## GEOLOGY AND GEOGRAPHY

## Chairman: T. M. BUSHNELL, Purdue University

The program of this section was well attended, those present including a number of students of the State Teachers College. The two papers by Fred J. Breeze, listed by title below, were omitted because of the author's illness. The program was short, and the less hurried presentation of the papers permitted more discussion than usual.

W. D. Thornbury, Indiana University, was elected chairman of the section for 1940.

## ABSTRACTS

The influence of the weather on crop yields in Indiana studied by the climograph technique. STEPHEN S. VISHER, Indiana University.-This is a study of the correlation between the yields of the various crops and such weather conditions as monthly average temperatures and rainfall totals, depth of snowfall, length of growing season, and number of days with temperature above  $90^{\circ}$ , over the period from 1887 to 1939, inclusive. The climographs show that monthly totals of rainfall and average temperatures affect crop yields to an extent which is surprising in view of the fact that the harvest depends upon several factors, including the weather of at least the entire period of growth. The departures from the monthly normals are, nevertheless, followed by rather consistent variations in yield. For wheat, Februaries which are drier than normal are advantageous, as are warmer Marches, cooler Mays, and winters with about 25 inches of snowfall. For oats, relatively cool Mays and wet, cool Junes and Julys are beneficial. For hay, relatively warm springs, wet Mays, and cool, wet Junes are advantageous. For corn, warm Mays and Junes and relatively cooler Julys and Augusts are desirable; more rainfall than Indiana's average amount is helpful to corn, especially in July and August.

The part of this paper concerned with corn appeared in Indiana Farmers Guide 95(1939):566. An extended discussion of these topics will appear as two chapters in a forthcoming volume, The Climate of Indiana.

A plan for measuring the recession of Liston Creek Falls. FRED J. BREEZE, Fort Wayne Extension Center, Indiana University.—Published by title.

1939, A centennial year in geology. FRED J. BREEZE, Fort Wayne Extension Center, Indiana University.—Published by title.