

of extinct species some remains, though in a small proportion, of living species, begin here to be discovered, so that the new or present state of the world dawns upon us. To this group belongs the London clay, so called because it is found in the neighbourhood of the metropolis, in a basin of the underlying chalk. The fossils differ widely from the overlying crag. The shells resemble those of the tropics, but few of them are identical with living species. 'Some fish, also, such as, a sword-fish, about eight feet long, and a saw-fish, about ten feet in length, indicate a warm climate.'—*Lyell*.

#### SECONDARY.

5. Chalk,—so called because it consists in part of that white earthy limestone to which the name chalk is applied. Abounds in marine remains, as corals, sponges, shell-fish. Contains some reptiles. With the termination of the secondary period the ammonite ceased to exist. It is found here and in the under strata, but not in any overlying deposit. The ammonites derive their name from their supposed resemblance to the horns of the statues of Jupiter Ammon. 'All the appearances concur in leading us to believe that this deposit was formed in a deep sea, far from land, and at a time when the European fauna [race of animals] was perfectly distinct from the Tertiary period.'—*Lyell*.
6. Green sand,—so called because some of the sands of this formation have a bright green colour. The green grains consist mostly of silicate of iron. Fossils similar to those of the chalk, but generally of different species. 'Unlike the white chalk [remarkable for its purity] this deposit consists of a succession of ordinary beds