the older, may often be detected among formations of all geological ages. It brings before us the shore-lines of ancient land-surfaces, and shows how, as these sank under water, the gravels, sands, and silts gradually advanced and covered them.

This structure must be carefully distinguished from Unconformability (postea, Part X.). In Overlap there is no break in the sequence of formations; the strata that overlap follow on continuously upon these which are overlapped. But in unconformability there is a break in the succession, the overlying rocks have been laid down on the previously uptilted and denuded edges of those below them. In Fig. 221, for example, the upper or Mesozoic formations (*d* to *i*) form an unbroken series, so do the lower or Palæozoic strata (*a b c*), but the latter have been disturbed and worn down before the deposition of the strata above them. The two series are said therefore to be unconformable.

Relative Lapse of Time represented by Strata and by the Intervals between them.—Of the absolute length of time represented by any strata or groups of strata, no satisfactory estimates have yet been possible. Certain general conclusions may indeed be drawn, and comparisons may be made between different series of rocks. Sandstones full of false-bedding were probably accumulated more rapidly than finely-laminated shales or clays. It is not uncommon in certain Carboniferous sandstones to find huge sigillarioid and coniferous trunks imbedded in upright or inclined positions. Where, as in Fig. 222, the trees actually grew on the spot where their stems remain, it is evident that the rate of deposit of the sediment which entombed them must have been sufficiently rapid to have allowed a mass of twenty or thirty feet to accumulate before the decay of the wood.