

As regards the 'Physical Method' of ethics, it is enough to say that there cannot possibly be any such 'method' in the sense in which I use the term, i.e., rational procedure for determining what ought to be done here and now. Ethical conclusions can only be logically reached by starting with ethical premisses: how the latter are got, it was no part of my plan to consider. I presume that even Mr. Barratt hardly means to maintain that practical principles can be in any sense proved by physical methods.

H. SIDGWICK.

'*Cogito ergo sum.*'—Professor Bain thinks it right to say of Descartes' famous aphorism, "I am of opinion that we should cease endeavouring to extract sunbeams from that cucumber". I do not pretend to determine the exact meaning that this formula bore to the French philosopher, but that it admits of an important meaning being attached to it, I cannot for a moment doubt.

Instead of likening this formula to a cucumber, from which it is high time to give up futile attempts to extract sunbeams, I am constrained to liken it to the sunbeam *minus* which all must, for us, be an unknown blank. In ultimate analysis, this sunbeam, which is Knowing, is, for me, the origin of all that exists. My own existence is a revealed or known existence, yea, the existence of Knowing itself is the same. For us, everything is rendered existent through Knowing. True, Knowing is only one element in a process containing several elements, each of which, in a certain sense, implies all the rest. As this ruler involves its two ends, and the two ends the ruler, so, in the mental process of which Knowing forms an element, it involves and is involved by every other element of the same process. This process may, I conceive, be thus expressed: 'I know an object as existing'. Although the elements of this process, however, imply each other, they do not all do so in the same sense. For since it must perforce be admitted that the sunbeam which renders existent, for us, the whole of the formula is Knowing, it follows (hence the *ergo* of Descartes) that, in the Order of Knowing, every other element of the formula is posterior to Knowing. Knowing is the sunbeam which renders existent, for us, the whole man, as well as the man's environment. Descartes' formula, after all, then, does not seem to be a barren principle, in which that which precedes the *ergo* is as six, and what follows it, as the identical half dozen.

It is absolutely necessary, as the nature of Prof. Bain's criticism fully reveals, to distinguish the Order of Knowing from the Order of Evolution. The former is not inaptly expressed by Descartes' formula, *Cogito ergo sum*, or, as an equivalent formula, by *Sum quia (quum) cogitem*; the Order of Evolution by the converse—*Sum ergo cogito*, or *Cogito quia sim*. These two formulae admit of being thus interpreted:—Through the medium of Knowing, it is, that I am rendered existent to myself: But through that portion of myself which cannot be eliminated (brain and nerves, circulation, nutrition, &c.) it is—so my Knowing declares—that my Knowing exists.

The *ergo* in Descartes' formula, therefore, may be taken as indicating the fact that my existence—my self-verified existence, at least (see the article on "The Veracity of Consciousness," in *MIND*, No. V.)—is rendered existent to me as the result or consequence of my Knowing. 'I think, therefore (or thereby) in so far, at least, as I am possessed of self-verifying attributes, I exist to myself.'

W. GEO. DAVIES.

*Elements involved in Emotions.*—I have long been dissatisfied with the account given of Emotion in books of mental philosophy. In particular great confusion has been introduced by the words 'feeling,' and 'sensibility' being employed to designate two such different things as sensations like pleasure and pain on the one hand, and mental emotions like hope, fear, pity on the other. The former are simple unresolvable states; in the latter are involved several elements. In a work to be published at no distant date I am to make an endeavour to unfold these elements. Meanwhile I present to the readers of *MIND* a summary of my views.

Four persons of much the same age and temperament are travelling in the same vehicle. At a particular stopping-place it is intimated to them that a certain person has just died suddenly and unexpectedly. One of the company looks perfectly stolid. A second comprehends what has taken place, but is in no way affected. The third looks and evidently feels sad. The fourth is overwhelmed with grief which finds expression in tears, sobs, and exclamations. Whence the difference of the four individuals before us? In one respect they are all alike: an announcement has been made to them. The first is a foreigner, and has not understood the communication. The second had never met with the deceased, and could have no special regard for him. The third had often met with him in social intercourse and business transactions, and been led to cherish a great esteem for him. The fourth was the brother of the departed, and was bound to him by native affection and a thousand ties earlier and later. From such a case we may notice that in order to emotion there is need first of some understanding or apprehension; the foreigner had no feeling because he had no idea or belief. We may observe further that there must secondly be an affection of some kind; for the stranger was not interested in the occurrence. The emotion flows forth from a well, and is strong in proportion to the waters; is stronger in the brother than in the friend. It is evident, thirdly, that the persons affected are in a moved or excited state. A fourth peculiarity has appeared in the sadness of the countenance and the agitations of the bodily frame. Four elements have thus come forth to view.

First, we may note the Affection, the Motive Principle or Spring of Action, or what I prefer calling the Appetence. In the illustrative case there is the love of a friend and the love of a brother. But the Appetence may consist in an immense number and variety of other motive principles, such as the love of pleasure, the love of wealth, or revenge or moral approbation. These appetences may be original,