

## CENTER OF AREA AND CENTER OF POPULATION OF INDIANA.

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The center of area and the center of population for the State of Indiana were determined lately for the Board of State Charities. The process in the determination of the center of area was to draw two lines at right angles across as good a map of the State as could be found, the intersection falling at the estimated center. The areas of the north and south sections were then measured with a planimeter and the east and west lines shifted till the two measured the same. The areas on each side for north and south line were treated in the same manner and the result checked by measurement on several different maps. The intersection of these lines is near the village of Traders Point, in Pike Township, Marion County.

The center of population is really a problem in center of gravity. It is not a point about which the population is equally distributed, but a point such that if a map of the State were loaded in proportion to the population of each locality, the map could be supported by that point and would balance. The population of any one locality is therefore only one factor in determining the location of the center, the other factor being the distance of such locality from the center.

In this determination the statistics used were supplied by Mr. Butler and consisted of the population of each township of each county. I assumed that the population would be evenly distributed over the township in the cases where no towns existed. Where a township had a large part of its population concentrated in a town, I estimated the center of gravity of the township accordingly. The distance of these township centers from a pair of arbitrary east-and-west, and north-and-south lines was measured on a large scale map. The solution for the center of gravity gave the distance of such center from the intersection of the arbitrary lines. This

intersection was eleven miles north of Lebanon and the corrections found as the result of the computation placed the real center of population in Eagle Township, Boone County, about  $1\frac{1}{2}$  miles southwest of the Station of Zionsville.

It is a remarkable fact that the centers of area and population are so close together.