

The tabular view given on page 15 shows the succession of the palæontological rock-groups, systems, and formations, that is, the larger and smaller neptunic groups of strata, which contain petrifications, from the uppermost, or Alluvial, down to the lowest, or Laurentian, deposits. The table on page 14 presents the historical division of the corresponding eras of the larger and smaller palæontological periods, and in a reversed succession, from the most ancient Laurentian up to the most recent Quaternary period.

Many attempts have been made to make an approximate calculation of the number of thousands of years constituting these periods. The thickness of the strata has been compared, which, according to experience, is deposited during a century, and which amounts only to some few lines or inches, with the whole thickness of the stratified masses of rock, the succession of which we have just surveyed. This thickness, on the whole, may on an average amount to about 130,000 feet; of these 70,000 belong to the primordial, or archilithic; 42,000 to the primary, or palæolithic; 15,000 to the secondary, or mesolithic; and finally only 3,000 to the tertiary, or cænolithic group. The very small and scarcely appreciable thickness of the quaternary, or anthropolithic deposit cannot here come into consideration at all. On an average, it may at most be computed as from 500 to 700 feet. But it is self evident that all these measurements have only an average and approximate value, and are meant to give only a rough survey of the *relative* proportion of the systems of strata and of the spaces of time corresponding with them.

Now, if we divide the whole period of the organic history of the earth—that is, from the beginning of life on the earth