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New Quarries in Madison County

Mrs. Arthur Goshorn

THE OCCURRENCE OF GYPSUM IN MISSISSIPPIAN FORMATIONS OF IOWA

A. C. TESTER

During the last three years several new deep wells have been drilled in Iowa and accurate sets of well cuttings have been studied. This material indicates the presence of bedded gypsum both in the forms of selenite and anhydrite in formations below the Ste. Genevieve and above the Kinderhook. It is suggested that the horizon is a part of the Warsaw formation and represents an interior saline basin of central Iowa. The details of the well logs of the intervals involved are included in the discussion.

STATE UNIVERSITY OF IOWA,
IOWA CITY, IOWA.

SUBSURFACE CORRELATION IN IOWA

A. C. TESTER

Much new information concerning the underground geology of Iowa is being accumulated by the Iowa Geological Survey. Greater enthusiasm on the part of well contracters, municipalities, and the public in general has made it possible to obtain and study accurate sets of well cuttings from several widely distributed deep wells. The record and correlation of formations encountered in wells at Fort Dodge, Jefferson, Lenox, Ottumwa, Clinton, Dubuque, and Decorah are discussed in this paper. By the more detailed studies possible at this time, correlations of several key members have been made.

STATE UNIVERSITY OF IOWA,
IOWA CITY, IOWA.

NEW QUARRIES IN MADISON COUNTY

MRS. ARTHUR GOSHORN

Opening new quarries at convenient points, Madison County has covered nearly 100 miles of county roads with crushed rock. The towns of St. Charles, Patterson and Winterset have their own crushers and are covering their streets and alleys with rock from quarries near by. Winterset's quarry is inside the city limits.

Adair County has opened a quarry at Drake's bridge in west Madison County to supply rock for some of its roads. At present the county is furnishing farmers with ground limestone from this quarry. Nearly all of the quarries including the Penn-Dixie quarry east of Winterset and the great Hawkeye cement quarry in the northern part of the county are in the Bethany limestone. Winterset's quarry is in the Winterset bed and so is Clark's quarry north of Winterset. The county quarry is in the Argentine limestone.

The abundance of good quarry sites near the roads and towns has given to the county cheap material and has enabled the employment officials to furnish work throughout the whole year.

WINTERSET, IOWA.

RECENT EROSION IN MIDDLE RIVER TRAVERSE

ARTHUR GOSHORN

The short, sharp and narrow ravines that lead into Middle river in Madison county cut through the Kansas City beds. In a nearly vertical wall, the rock is frequently exposed with the brooks running along its base. There are many little waterfalls and some rock-falls or slides caused by the river eroding the shales and undermining the exposure. In the wider ravines, the brooks often change their channels from one side of the ravine to the other.

The rock-falls and slides occur most frequently in the spring when the frost goes out and this year they have been larger and the erosion greater than is known in any previous year. Undoubtedly the abundance of rain in the summer and fall of 1935 following the great drought of '34 that stopped practically all of the numerous springs and this followed by the intense cold of continued zero weather in winter were contributing factors in causing the slides. The deep snow when it melted caused the ravines to be flooded not for two or three days as after a rain, but for more than a week.

Most of the waterfalls receded several feet; large, flat stones 12 to 20 inches thick where moved down stream. At the mouths of the ravines entering the bottom, large amounts of broken stone were deposited. In places where the force of the stream was checked by accidental damming, large quantities of good black soil from the uplands were deposited. One farmer had his barnyard and its fences almost ruined by the floods which left the yard strewn with rock and mud.