ART. VII.—*Every-day Wonders: or Facts in Physiology, which all should know. Illustrated with Wood-cuts.*—London, 1850. Fcap. 8vo, pp. 137.

WE cannot impart to our readers a better notion of the character of this admirable little book, than that which its Preface will afford them.

"The object of the writer of this book has been to present a few of the truths of that science, which treats of the structure of the human body, and of the adaptation of the external world to it, in such a form, as that they shall be readily apprehended by children and young people. The lively interest which intelligent children would take in the works of God, within and around them, is frequently checked by the manner in which they are introduced to the study of science. Portions of elementary scientific books are required to be learnt as task-work, and the learner inwardly condemns the subject as 'dry,' and abandons all farther pursuit of it when at liberty to do so.

"Where a teacher communicates orally such a thorough explanation of the terms employed, and such familiar illustrations as may enable the child, not only to *remember words*, but to *apprehend truths*, the child's wonder and delight are excited, and such a beginning is likely to awaken sufficient energy to lead to sound and valuable acquisitions.

"The writer disclaims any wish to represent the attainment of science as an easy work. But for the very reason that the path is toilsome, it is surely unwise to scare the learner from the entrance.

"It is attempted in this little book to supply the explanations and illustrations by which a teacher would win the attention of a child.

"For this purpose it has been thought better to *dwell* on a few *facts*, than to crowd the book with many. Pains have been taken that all the information imparted should be accurate."

We cannot give the book higher praise, than to say, that it most successfully realises the purpose thus judiciously set forth; and that we can speak from experience of its complete adaptation to the mind of an intelligent child. We should like to see some more scientific introductions from the same pen.

ART. VIII.—*Instinct and Reason: deduced from Electro-Biology.* By ALFRED SMEE, F.R.S.—London, 1850. 8vo, pp. 320. With Lithographic Plates and Wood-Engravings.

HAVING not long since (Vol. IV, p. 371) devoted no fewer than ten of our pages to an inquiry into the merits of Mr. Smee's system of philosophy, we do not think it requisite to bestow any lengthened space upon this last treatise, which is to be regarded as one of its offsets, produced during a period of repose from the author's severer labours, which we presume to be directed towards "the construction of a living, moving, feeling, thinking, moral, and religious man, by a combination of voltaic circuits," which will assuredly cause Mr. Alfred Smee to rank as the greatest genius of this or any other age. The author informs us, that the composition of this work was undertaken for amusement rather than labour; and truly we think that he must have found a congenial relaxation from his severer studies, in the free indulgence of his propensity to vanity and egotism, which this treatise displays, to the great amusement of his readers. We do not recollect ever to have looked into a book, in which the smallest trifle affecting its author was exaggerated into so much importance. Of this we

shall cite a few examples for our readers' edification, taking them just as they come. The following is Mr. Smee's estimate of the merits of his own researches :

"It would be vain to conceal, and useless to deny, that the system of Electro-Biology, upon which this work is based, required intense labour in the laboratory and dissecting-room, to learn the facts; and even then, the subsequent labour required for their arrangement was so great, that it cost me many years of anxious toil for the development of the system." (Preface, p. vi.)

Mr. Smee makes his Description of Plates a vehicle for advertising for a lost paper.

"The figures in this plate represent the distribution of the blood-vessels in the brain and spinal cord. These beautiful injections are exceedingly difficult to prepare; but they are made by using a solution of carmine in ammonia mixed with size; a process which I communicated to the Microscopical Society, but the society has contrived to lose my paper. (*Note.* If any gentleman now has it, I should feel extremely obliged if he would return it to me, as its loss has caused me much inconvenience)." (p. xxiv.)

Mr. Smee scolds his puppy-dog for carrying off a chicken from his breakfast-table; and the puppy, having learned wisdom by experience, has not done so again (p. 10). On the contrary,—

"My dog, when I return home, shows unequivocal signs of memory by jumping about and wagging his tail. He also, by little artifices, seeks to attract my attention, and induce me to caress him." (p. 53.)

We almost wonder that Mr. Smee did not introduce a picture of this highly interesting occurrence among his illustrations; it would have been just as appropriate as a great many of the subjects he has figured, such as the Nineveh Sculptures, or the Old Wooden Exchequer Tally, of which last he has given not only two figures, but a description two pages long, just because he finds that no gentleman in the Bank of England recollects the mode of reading them! What either has to do with "Instinct and Reason, deduced from Electro-Biology," we must own ourselves at a loss to discover.

