Of which were found both recent and fossil 426, leaving 7390 for the total number of species examined The ratio of the species which are both recent 3.7 to 100.0 The 4780 living species consisted univalves bivalves  ${3616 \atop 1164}$  or per cent.  $\left\{ \begin{array}{l} 75.6 \\ 24.4 \end{array} \right.$ The 3036 tertiary species univalves 2098 } \_\_\_\_ } 60.1 bivalves 938 } \_\_\_\_ } 30.9 Among the shells examined were included 1465 recent, and 259 fossil. Shells of the land and freshwater, viz. Freshwater species, living bivalves 118 | fossil 30 univalves 151 fossil 151 living univalves 1196 fossil 78 Land species, As before observed, the ratio of the number of species, both recent and fossil, to the total number of recent and fossil observed, is

The ratio of the same to the number of recent species, 4780, is

And to the number of fossil species, 3036, is

- 14.0

But this last general average of the number of tertiary species now living, is composed of many very different ratios, by the study of which M. Deshayes has been led to class the tertiary formations upon a new principle. He assumes, as a general truth, that those tertiary deposits which contain the greatest proportion of existing species are of the most recent date; and on the contrary, that those in which the ratio of existing species is smallest are the oldest. Applying this principle to the most important localities of tertiary strata, and grouping together those which have the greatest agreements in ratio of living species, he arrives at the following series of three terms for the whole mass of tertiary strata.

## Localities.

Upper or most recent group. Sicily; the subapennine beds; the crag. (Perpignan and the Morea agree in their fossils with the subapennine beds.)