ESTIMATING THE COMPARATIVE RICHNESS OF INDIANA.

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It is difficult to evaluate the many items which together make up the richness of a state, and hence carefully considered comparisons of the comparative wealth of large areas, as states, are few or lacking, although poorly founded assertions of superiority are common.

In spite of the great difficulty of arriving at a just statement of the richness of a state like Indiana it is very desirable that the citizens have a well founded idea as to the standing of their state.

My studies have convinced me that Indiana is one of the most fortunate areas in America. I doubt if another area of like size is permanently richer, except an area which would include a large part of Indiana. But what existing state is richer in proportion to size? Iowa is perhaps a better farming state, but she lacks many of Indiana's advantages. Illinois has Chicago, and more coal than Indiana but she is likewise much larger and has numerous difficulties and responsibilities which Indiana has to a lesser degree. Ohio, another fortunate state is inferior to Indiana in having a wide lake and a national boundary largely shutting her off from the north, a less central location and a larger percentage of rough land.

Indiana has a far smaller coal reserve than several states, but in the long run coal is less important than climate, topography, soil and a favorable location. Some believe that accompanying the practical exhaustion of coal, there will be an altogether different distribution of the industrial centers. For example, that the more important parts of our nation will then be near the Cascade Mountains because of the great water power resources there. However, I suspect that instead power will be brought to the places which have a favorable climate, fertile land, and already well established industries.

But now to consider how Indiana compares at present with other states. Indiana is 37th among the states in point of size. She is surpassed by many larger states when totals are concerned, but totals are often less significant than amounts in proportion to population or in proportion to area, or in proportion to needs.

The gross value of farm products affords one excellent basis for comparison between the states. In this respect, Indiana ranked eighth in 1919¹. However, only three states ranked ahead of Indiana in the value of farm products in comparison to size. Iowa, the leader in 1919, produced only ten per cent more while Ohio produced only a trifle more per square mile than did Indiana.

The "gross value of farm products" is made up of crops, livestock products and animals sold or slaughtered. In respect to value of crops, although Indiana ranked thirteenth state in 1919, when allowance is made for comparative size, Indiana is seen to surpass all but Iowa, Illinois and Ohio. In livestock products, Indiana ranked eleventh but six

¹ Statistics given are all official census figures.

[&]quot;Proc. 38th Meeting, 1922 (1923)."

of ten states ahead of Indiana are enough larger to fall behind Indiana when comparative area is considered. Indiana stands still higher in the value of animals sold or slaughtered, ranking seventh when size is ignored, but claiming third place when area is considered.

In respect to individual crops: Though often surpassed by five states, Indiana ranks with Illinois and Iowa as a corn state, when area is considered. Indeed, in average yield of corn per square mile, Indiana surpasses these states, as well as the other three—Missouri, Nebraska and Kansas, which often have more acres planted to corn than Indiana. In wheat production Indiana normally ranks eighth, but is usually exceeded only by North Dakota and Kansas in the average yield per square mile of total area. In oats production, Indiana ranks seventh, but fourth when area is considered.

Indiana is second in hog production, and in eggs; third in the average crop yield per acre during the poorest years; third in the average value per acre of farm land, and in the percentage of improved farms; third in poultry; and sixth in the dependability of crop yields from year to year. The only states which surpass Indiana in this very important respect are in the extreme East, on the Atlantic Coast.

Few people realize how large a total income is obtained from Indiana's forest trees. In 1919, Indiana marketed eleven million dollars worth of forest products, ranking nineteenth among the states. In proportion to area, however, Indiana ranked thirteenth.

The value added by manufacture (724 million dollars) was only a little less than the gross value of farm products, which was 782 million dollars in 1919. As a manufacturing state, Indiana ranked ninth among all the states in 1919. Indiana had more than two dozen manufacturers, yielding products worth over ten million dollars in 1919. The leading industries of Indiana according to the Census are: 1. Steel, forgings, etc., producing products worth 192 million dollars and giving Indiana third place among the states. 2. The Indiana products of the automobile industry had a value of 179 million dollars in 1919 and Indiana was surpassed only by Michigan in this respect. 3. The third industry in value of products, was the manufacture and repair of railroad cars, The total for 1919 was 149 million dollars, and Indiana's rank was about fifth. Indiana ranked ninth in the value of the slaughtering and meat packing industry, with a value of 134 million dollars. However, if comparative area is considered, Indiana would surpass half of the eight states which have greater totals. Indiana ranked third in the production of agricultural implements in 1919. In the value of products of the canning industry, Indiana should take fourth place instead of sixth. Likewise, although Indiana was about eighth in the value of the products of flour mills and grist mills, she is enough smaller than the higher ranking states to surpass all but the leading state, Minnesota, in value per area.

In mineral products also, Indiana ranks high, second in the production of cement, fifth or sixth in coal, fourth in coke, fifth in brick and tile.

In brief, in spite of her comparatively small size, the 37th state in

this respect, Indiana ranks second in the automobile industry, in cement, and in flour and grist mill products, third in the steel industry, in corn and wheat production, and in animals sold or killed; fourth in the gross value of farm products, of crops, of livestock, of oats and of coke, and in the canning industry; fifth in meat packing and in coal mining; eighth in manufacturing; and thirteenth in forest products.

Conclusion: Indiana's high rank in these diverse but fundamental respects indicates clearly that our state is very rich. No other state is notably richer, in proportion to size and population. Although a few other states are richer in total wealth, they also have a larger population to serve and a larger area to cover. Furthermore, their sources of income are not so diverse as are Indiana's nor are the yields of their crops so dependable year in and year out.

Indiana's wealth is not of the short-lived kind; most of the state has very deep, fertile soil; the climate is excellent in many ways; and Indiana's central position is very advantageous. We need not be surpassed by Michigan, Wisconsin, or any other less well endowed state. We should lead.

