THE CHANGING GEOGRAPHY OF THE LOCOMOTIVE MANUFACTURING INDUSTRY IN THE UNITED STATES: 1830-1970

An Abstract of
A Thesis
Presented to
the Department of Geography
Western Illinois University

In Partial Fulfillment of the Requirements for the Degree Master of Arts

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May 1974

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ABSTRACT

The railroad locomotive manufacturing industry in the United States has experienced noteworthy geographic changes since its inception in 1831. The number of producing companies has greatly fluctuated as has the location of these producers. The purpose of this study was to determine reasons for this changing geography by looking at a number of historic and geographic factors which have had some influence in causing this change.

The data used in this study were primarily historical.

Present day locomotive builders were interviewed and various railroad societies were contacted, but their contributions were minimal.

The procedure employed in the study was first, a description of the initial locations and conditions under which the industry began, and secondly, an analysis of the initial location of the industry and subsequent changes therein. Further historical data is introduced in various places to clarify and provide a basis for the analysis in succeeding periods.

Railroad locomotive manufacturing began along the eastern coast of the United States, tied to available supplies of suitable iron, machine shops, labor, and the fragmented early railways. As miles of railway line multiplied, so did the number and locations of locomotive manufacturing establishments. This trend, parallel growth

of railroad mileage and locomotive manufacturers, existed through the late 1850s. At this time a financial flurry known as the Panic of 1857 had very adverse effects on many of the builders causing about twenty to close.

Never again did the industry have more than twenty cities carrying on manufacturing at any one time.

The industry was becoming more efficient as was the product itself. The existing builders satisfied the market from the 1880s forward, and in fact, their numbers were reduced gradually as the market became more stable and locomotive production and locomotive efficiency were further increased. Along with a reduction in the absolute number of producers, their location was also being altered. The trend was to follow the expanding rail pattern and was made attractive by the growth of iron and steel production in the Midwest.

This was the pattern of the industry until the advent of the diesel-electric form of motive power. Although the first diesel went into regular service in 1925, it was the early 1940s before the eventual, total, replacement of steam was recognized. The motive power revolution was rapid, diesels surpassing steam in tonnage carried by 1951. The improved efficiency of the new locomotives created a smaller market. This diminished market and the changed mode of manufacturing enterprise which dieselectric production required served to further concentrate the industry, and led to its being in the present form.

The future of this industry would appear to be very stable, the trend being an extremely slow reduction in the number of locomotives in service. In all probability, only a dramatic change in the technology of motive power or a crisis requiring the movement of immense tonnages of material would significantly alter the industry in the immediate future.