Radiated, when the fibres are broader and flattish and diverging.
Lamellar or *Foliated*, composed of minute plates laid over each other.
Porous, penetrated by pores.
Cellular, or *Vesicular*, when the pores swell into rounded cavities, like bladders, as in some lavas.
Slaty, or *Laminar*, composed of straight, parallel, thin plates, or laminæ.

The structure of *compound rocks*, may also be *Slaty*.

The external structure of rocks *en masse*, or considered as mountain masses, is as distinct from their internal mineral structure, as the shape of a building from that of the bricks or stones of which it is composed; though this distinction has been generally overlooked. The external structure of rocks, as forming mountain masses, may be

Stratified, or stratiform.
Tabular, or in large plates.
Columnar,
Globular, or in spherical masses.
Massive, or *Indeterminate*, which includes all unstratified rocks that have no determinate shape.

Stratified mountains or rocks are those which are composed of layers of stone, laid over each other, and divided by parallel seams like the leaves of a closed book. In these seams or partings, which divide the strata, there are frequently, thin laminæ of soft earthy matter; but, sometimes, the surfaces of the upper and lower stratum are so closely joined, that it requires a considerable force to separate them. These layers are denominated strata: they extend through the whole mountain or mass, their length and breadth, being much greater than their thickness. If the thickness of any stratum exceed two or three yards, it is more usually denominated a bed; and if it lie between two beds of stone of a different kind, it is said to be imbedded. Strata, almost always, decline, or dip down to some point of the horizon, and of course rise towards the opposite point. A line drawn through these points is called the line of their dip: another line drawn at right angles to this, marks the course along which the strata stretch out to the greatest extent:—it is called the line of bearing. If a book be raised in an inclined position, with the back resting lengthwise upon the table, the leaves may be supposed to represent different strata; then, a line descending from the upper edges to the table will be the line of dip, and their direction lengthwise will be the line of bearing; and the angle they make with the table will be the angle of inclination. Strata, are, however, sometimes curved or bent in both directions, and are frequently broken; which makes it difficult to ascertain their true position.

Stratified rocks of sandstone, and beds of clay and marl, are generally admitted to have been deposited by the turbid waters of the sea, or of large rivers or lakes. These sedimentary depositions are