

earth are not uniformly continuous in all directions over large superficial areas. In one district, we trace the course of crystalline and granitic rocks; in another, we find mountains of slate; in a third, alternating strata of sandstone, shale, and limestone; in a fourth, beds of conglomerate rock; in a fifth, strata of marl and clay; in a sixth, gravel, loose sand, and silt. The subordinate mineral contents of these various formations are also different; in the more ancient, are veins of gold and silver, tin, copper, lead and zinc; in another series, we find beds of coal; in others, salt and gypsum; many are composed of freestone, fit for the purposes of architecture; or of limestone, useful both for building and cement; others of clay, convertible by fire into materials for building, and pottery: in almost all we find that most important of mineral productions, iron.

Again, if we look to the great phenomena of physical geography, the grand distributions of the solids and fluids of the globe; the disposition of continents and islands above and amidst the waters; the depth and extent of seas, and lakes, and rivers; the elevation of hills and mountains; the extension of plains; and the excavation, depression, and fractures of valleys; we find them all originating in causes which it is the province of Geology to investigate.

A more minute examination traces the pro-