

not showing. It is capped by red, feldspathic sandstones of the ordinary basal type. The conglomerate carries numerous quartz pebbles, up to 2 inches in diameter, along with occasional smaller ones of diabase, and of red orthoclase feldspar, the latter clearly from pegmatite veins. The coarsely granular matrix looks black when fresh, becoming green mottled with blotches of chloritic material on weathering. Along with the quartz in the matrix is much microperthite feldspar, considerable magnetite in streaks, and occasional grains of titanite and microcline, all these grains being surrounded by a greenish, chloritelike cement, whose exact nature is not clear.

This conglomerate represents an intermediate stage between the normal, quartzose conglomerates and the local, disintegration conglomerates of the hollows. It is therefore of interest to note that, while it lies in contact with anorthosite gabbro, with no gneissic outcrops within a mile, it is entirely made up of gneissic debris. This may either argue transportation of the materials for at least this distance, which would imply great strength of wave action; or else that gneiss occurred near at hand along the old shore, became covered up by later Potsdam beds, and has since been faulted out of sight. There is no question about the necessary fault being near at hand, and, so far as the writer knows, no evidence which will enable a decision one way or the other.

Very abundant also in the basal portion of the formation, are beds of rapidly disintegrating, very red, coarse arkose sandstones, made up mainly of quartz and feldspar grains and the whole much permeated with red hematite. They break down rapidly to a red, sandy clay, a characteristic soil which is produced by no other rock in the district, and which often shows the presence of these beds when actual outcrops are lacking. Beds of this sort often occur interbanded with the basal conglomerates, or they may constitute the larger part of the base, conglomerates being scarce or absent, as is the case on Rand hill, where these beds show greater bulk than in any other known locality.

Well indurated, red sandstones, such as those from the type locality at Potsdam, are not infrequent in the basal portion of