The title of this paper is somewhat misleading. The problems herein discussed are by no means limited to Indiana.

The past summer we had charge of a survey in the central part of that State. For the most part the area is an undulating plain of Wisconsin drift and, with some exceptions a remarkably close and consistent relationship exists between topography and the present stage in soil development. In order of importance the principal series are Miami, Brookston, Clyde and Fox, with some Bellefontaine and Crosby.

After some preliminary skirmishes we decided upon about 8 separations for the uplands and a similar number for the lower grounds. A scale of 2 inches per mile was adopted and the field work quite systematically laid out so no point was left more than one-eight mile from the observer. Both men had had previous experience in similar soils, and the area was covered in about 23 weeks of actual mapping.

Our labors resulted in a better base map than the County will ever have unless a mineral boom strikes it and the U. S. Geological survey gets interested. The relief can be easily interpreted from our soil separations, the drainage is pretty well up to date with respect to all water ways, natural and artificial, and many interesting eccentricities in ancient glacial discharge may be traced.

As a soil map it is a marked improvement upon the maps we made in neighboring counties some years ago. Beyond doubt a committee of field men from this audience would pronounce it a fairly creditable piece of work judged by our present standards of soil mapping. But is this a detailed soil map? That is the question that forced itself upon our mind many times in the course of the work. Instead of a 2 inch scale and 16 separations, why not 4 inches and twice the number of recognized soil distinctions. On most of these slight topographic swells the Miami and Crosby each in varying phases may be found. In most of these depressions having such irregular outlines and erratic courses amid the maze of low contours there is a range of soils from a silt loam with a modicum of organic matter to as deep and dark a Clyde as over developed in the timbered regions. And in like manner several other types which at the beginning seemed fairly uniform resolved themselves as our work proceeded into a number of distinctly different soils, and these distinctions most persistently defied our efforts to prevent two or more of them getting into the same cartographic enclosure.