

Northern Kentucky Views Presents:

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# Kenton, Campbell, and Pendleton Counties

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KENTON, CAMPBELL AND PENDLETON COUNTIES.

The remarks which have been made in the preceding section, in regard to the geological formation of the counties adjacent to these on

the west, apply to a considerable area of Kenton, Campbell and Pendleton counties, especially in the south and west portions of these counties.

In the north part of Kenton county, where the soils were collected for chemical analysis, the growth is chiefly beech mixed with sugar-tree, walnut, buckeye, large and small varieties of wild cherry, and black locust. About twelve feet below the general level of the arable upland the beds of blue limestone are charged with *Leptaena alternata*, *Orthis Lynx*, *Chaetetes lycoperdon*. The soil is best adapted to corn and rye. Wheat often freezes out; this could be avoided by underdraining and liming, and improving the mechanical texture of the soil by a proper system of cultivation.

The surface is very much broken in Campbell and the northern part of Pendleton; the predominating rock, towards the tops of hills, being the aforementioned silicious mudstone. About the centre of Pendleton county the hills are about three hundred and twenty-five feet above the Licking. Their base is composed of yellow marly shales and rough weathering limestones, containing *Orthis testudinaria*, *Leptaena sericea*, and *plano-convexa*, alternating with marly argillaceous shales. Above these come in shell-beds, full of broken fragments of *Leptaena alternata*. Owing to the large amount of marly argillaceous shales the ravines are very much gullied out, and for the same reason the soil is quite marly and argillaceous in its character. Vestiges of the silicious mudstone are still seen on some of the hill tops. The soil of this part of Pendleton is derived chiefly from the *Leptaena* and *Chaetetes* limestone and marly argillaceous shales—the sub-soil being a yellow clay. The growth is black walnut, large white and red oak, black ash, black locust, and some wild cherry and shell-bark hickory. Between six and seven miles north of Falmouth the soil is derived more from the buff silicious mudstone; here the growth is mostly white oak and small scrub oak.

In the northern part of Campbell county the soil of the table land is chiefly derived from the silicious mudstone, resting on a deep yellow subsoil, supporting a growth of white oak, beech, sugar-tree, and black-walnut. Under the mudstone are yellow marly shale, with thin beds of hard (limestone?) interstratified, containing branching forms of *Chaetetes lycoperdon* and *Leptaena sericea*. The base of the hills are composed chiefly of blue marly argillaceous shales, with bands of

limestones containing *Orthis testudinaria*, remains of *Encrinites*, and *Calymene senaria*. These two last mentioned members occupy together about one hundred feet of the base of the hills.

The southern part of Campbell county is much broken, and the geological formation very similar to that above described, the growth being white and red oak, shell-bark hickory, some poplar, with locally scrub and black-jack oaks; on the north slopes sugar-tree, black walnut, hickory, and beech prevail.

In the south part of Campbell county, about three miles from the county line, there is a considerable bed of bog iron ore. Masses of from two to four superficial feet are strewed on the surface, in a field on Mr. Yelton's farm, and large masses of the same description of ore also occur in the northern part of Pendleton county. If the specimens prove to be rich enough in the percentage of iron, on analysis, it is possible that enough might be obtained in this part of Kentucky to support a furnace. Near the top of the ridges, north of Falmouth, beds of white rounded quartz pebbles, as large as partridge eggs, were observed. These seem to be derived from some conglomeritic rock, which very likely may occupy the place of the Oneida conglomerate of the New York system; but, as yet, the rock itself has not been seen satisfactorily in place. If it prove, from future investigations, that these pebbles are derived from such a member of the rocks of Lower Silurian date in Kentucky, it will, I believe, be the first time that it has been observed in the western states. These pebbles can be detected occasionally, for a distance of ten miles, near the Cynthiana and Falmouth road.