

We pass to the upper formation of the system. Over the belt of mingled gray and red there occurs in the pyramid a second deep belt of red conglomerate and variegated sandstone, with a band of lime a-top, and over the band a thick belt of yellow sandstone, with which the system terminates.* Thus the second pyramid consists mineralogically, like the first, of three great divisions, or bands; its two upper belts belonging, like the three belts of the other, to but one formation—the formation known in England as the Quartzose Conglomerate. It is largely developed in Scotland. We find it spread over extensive areas in Moray, Fife, Roxburgh, and Berwick shires. In England, it is comparatively barren in fossils; the only animal organic remains yet detected in it being a single scale of the *Holoptychius* found by Mr. Murchison; and though it contains vegetable organisms in more abundance, so imperfectly are they preserved, that little else can be ascertained regarding them than that they were land

* There still exists some uncertainty regarding the order in which the upper beds occur. Mr. Duff, of Elgin, places the limestone band above the yellow sandstone; Messrs. Sedgwick and Murchison assign it an intermediate position between the red and yellow. The respective places of the gray and red sandstones are also disputed, and by very high authorities; Dr. Fleming holding that the gray sandstones overlie the red, (see Cheek's *Edinburgh Journal* for February, 1831,) and Mr. Lyell, that the red sandstones overlie the gray, (see *Elements of Geology*, first edit., pp. 99–100.) The order adopted above consorts best with the results of the writer's observations, which have, however, been restricted chiefly to the north country. He assigns to the limestone band the middle place assigned to it by Messrs. Sedgwick and Murchison, and to the gray sandstone the inferior position assigned to it by Mr. Lyell; aware, however, that the latter deposit has not only a coping, but also a basement, of red sandstone—the basement forming the upper member of the lower formation.