

chlorite, and sericite. Occasionally these pliable scales are so arranged as to give a certain flexibility to the stone (flexible sandstone). This rock occurs in the southeastern States of North America; also in Brazil, as the matrix in which diamonds are found.

Siliceous schist (Lydian stone, Lydite, Kiesel-schiefer) has already been described (p. 268) among the stratified rocks; but it also occurs among the crystalline schists, sometimes as the result of the pulverization of quartzose rocks (mylonite).

Quartzite (Quartz-rock), though not properly a schistose rock, may be most conveniently considered here, as it is so constant an accompaniment of the schists, and, like them, can often be directly traced to the alteration of former sedimentary formations. It is a granular to compact mass of quartz, generally white, sometimes yellow or red with a characteristic lustrous fracture. It occurs in thin and thick beds in association with schists, sometimes in continuous masses several thousand feet thick. In Scotland it forms



Fig. 37.—Contorted Micaceous-schist, as seen under the microscope with a magnifying power of 50 diameters.



Fig. 38.—Microscopic Structure of Quartzite. (Magnified 20 diameters.)

ranges of mountains, and is there frequently accompanied by beds of limestone, which in Sutherlandshire contain Cambrian fossils.²¹⁶

Even to the naked eye, the finely granular or arenaceous structure of quartzite is distinctly visible. Microscopic examination shows this structure still more clearly, and leaves no doubt that the rock originally consisted of a tolerably pure quartz-sand (Fig. 38). More or less distinct evidence

²¹⁶ See the chapters on the Pre-Cambrian and Cambrian systems postea. On the metamorphic quartzose rocks of Morbihan, France, see Barrois, *Ann. Soc. Géol. Nord*, xi. (1884).