1838, he described the Hardyston as his Formation No. 1 of his Secondary rocks. Later he designated it as the Primal White Sandstone and correlated it with the Potsdam Sandstone of New York. While Prime was investigating the geology of the Lehigh Valley for the Second Geological Survey, the name Potsdam was continued. When later several paleontologists and stratigraphers proved conclusively that the Potsdam of New York is Upper Cambrian in age and is underlain by a great thickness of limestones, shales and quartzites of Paleozoic age it became apparent that the Pennsylvania and New Jersey basal Cambrian siliceous deposits should not be correlated with the Potsdam of New York but rather with the Poughquag quartzite of the Taconian (Georgian) series.

Wolff and Brooks proposed the name Hardistonville in 1897, from Hardistonville, N. J. This name was slightly modified by Kimmel and Weller who proposed the shorter township name of Hardiston (later changed to Hardyston) which has since been widely adopted. Even yet, however, one finds the occasional use of the name Potsdam.

The Hardyston of Northampton County is correlated with the Chickies formation of Chester and Lancaster counties, and with the Antietam sandstone of Franklin County, Pennsylvania.

Stratigraphic relations.—The Hardyston rests unconformably upon the older pre-Cambrian crystalline gneisses. Some of the earlier workers confused banding of the gneisses with bedding planes and announced the conformability of the two classes of rock. It is evident that there was a long interval of erosion between the deposition of the basal Hardyston and the solidification of the underlying igneous rocks.

Presumably, the Hardyston is overlain conformably by the Tomstown formation although no exposure of that contact is known within either Northampton or Lehigh County. Where strata of the two formations are seen in proximity, the close parallelism of strike and outcrop suggest conformability.

Local details.—At Camels Hump three miles north of Bethlehem, the Hardyston formation is a rather narrow band on the south slope of the hill formed by pre-Cambrian gneiss. This band extends on the east to the northeast end of the hill, following the contour of the steeper slope. East of the road intersection at the southwest corner of the hill there are several old shafts from which umber was taken. This umber, and along with it some less manganiferous limonites and iron-rich jaspers, is good evidence for the presence of the Hardyston.