

tainly does not intend to deny that the principle of contradiction is self-evident. On the other hand, it is plain that he does hold that the principle of contradiction can be deduced from the law of duality. But (we ask) how? Can the principle of contradiction be deduced from the law of duality, without our assuming the principle of contradiction itself as the basis of the deduction? This would be absurd; for a conclusion can be established in no other way than by pointing out that the supposition of its being false involves a contradiction. In the particular case before us, the equation $x(1 - x) = 0$, which is that expression of the law of duality in which the principle of contradiction is regarded as being brought to light, is only reached by a process of reasoning, every step of which takes the principle of contradiction for granted. The only interpretation, therefore, which Professor Boole's words can bear, unless we give them a meaning palpably absurd, is, that a formula, which we are enabled to state by assuming the law of contradiction, contains a symbolic representation of that law. This hardly seems to us a very significant fact in the philosophy of the intellectual powers. If indeed the formula in question could be shown to represent some law of thought of wider application than the law of contradiction, that would be a very significant fact. But such is not the case. The equation $x(1 - x) = 0$ is just the law of contradiction symbolically expressed: neither more nor less.

The Aristotelian logic is charged with being *incomplete*, as well as with being not sufficiently fundamental. By this our author does not mean that Aristotle and his followers have casually omitted some forms of thought which their system ought to have embraced: had they done so; the fault would have been chargeable—not upon the system, but upon its expounders; but he means, that, from the very nature of the system, there is an indefinite variety of problems belonging to the science of inference, which their system is incapable of solving, or for the solution of which at all events it furnishes no definite and certain method.

It will be observed that there are two questions here, which, as radically distinct from one another, require to be considered separately: the one being, whether the Aristotelian logic is capable of solving all the problems belonging to the science of inference; and the other, whether it furnishes a definite and certain method for the solution of these.