

3. All the natural sciences ramify into each other, in so extensive a manner, that their points of contact show themselves perpetually. This fact not only brings to view the necessity of the combination of these parts of knowledge, but it creates an ardent desire for practically effecting it ; it opens numerous avenues in to the domain of other sciences ; it suggests methods of proceeding for making the desired acquirements ; and, while we feel ourselves obliged to submit to the necessity of being but imperfectly acquainted with many parts of the field, we are preserved (if we maintain a becoming moral discipline) from the vanity and pedantry of half-knowledge, we are enabled to apprehend *with accuracy* what we do learn, and we gain safe positions from which, when the opportunity may occur, we can make further advances.

4. Any person of good mental faculties and liberal education, if he will take the pains of attention and some self-cultivation, may acquire an ability to draw satisfactory inferences from the facts recited and the reasonings propounded in the best geological works ; or at least to exercise an unpresuming judgment whether the conclusions are sound which others have drawn.

But it cannot be denied and ought not to be suppressed, that a different view of the whole matter is taken by many estimable persons. The objects of geological investigation, especially in the department of organic remains, are in the highest degree attractive : casual allusions and fragments of information float plentifully in the atmosphere of social intercourse, so that none but the incurious can fail to hear something : and the periodical papers of the day have occasionally paragraphs of wonder, upon real or alleged geological discoveries ; which frequently indeed turn out to be the echoes of ignorance. Hence, the assumption is easily made, that the circuit of this kind of knowledge may be filled up by any young and ardent