

forget that this is, after all, only one employment of the reason among more ; only one mode of arriving at truth, needing to have its deficiencies completed by another. Deductive reasoners, those who cultivate science, of whatever kind, by means of mathematical and logical processes alone, may acquire an exaggerated feeling of the amount and value of their labours. Such employments, from the clearness of the notions involved in them, the irresistible concatenation of truths which they unfold, the subtlety which they require, and their entire success in that which they attempt, possess a peculiar fascination for the intellect. Those who pursue such studies have generally a contempt and impatience of the pretensions of all those other portions of our knowledge, where from the nature of the case, or the small progress hitherto made in their cultivation, a more vague and loose kind of reasoning seems to be adopted. Now if this feeling be carried so far as to make the reasoner suppose that these mathematical and logical processes can lead him to all the knowledge and all the certainty which we need, it is clearly a delusive feeling. For it is confessed on all hands, that all which mathematics or which logic can do, is to develop and extract those truths, as conclusions, which were in reality involved in the principles on which our reasonings proceeded.* And this being allowed, we cannot but ask how we obtain these principles ? from what other source of knowledge we derive the original truths which we thus pursue into detail ? since it is manifest that such principles cannot be derived from the proper stores of mathematics or logic. These methods can generate no new truth ; and all the grounds and elements

* “ Since all reasoning may be resolved into syllogisms, and since in a syllogism the premises do virtually assert the conclusion, it follows at once, that no truth can be elicited by any process of reasoning.”—*Whately's Logic*, p. 223.

Mathematics is the *logic of quantity*, and to this science the observation here quoted is strictly applicable.