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The Geology of the Region about Belton in Northwestern Montana

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description of each ruin, about sixty ruins being described. The ethnological part treats of the Indians of the region, giving their linguistic family, the location of their reservations, and the number of Indians residing on same. It also gives their manners and customs in minute detail.

A SECTION IN SOME LATE TERTIARY AND QUATER-
NARY MARLS NEAR DE LAND, FLORIDA

THOMAS H. MACBRIDE

An excavation at De Land this winter revealed some highly fossiliferous marls and clays. They are separated by bands of nodular sandy clays in such a way as to suggest the sequence intimated in the title. The fossils will check this assignment. A part of a chelonian carpace in one of the older beds adds interest to the investigation.

INDIAN QUARTZITE QUARRY NEAR HOT SPRINGS,
SOUTH DAKOTA

PAUL ROWE

Bottle Mountain east of Hot Springs, South Dakota is the traditional last fortress of the Indian tribes occupying the region.

On the southwest face of this mountain there is evidence that the Indians removed a considerable amount of the rock best fitted for making arrow points. There is considerable loose talus, apparently rejected blocks, about the foot of the slope at this place. Elsewhere there is little talus. Some of the joints have been widened into small caves by the continual "fracturing" of the most desirable rock for making artifacts.

THE GEOLOGY OF THE REGION ABOUT BELTON IN
NORTHWESTERN MONTANA

ROBERT H. SEASHORE

This report deals with the geology of the region about Belton, Montana, which adjoins the southwest corner of Glacier National Park. It includes sections in the valleys of Lake McDonald and the lower twenty-five miles of the Middle Fork of the Flathead River, which cuts across the Belton Hills, Apgar Mountains, Flathead Range and Whitefish-Kootenay Range. The bed rocks are of the Lewis and Galton contemporaneous phases of the Belt

Series, and have been faulted into a series of parallel blocks which dip from 20 to 75 degrees to the northeast, and trend north 45 degrees west. Two examples of drainage changes due to glaciation are cited.

SOME THEORETICAL STAGES IN THE RETREAT OF THE IOWAN ICE SHEETS

JOHN E. SMITH

A definite moraine extends southeastward across the southwestern township of Butler County to central northern Grundy County where it swings to the northeast passing north of Cedar Falls and southward (less distinct here) along the Cedar River and just east of it to Vinton. East of Vinton it crosses the river and extends southward along the eastern part of Benton County and thence toward the east. Similar deposits in several other places have been recognized as possible recessional moraines.

THE ALGONA RECESSIONAL STAGES OF THE WIS- CONSIN GLACIATION IN IOWA

JOHN E. SMITH

The city of Algona is the best known locality near the maximum southern extent of these recessional stages of the Wisconsin glaciation in Iowa. This city is near the most pronounced concentration of the chief moraine in mass and height, hence the name.

In Winnebago county the principal moraine extends from the northeastern corner in a southwesterly direction past Lake Mills and just west of Forest City. Other distinct substages are marked by smaller moraines approximately parallel to the main one (see map Fig. 1). In some places there are ridges or low ranges of hills which connect two of the substages with each other, or that extend only part way toward another ridge. There are also small hills of other recessional deposits irregularly disposed which seem to have no positive relation with the well defined substages. One of these moraines lies just west of Thompson, another a few miles east of Buffalo Center, and another just west of it.

In Hancock county the principal moraine lies west of Britt crossing nearly in a due northeast-southwest direction. This moraine is cut into two nearly equal parts in this county by the west branch of the Iowa River and near the stream it has been eroded away. Toward the west where it enters Kossuth county, this