Under the head "Operations of Man superior to those of Animals," we find all Mr. Alfred Smee's inventions in Electro-Metallurgy, &c. cited in illustration; and, curiously enough, under the head "Perverted Reason," we have no fewer than *twelve pages* devoted to the history of the "Aphis vastator," and the laws of its action on the potato, introduced for the purpose of showing "the extreme difficulty which the mind finds in estimating the cause of any event,"—Mr. Smee being obviously quite unaware that this speculation of his was generally regarded by competent judges as a most excellent example of the "perverted reason" which he is exposing.

We had marked a number of amusing passages for citation; but it would be scarcely fair to our author to separate too many of these innocent frailties from the connection in which they occur. The following, however, is a choice example of a "stage" *aside*, which is told to the whole audience, but which the other party to the conversation is supposed not to hear. Speaking of a certain wasp's nest, which has been lent to him by Mr. Bowerbank, Mr. Smee tells his readers :

"When Mr. Bowerbank asks for this interesting specimen, I intend to use every persuasion to induce him to allow me to keep it, by offering him a substitute in some other department of natural history in which he more delights." (p. 161.)

Our author happens to be at the Opera when 'Roberto il Diavolo' is performed, and wishes to see behind the curtain how the scenic effects are produced. Behold Mr. Alfred Smee, F.R.S., "behind the scenes."

"At first I thought that it was hardly consistent with my dignity to visit such a spot; but I reconciled myself by the thought that I should be sure to see nobody whom I knew. However, to my astonishment and amusement, I found several persons who, at one time or another, had come before me in my official capacities, and who were engaged in various departments of the opera." (p. 234.)

The book is, in fact, a congeries of all sorts of odds and ends, brought together out of the treasures of Mr. Alfred Smee's reading and personal experience, with the slenderest possible connecting thread. In fact, if we were asked the subject of the book, we should say that it was at least as much an exposition of Mr. A. S.'S doings and thoughts *de omnibus rebus et quibusdam aliis*, as a Treatise on Instinct and Reason. We began to reckon up how many of the 604 paragraphs of which the body of the work is composed, contain some special mention of the author, as *I, me, my, or mine*; but gave up the enumeration, when we found that after going through about one third of the volume, those paragraphs in which Mr. Smee's personality is thus brought prominently before the reader, certainly constitute the majority. One thing he takes every opportunity of impressing upon the minds of his readers,—namely, that Electro-Biology is to effect the great *moral* revolution by which the whole world is to be renovated; when, of course, Mr. Alfred Smee will take rank as a sort of second Messiah, whose work is to complete that which was left imperfect by the first.

"I have much cause to rejoice that the system of Electro-Biology, which I have developed, after many tedious hours of investigation with the midnight oil, and after many years of anxious thought, should now be found to be a system deduced by reason, and in perfect accordance with that religion which I hold by faith. I have, indeed, even more cause to rejoice that reason [*i. e.* electro-biology] and faith mutually re-act, each supporting the other, and causing it to be more firmly fixed in the mind. I have, however, most cause to rejoice, because this union of faith and reason cannot fail, when universally known, to have the best influence in supporting pure religion, in suppressing infidelity, bigotry, and irreligion, and in extending the inestimable blessings of true Christianity throughout the different countries of the globe." (p. 227.)

And all this is to come out of Smee's galvanic battery! Among all the arrogant assumptions which it has been our lot to meet with, we do not recollect to have met with one that beats this; yet it is by no means an unfair sample of what the reader of this strange book will not unfrequently encounter.

ART. IX. — *Proteus; or the Law of Nature.* By CHARLES BLAND RADCLIFFE, M.B., Lecturer on Vegetable Physiology and Botany at the Westminster Hospital, &c.—London, 1850. 8vo, pp. 150.

"MANY thoughtful and philosophical men," as the Author of this treatise rightly observes, "have believed in the existence of a common idea or principle in the works of Nature, by which all things are linked together in one; and the joint dictates of experience and tradition are in harmony with this belief." This common principle he endeavours to trace out, first in the material organisms of Plants and Animals, and in