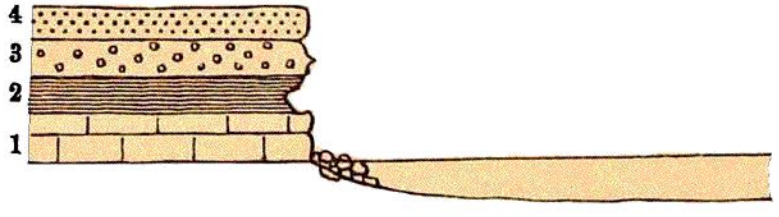
http://www.geology.19thcenturyscience.org/books/1878-Ramsay-Geology/README.htm

rocks the particles are partly cemented by oxides of iron, in others by carbonate of lime. Minor beds of limestone are often formed on land from calcareous springs. Marine strata, formed of limestone, in the Adriatic, were found by Marsilli to be consolidated a foot beneath the surface. A great many rocks contain more or less carbonate of lime, and along with this, or alone, many others contain silicates of soda or potash. These are soluble in carbonic acid, and entering into new combinations the whole becomes petrified. During these processes shells, echini, corals, bones, teeth, and scales of fish and of marine mammals, &c., are imbedded and cased in stone, and in a less degree terrestrial plants and animals are floated into lakes and estuaries, and occasionally out to sea, where those parts that escape decay and predaceous fish may become fossilised.

If we examine the stratified rocks that form the land, we very soon discover that a large proportion of them are arranged in thin layers or thicker bands or beds of *shale*, *sandstone*, *conglomerate*, and *limestone*, more or less pure; for shales are sometimes sandy, sandstones sometimes shaly, and most conglomerates have a sandy and sometimes a shaly or marly base in which the

FIG. 1.



pebbles are embedded, while limestones occur of every degree of impurity. These must have been formed in a manner analogous to that which I have just described, proving that such beds have been deposited as sediments from water. Take, for instance, a possible cliff