

sion was a natural one. The expression, 'the brain is the organ of the mind,' is misleading, and after quoting from Dr. Wallace's 'Natural Selection' (p. 188), I said, 'It by no means follows, however, that this means that the brain *thinks*.' I interpreted the expression 'the brain is the organ of the mind' in the light of other statements referring to the same subject.

Professor Huxley, speaking of Hume, says (Vol. VI., p. 94), 'It must be noted that he grasped the fundamental truth, that the key to the comprehension of *mental operations* lies in the study of the *molecular changes* of the nervous apparatus by which they are originated. Surely no one who is cognizant of the facts of the case, nowadays, doubts that the roots of psychology lie in the physiology of the nervous system. What we call *operations of the mind* are *functions of the brain*, and the *materials of consciousness* are *products of cerebral activity*. Cabanis may have made use of crude and misleading phraseology when he said that the brain secretes thought as the liver secretes bile; but the conception which that much-abused phrase embodies is, nevertheless, far more consistent with fact than the popular notion that the mind is a metaphysical entity seated in the head, but as independent of the brain as a telegraph operator is of his instrument.' Italics are mine.

The passage I have quoted compels me to conclude that Professor Huxley's meaning was—the brain *thinks*. From such statements it seems natural to conclude that when the brain dies the man dies. I interpreted Dr. Wallace's expression in the same sense and concluded that, in 1891, he would have said the brain *thinks*.

Turning now to the new edition of 'Miracles and Modern Spiritualism' (p. 107), 'It is the spirit of man that is man. Spirit is mind; the brain and nerves are but the magnetic battery and telegraph by means of which spirit communicates with the outer world.' Here the brain is *not* the thinker, but the spirit *is*. There is, however, a qualifying clause which is somewhat perplexing from my point of view. I refer to the words, 'though it can only do so by means of, and in exact proportion to, the organisation it is bound up with.' And yet this is an important limitation. I regard the spirit as the thinker, the agent; and the body, brain and nervous system as instruments only, and think that Dr. Wallace's limitation applies to all that the spirit does *mediately*, *i. e.*, by instrumental aids—*e. g.*, feeling, perception, and acquiring knowledge; but does *not* apply to what the spirit does *immediately*, *e. g.*, thinking, reasoning, and aspiring. The spirit *originates* all mental observation and action excepting what is due to environment.

From what I have said it may be inferred that, although I regard thinking, &c., as due to the spirit and not to the brain, I cannot regard the spirit, while in the body, as ever mentally independent of the brain. All mental effort, and especially that kind which causes feeling, must affect the brain. I accept Mr. Fiske's statement ('Cosmic Philosophy,' Vol. II., p. 149), that 'prolonged mental exertion is followed by a bodily fatigue and a keen appetite, not essentially different from the fatigue and hunger which follow muscular exercise.' All *conscious* spirit action must, as I take it, involve the nervous system and cause waste. Probably this is true of unconscious, sub-conscious, or automatic thinking, in proportion to the measure of consciousness.

I have said enough to account for, if not to justify, my interpretation of the passages referred to. I am disposed to regard Dr. Wallace's hypothesis, as I understand it, as a new and important departure in psychology. He seems to have felt the full force of the phenomena of Spiritualism, and treated them as elements to be seriously taken into account in dealing with psychological problems. It has been the fashion totally to ignore them.

SCRIBA.

Does the Brain Think?

SIR,—When I wrote the first letter referring to the new edition of 'Miracles and Modern Spiritualism' (v. 'LIGHT,' June 13th), I supposed that Dr. Wallace had changed his views since 1891. His reply (June 20th) shows that I was wrong. On carefully re-considering the matter, I still think my conclu-