

Tertiary strata. In this country a little is found in the Palæozoic rocks, but in greatest abundance in the Mesozoic and Cainozoic formations. Upon the Red River, in Texas, more than a hundred miles square of surface are underlain by *selenite*, a transparent variety.

*Rock Salt* (Chloride of Sodium) is frequently found associated with gypsum, in the New Red sandstone. It occurs also in the Supercretaceous or Tertiary strata; as at the celebrated deposit at Wieliczka in Poland, and in Sicily, and Cordona (Spain), in Cretaceous strata; in the Tyrol, in the Oolites; and in Durham, England, salt springs occur in the Coal series. In the United States they issue from the Silurian rocks.

*Forms of Vegetable Matter.*—If vegetable matter be exposed to a certain degree of moisture and temperature, it is decomposed into the substance called *peat*, which is dug from swamps, and belongs to the alluvial formation.

*Lignite or Brown Coal*, the most perfect variety of which is jet, is found in most of the series above the coal formations; and appears to be vegetable matters like *peat* which have long been buried in the earth, and have undergone certain chemical changes. It generally exhibits the vegetable structure.

*Bituminous Coal* appears to be the same substance which has been longer buried in the earth, and has undergone further changes. The proportion of bitumen is indefinite, varying from 10 to 60 per cent., and the coal is said to be *dry* or *fat*, according to the amount of bitumen present.

There are several varieties of the bituminous coal.

*Pitch*, or *caking coal*, is a velvet black, highly bituminous mass, which cakes or runs together during combustion. *Cherry coal* is like caking coal, but it does not soften and cake. It breaks so readily that much of it is lost in the mining process. *Cannel coal* is nearly black, with a fine compact texture and a conchoidal fracture. It burns readily like a candle, hence its name. *Splint coal* is a coarse variety of cannel coal. The *Albert coal* of Nova Scotia is perhaps to be regarded as a species of bitumen, because the latter so much predominates. It has a bright, shining lustre, and ignites instantly upon contact with flame. *Coke* is bituminous coal artificially deprived of its bitumen. It is light, and approaches charcoal in appearance. Coke is occasionally found in nature; especially in the neighborhood of dikes. All these varieties are found in the coal formation, and even in the Mesozoic and Tertiary series.

*Anthracite* is bituminous coal that has been deprived of its bitumen, usually by heat, under pressure. It thus forms a com-