

7-18-79

# Bethinking of Old Orleans

C.W.Lattin • County Historian

VOL. I

No. 28

## Whence Came The Cobblestone?

The answer to this question may be found in Chapter 1 of Cobblestone Landmarks of New York State by Shelgren, Lattin, Frasch and Peterich.

"The evolution of the humble cobblestone began 325-475 million years ago. During the Ordovician, Silurian, and Devonian periods of the Paleozoic Era all of the Great Lakes region west of the present Hudson Valley was a great shallow salt sea filled with living creatures whose remains, falling to the bottom, gradually formed layers of limestone deposits. Erosion of the young Appalachian Mountains, a more ancient land mass to the east of this salty sea, washed down additional layers of sand and clay, depositing these in thicknesses of thousands of feet. Under enormous pressure, these various layers of sediment became limestone, dolomite, sandstone, and shale. Finally, some 250 million years ago, as the salty, sediment-filled sea dried up and the land mass emerged, new rivers began to cut into and expose our regional sedimentary bedrock. The forces of erosion, pressure, and time that produced this foundation were eventually to form the cobbles that later were wrought from this same bedrock.

In the last million years or so the Ice Age redesigned our landscape. Great juggernaut masses of ice ground loose stones on top of the bedrock surface as well. Advancing slowly down from Labrador, these glaciers and ice sheets picked up rock rubble and carried it south. Thus, in addition to polishing and redistributing the loose fragments of local sedimentary sandstone and limestone, the ice mass brought with it a small number of harder Canadian metamorphic stones, such as gneiss and quartzite, which were tumbled and crushed along the way. These stones were eventually left on the land when the ice melted. Geologists call this glacial deposit of rocky debris over the bedrock layer the till sheet or drift mantle. The layman knows it as topsoil or subsoil."

Thus it is interesting to note that some of the cobblestones, particularly those of gneiss and quartzite found in nearby fields and the shoreline of Lake Ontario which were used for the building of cobblestone structures in this area from 1825 - 1860 were imported."

