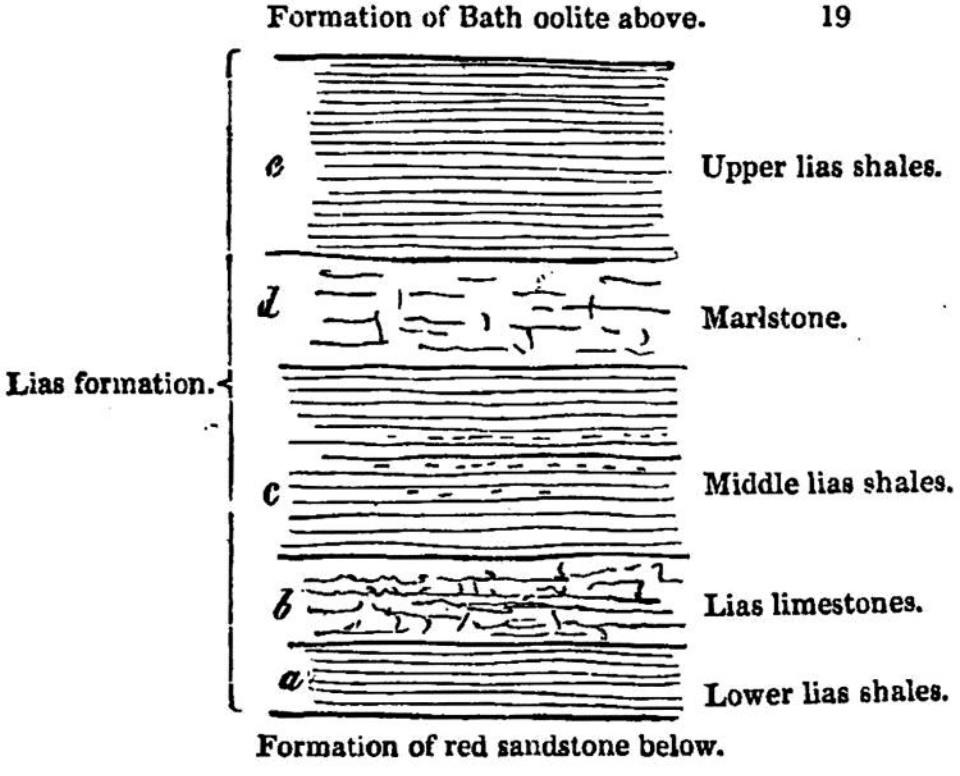
by some writers (Dr. Smith and others) it has been used to express the whole of one mass of layers or beds of the same or nearly the same quality (as the Bath oolite), or one similar series of alternations (as the Weald clay). By others (Playfair, &c.) it is applied to the thinner layers of rocks, which Smith denominates beds. Neither mode is perhaps inaccurate, yet it is convenient now to settle the nomenclature we must employ in the following descriptions.

Many rocks, as limestones, are divided by parallel, or nearly parallel, seams, into what are by the quarrymen called *beds* or *posts*; in some cases these are further divisible into *laminæ*. Moreover, it is the custom of geologists to include several rocks which are generally concomitant, and have some common characters of deposition and organic remains, under one title, viz. *formation*. The subjoined diagram (*fig.* 19.) will illustrate the use of these terms.




The shales in this diagram (*a c e*) are from 20 to 300 feet thick, and are composed of *laminæ* parallel to the planes of stratification; the limestones (*b*) are *thin*