures; various suggested pedigrees are quoted; the brilliant rise, and slow but continuous decadence, of the 'worm theory,' is related, with generous recognition of the sagacity of Morse in the detection of affinities to which the then imperfect knowledge of the molluscan pedigree, and his remarkable researches into the early stages of Terebratulina and Lingula, lent a plausible, but, as it has since proved, a one-sided interpretation. The general conclusion is reached, that, however great the probability of continuous descent, with modification, as an explanation of the various forms of brachiopods now or previously existing, the paleontological record presents many facts inexplicable by, or even opposed to, this theory; while of natural selection there seems to be absolutely no visible trace. The number of British forms which, at the commencement of the work, numbered 13 genera, and 454 partly invalid species, has now expanded to 74 genera, and 976 species and varieties, to which even now accessions continue to be made.

In taking leave of his task, so worthily performed and to be continued by younger hands,

the author, in spite of certain infirmities, does not relinquish his studies, but is now engaged on a monograph of the recent species, which it is to be hoped he may be spared to complete to his own satisfaction and the undoubted benefit of science.

W. H. DALL.

NOTES AND NEWS.

—THE prize of 500 francs, founded by Augustin-Pyramus de Candolle, has been awarded to Professor Planchon, professor of botany at Montpellier, for his memoir on the Ampelidees.

—A geographical society has been established at Rio de Janeiro, under the presidency of Viscount de Paranaguá, with Baron Teffé and Señor Henriques, vice-presidents; Carlos Montéro and Pereira Coruja, secretaries.

—According to the *Oesterreichische monatschrift für den orient*, the preference shown in England and her colonies for Indian teas is causing considerable anxiety among the native and European tea-establishments of China. Calcutta alone sent to England, in the past year, 62,773,187 pounds, against 58,830,478 in 1883, and 51,579,740 in 1882; while the Australian and New Zealand markets received, in 1884, 1,029,463 pounds, against 696,479 in 1883. To be sure, this figure shows a great falling-off from 1882; yet at present a preference is manifested in Australia for Indian teas, which, like those of Ceylon, whose production probably has a similar future, far surpass in quality the average teas of China. Also the success of Natal, in the production of tea, warrants the assumption that South Africa will soon enter the market. The total export of Foochow, the greatest tea-depot of China, amounted, in the last season, to 77,631,997 pounds, against 81,100,875 for the same time last year. In Hankow, Canton, Shanghai, and Macao the same proportion is seen. The falling-off in the export of all China against the past year amounts to about ten million pounds, and may be ascribed to the reduction in quality of the Chinese teas. How far this decrease may have been due to the French operations cannot be told.

—Another party for the scientific exploration of Greenland is being organized by the authorities at Copenhagen. It will be commanded by the naval lieutenant, J. A. D. Jensen, assisted by Lieut. C. H. Ryden.

—In a recent visit to Russian Lapland, Rabot visited the valleys of Pasvig and Talom and Lake Enara. The entire country is an immense forest, dotted with lakes and pools, and cut by rapid streams. The latter, though very difficult of navigation, form the sole roads of the country. The Pasvig, for instance, in its course, forms more than thirty cascades and rapids. Lake Enara, from which it flows, is an interior sea, dotted with thousands of islets covered with magnificent pines. The climate is very rigorous; the short summer is, however, quite hot, but in August frosts are not unknown. The country around Lake