

from the dry details his mind would sweep with easy relief to the consideration of the broader truths of the science.

The following passage may be quoted as an example of Von Buch's style of writing. It describes his idea of the origin of the Carboniferous series of rocks:—"First the conglomerate falls, a mixture of great stones that could not be carried far from their parent mass, even by an angry flood; and they tear away with themselves the mantle of vegetation which had formerly reposed in security upon their surface. Woods are overthrown, buried beneath the irresistible rush of jagged and broken rock, again and again the floods rise and pour over the land, renewing this drama of destruction. Countless fragments are rolled from the heights into the narrow mountain basins and valleys; there in the hollow they are dashed against one another, gyrated and rounded into pebble form. After the surface has been denuded of its vegetation and the force of the flood diminishes, the finer, lighter grains begin to subside and the newer fine-grained sandstone accumulates."

Von Buch was particularly interested in the conglomerates, and on the basis of the lithological features he traced the pebbles and larger fragments included in the conglomerates very carefully to their place of origin. He demonstrated that the pebbles are smaller the more remote they are from the rock from which they have been broken, and by comparative studies he tried to determine the direction that had been followed by the transporting floods.

From a strictly scientific point of view, Leopold von Buch's geological researches were less successful than those of Voigt or Freiesleben, which marked a distinct note of advance in stratigraphical inquiry. The geological data given by Von Buch in his Silesian papers are sketchy in comparison, and there is no serious effort to draw up a definite succession of the rock deposits upon either stratigraphical or palæontological grounds.

During his Norwegian journey, Leopold von Buch had drawn attention to the position of granite *above* the "transitional" limestone in the neighbourhood of Christiania. Soon after, in 1811, a work on the *Syenite Formation in the Erz Mountains*, written by Raumer and Engelhardt, aroused great interest. These authors stated that the granite and syenite on the north-east edge of the Erz