will long be used in small amounts for construction of buildings, bridges and walls, but the quarrying of such material is apt to be incidental to other purposes.

**Sandstone and quartzite.**—The Hardyston formation contains siliceous beds that are commonly known as quartzites, although generally the degree of metamorphism is so slight that they are more appropriately called sandstones. They rest unconformably on the gneisses and now outcrop on the lower slopes of the gneiss hills. With the exception of a small area on the south side of Camels Hump, they all lie south of the Lehigh River. This is the most attractive building stone in the county and the one most generally used at the present time.

These sandstones have been quarried in several places in Northampton County but not as extensively as in Lehigh and Berks counties. In recent years the only quarry operated lies on the hillside east of Hellertown, about one-fourth mile north of Lost (Hellertown) Cave. Earlier, this stone was quarried on the northeast side of South Mountain one and a half miles east of Lehigh University and on the west side of the Bethlehem Pike in Seidersville.

These sandstones were long known to the building trade as the Potsdam sandstone under the mistaken idea that they were of the same age as the Potsdam formation of New York State.

The quarry east of Hellertown furnished the stone for several buildings on the Lehigh University campus. The Packard Engineering Laboratory is the best example. The quarry is on the lower slope of the west end of a gneiss hill. The beds form a surface cover to the gneiss, dipping to the west only slightly more than the slope of the hill, and having somewhat the same relationship as the shingles on a roof. The rock is a hard, compact stone composed of quartz sand grains with some quartz pebbles as much as one-fourth inch in diameter. A basal layer with pebbles up to two inches in diameter and with a dark-colored matrix is generally present but not used. When fresh, the rock is gray to bluish-white but a band of discoloration from one-eighth to one inch in depth has stained the stone to a ferruginous brown or red along bedding planes and joint cracks. This is due to the presence of numerous tiny cubes of pyrite that are almost invariably present in the unaltered stone. They may be seen with the naked eye but better with a hand lens. At one time builders sought the gray fresh stone but in recent years architects have expressed a decided preference for the discolored stone. The alteration has not weakened the stone to any appreciable extent.