

Summing up the facts, then, in few words these rocks are of limited occurrence, covering a few hundred acres all told; they are found at rather low elevations in the hills though they sometimes occur as far as the very tops of the highest points in the ridge country; they have yielded fossils of lower or eocene tertiary age; they have probably resulted from weathering processes; are metamorphic in character; and have no history of dynamic origin or of present or past dynamic change. Their former reference to the paleozoic is no longer tenable and they stand as a unique instance of the induration of soft sandstones in the southwest.

The sketch map accompanying gives that portion of Crowley's Ridge in which indurated sandstones have been found. It will serve to indicate the relations of the ridge to the low-lying country surrounding as well as helping to make clear the geographic distribution of the quartzites.

THE WHITE CLAYS OF INDIANA. By AMOS W. BUTLER. Published in the Trans. of the Ind. Horticultural Soc. for 1893.

BIOLOGY.

ON THE HABITS OF TURTLES. By A. W. BUTLER.

[ABSTRACT.]

In the White Water valley the soft-shelled turtles are never found active in winter. They seem to seek the deepest water and then bury beneath the surface of the mud or sand. They disappear earlier in the fall and reappear later in the spring than the hard shelled forms. They rarely appear before April 15th, and sometimes not until about May 1st. In the canal none have ever been found in winter. Possibly they seek the deeper water. The hard-shelled turtles winter in the more shallow water, and seem to prefer a mud bank where a musk rat hole has caved in. There they may be found by prodding with an iron rod.

ON THE OCCURRENCE OF KIRTLAND'S WARBLER (*Dendroica kirtlandi* Baird) IN INDIANA. By A. B. ULREY.

Owing to the rare occurrence of Kirtland's Warbler in North America and the fact that its life-history is almost entirely unknown, considerable