

garded as a mere contingency in that exact formation, and second, by the sum of all the previous occurrences at the same point.

In this curious question, however, which it must be the part of future explorers in the geological field definitely to settle, the Lamarckian can have no legitimate stake. It is but natural that, in his anxiety to secure an ultimate retreat for his hypothesis, he should desire to see that darkness in which ghosts love to walk settling down on the extreme verge of the geological horizon, and enveloping in its folds the first beginnings of life. But even did the cloud exist, it is, if I may so express myself, on its nearer side, where there is light, — not within nor beyond it, where there is none, — that the battle must be fought. It is to Geology *as it is known to be*, that the Lamarckian has appealed, — not to Geology as it is *not* known to be. He has summoned into court *existing* witnesses; and, finding their testimony unfavorable, he seeks to neutralize their evidence by calling from the “vasty deep,” of the unexamined and the obscure, witnesses that “won’t come,” — that by the legitimate authorities are not known even to exist, — and with which he himself is, on his own confession, wholly unacquainted, save in the old scholastic character of mere possibilities. The *possible* fossil can have no more standing in this controversy than the “*possible* angel.” He tells us that we have not yet got down to that base-line of all the fossiliferous systems at which life first began; and very possibly we have not. But what of that? He has carried his appeal to Geology *as it is*; — he has referred his case to the testimony of the *known* witnesses, for in no case can the *unknown* ones be summoned or produced. It is on the evidence of the known, and the known only, that the exact value of his claims must be determined; and his