thod," and "another method," and sometimes even another; but no mention is ever made of which *is* the best.

We do not think it incumbent upon us to enter into a detailed critical examination of the work: if we did, we should find no difficulty whatever in producing examples to shew that Mr. Cocks sometimes mentions well-known facts in such loose and indefinite language as to lead the reader to no positive conclusion; and that at others he describes operations which are now nearly exploded, omitting any mention of the really "best recorded method," but selecting for the student that which is but rarely practised. Proofs of the carelessness with which the work has been sent from the press are by no means rare. For example, at page 233, we are referred in the text to *Plate 8th* as illustrative of hernia, but *Plate 8th* illustrates other subjects. Again, at page 306, the reader is referred to *Plate 11th* for the "surgical means of suppressing hemorrhage," but this plate depicts the appearance of hernia. Mr. Cocks seems to have an insuperable objection, too, to the ordinary mode of spelling the names of the different authorities he quotes: thus, we have "La Dran," "Baron Heurtelop," "Caviale," &c. It may appear hypercritical to mention these mistakes, and we certainly should not have done so if the work, in general, had possessed any redeeming merits. It has often been said, and truly too, that a medical practitioner may fail completely in a court of justice, in giving clear and satisfactory evidence upon a subject with which he is well acquainted, and upon which he would *act* skilfully and efficiently. The same observation applies to written statements, which may be loosely worded or injudiciously compiled, and yet the writer may be a very good and safe practitioner: and this may very probably be the case with Mr. Cocks.

ART. III.—*The Question concerning the Sensibility, Intelligence, and Instinctive Actions of Insects.* By DAVID BADHAM, M.D.; one of the Radcliffe Travelling Fellows of the University of Oxford, &c.—*Paris*, 1837. 8vo. pp. 54.

THE ingenious author of this pamphlet has put forward much acute, but (as it appears to us) somewhat sophistical reasoning in defence of a position which will probably startle most of our readers,—that the insect tribes are not endowed with sensibility, still less with anything approaching to intelligence. Our own views on this subject have been partly expressed in a former article, and remain unchanged by the perusal of this essay: it contains, however, much clever argument and lively criticism upon the opinion of others, which will amuse, at least, if it does not convince. That a large proportion of the actions of the articulated tribes result from the stimulus of external *impressions* only, or, in the language of Dr. M. Hall, are *excito-motor*, we have no doubt; but this is only saying that they are purely *instinctive*, according to the definition we have given of the latter term. Dr. B.'s great error consists, as it appears to us, in maintaining that *sensations* can only act through the intellect and will: now, we have already endeavoured to show that this is by no means the case, and that there is a class of actions (of which the purely *emotional* movements may be taken as a specimen,) as necessarily con-

nected with particular sensations as others are upon impressions only. We see no reason to believe that the *mental* emotion, passion, or propensity always intervenes, in the lower animals, between the sensation and the action: and, in fact, we are disposed to regard it as rather designed to awaken the reasoning faculties, and to exist therefore in proportion to them. But we feel no doubt that insects possess the senses of sight, hearing, &c. in great perfection, and that these senses minister to their instinctive actions. Nor can we refuse to them some degree of intelligence, which, we think, is proved by the power of adaptation to novel circumstances evidently possessed by many, and still more by the educability which some manifest. We have had the opportunity of noticing the last in the case of bees, whose *memory* for the entrance to a hive beneath a window, to which there were many similar, evidently improved during the first few days of their being placed in their new situation. We have an additional argument for the existence of sensation in insects in the fact that impressions in the special organs of the Vertebrata do not appear to operate like those which act through the organs of common sensation.

ART. IV.—*On Warming and Ventilating; with Directions for making and using the Thermometer-Stove, or Self-regulating Fire, and other new Apparatus.* By NEILL ARNOTT, M.D., Physician Extraordinary to the Queen.—London, 1838. 8vo. pp. 138.

THIS is an admirable book; and, although not (strictly speaking) a medical one, it ought to be in the hands of every member of the profession. The warming and ventilating of chambers and houses are so intimately connected with the prevention and cure of diseases, that every physician and surgeon ought to understand them thoroughly; or, at least, the principles on which these most important measures rest: and we think it is not going too far to say that no book, before the publication of Dr. Arnott's, contained the exposition of these principles in such a clear and simple form as rendered the understanding of them easy to every one. But, besides the much clearer exposition of what was already known, Dr. Arnott's book contains a great deal of most important information which is entirely new. It is, indeed, like the "*Elements of Physics*," by the same author, literally full of the most interesting knowledge and the most ingenious contrivances, all planned and directly destined for the improvement of the arts of life, and the amelioration of man's condition as a social and civilized being.

The invention of greatest interest and value is the *thermometer-stove*, named in the title-page; an invention which appears to us calculated to produce a total change in the mode of warming houses, and with a saving of expense in the article of fuel, (to say nothing of its probable benefits in improving health,) which will cause it to be hereafter regarded as of national importance. We will not attempt here to describe the stove: we will only say that it may be manufactured, from Dr. Arnott's description, by any experienced white-smith, at a small expense, and that it has been proved to have the power of keeping up an incessant and unvarying degree of temperature in a room, at the cost in fuel of threepence, or, we believe we may say, three half-pence, in twenty-four hours!