

TEXT-BOOK OF GEOLOGY

BOOK IV

GEOTECTONIC (STRUCTURAL) GEOLOGY (CONTINUED)

Section ii. Interbedded, Volcanic, or Contemporaneous Phase of Eruptivity

MASSES of igneous materials ejected to the surface in some of the forms now visible in modern volcanoes, possess great value as fixing the geological epoch of volcanic eruptions. It is evident that, on the whole, such superficial masses must agree in lithological characters with rocks already described, which have been extravasated by volcanic efforts without quite reaching the surface. Yet they have some well-marked general characters, of which the most important may be thus stated. (1) They occur as beds or sheets, sometimes lava-form, sometimes of fragmental materials, which conform to the bedding of the strata among which they are intercalated. (2) They do not break into or alter overlying strata. (3) The upper and under surfaces of the lava-beds present commonly a scoriaeous or vesicular character, which may even be found extending throughout the whole of a sheet. (4) Fragments of these upper surfaces not unusually occur in the immediately overlying strata. (5) Beds of tuff are frequently interstratified with sheets of lava, but may also occur by themselves, interstratified among ordinary sedimentary strata.