ground strewn with the pebbles. These are distinctive in that they have been colored red on the outside by the red coloring matter of the mud matrix and the same stain has penetrated the pebbles along cracks. Some of the cobbles are as much as one foot in diameter and are themselves conglomeratic; most of the cobbles are fine-grained and less than three inches in diameter. They are only fairly well rounded. Some have been broken by frost action into sharp angular fragments.

Where fresh excavations have been made either by stream erosion or artificially, limestone pebbles, usually more angular than the quartzites, are fairly abundant. Near the surface some of these limestone fragments have been entirely removed by erosion, producing a honey-combed rock. A few excavations and a shaft located about three-fourths mile southwest of Leithsville on the east side of a small north-flowing stream, exhibit the character of this conglomerate to excellent advantage. These openings were made in search of a copper deposit. The only evidence of copper was thin films of green malachite coating some of the pebbles, particularly the limestones.

On the east side of a ravine about three-fourths mile southeast of Leithsville about 42 feet of well-consolidated conglomerate rests on 6 feet of hard red sandstone with thin conglomeratic lenses. Beneath is another red sandstone about 3 feet thick that is more conglomeratic. The beds dip about 14° SW. and strike N. 30° W.

There has been considerable discussion concerning the origin of both the limestone and the quartzite cobbles. The quartzites have probably come from the Shawangunk of Kittatinny (Blue) Mountain, although some have suggested the Green Pond conglomerate of New Jersey. The limestone cobbles probably came from the Cambro-Ordovician limestones although the writer has found a much larger percentage of low-magnesian stones than one would expect from the largely high-magnesian limestones adjacent to the region.

Thickness.—The Brunswick formation in its full development is believed to be several thousand feet thick. That portion included within Northampton County is about 300 feet thick.

Name and correlation.—These rocks have been known under several different names. The First Geological Survey of Pennsylvania designated them as the “Mesozoic Red Sandstones.” The Second Geological Survey generally called them the “New Red” because of the color and the distinction from the “Old Red” sandstones of the Paleozoic. From the New Jersey geologists we have the general name “Newark” and the names of the subdivisions.

Several different correlations for the deposits of Flint Hill have been suggested. In 1885, the Second Geological Survey of Pennsyl-