

# RECENT CHANGES IN THE INDUSTRIAL DEVELOPMENT OF NEWARK, OHIO

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The role of the small manufacturing city in our nation's industrial structure is becoming increasingly important. In 1947 only 40 percent of the persons engaged in manufacturing in the United States worked in factories in cities larger than 100,000. It is the purpose of this paper to evaluate, from the geographical viewpoint, recent changes in the industrial development of one of these smaller cities in east-central Ohio.

TABLE 1  
*Number of employees in Newark's industries, 1950-51*

	Percent	Percent
Glass Products	3,220	50
Fiberglas products	2,600	40
Table glassware	400	6
Prismatic glass	220	4
Metal Products	2,526	38
Stoves	1,123	17
Fabricated metal	351	5
Aluminum wire and cable	750	11
Munitions	250	4
Heating apparatus	52	1
Paper	328	4
Foods	269	3
Printing and Publishing	166	2
Chemical and allied products	47	1
Other industries	96	2
Totals:	6,652	100

Source: U. S. Employment Service and contracts with individual factories.

The information and data used in the prosecution of this study have been secured by means of field investigation supplemented by a rather limited amount of background material available from library sources. Carefully prepared industrial questionnaires, accompanied by letters explaining the nature of the problem, were distributed to the appropriate representatives of the 31 major industrial concerns of Newark. These served to introduce both the problem and the investigator and were followed by personal interviews in which a more intensive examination of the individual establishments was made.

Newark is located approximately 33 miles east of Columbus in the eastern extremity of the Central Lowland province (fig. 1). Its site is the junction of the North Fork and Licking rivers. Long the nucleus of a prosperous, though somewhat limited agricultural area, Newark has experienced a definite "industrial awakening" during the post World War II period.

Approximately 3,200 people are employed in the 20 factories of southwest Newark (table 1). More than two-thirds of these are associated with metal

goods. No other section of the city is represented by such a diversity of products: stoves, fabricated structural steel, heating apparatus, aluminum wire and cable, and petroleum refining. This area has a definite linear pattern of industry, with solid industrial belts paralleling the two major railroads, which lead into the city from the south and southwest (fig. 2). Higher and more nearly level land,

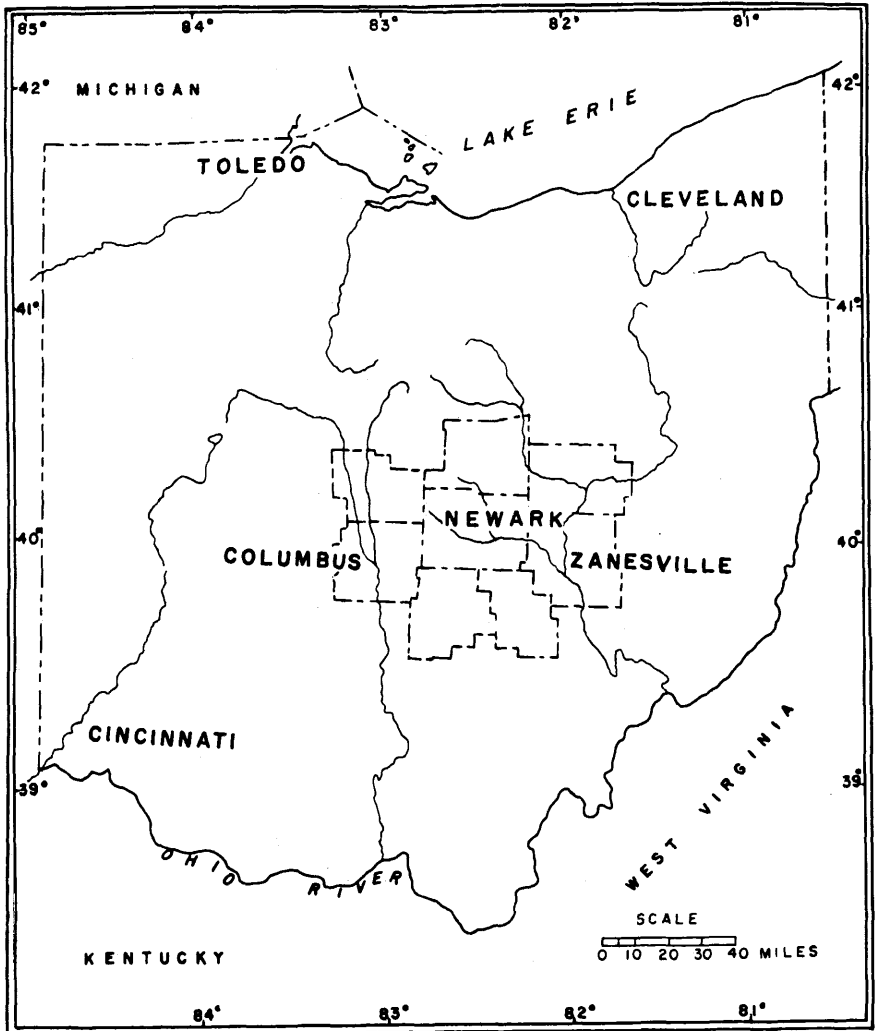


Figure 1. Location map of THE NEWARK AREA.

unrestricted by valley walls, makes this an attractive area for industrial expansion and many of the post-war plants are locating here. There are several large factories in this section of Newark. Here is the city's second largest plant, the Newark Stove Company, which employs over a thousand people producing stoves, vertical heaters, and electric roasters for Sears-Roebuck and Company. Perhaps the plant which has had the most spectacular development during the World War II and post-war years is the Kaiser Aluminum and Chemical Corporation,

a "war-baby" purchased from the War Assets Administration in 1949, and producer of aluminum wire and cable. Although the process of manufacture is an almost continuous, fully automatic operation, the average number of employees in 1950 was 750 and, with the expansion of new products, the number of workers is increasing yearly.

A recent addition to Newark's industrial community, the Timken-Detroit Axle Company's Ohio Axle and Gear Division, has started production of axles and transfer cases for military trucks and, at full capacity, will employ approximately 1,600 persons. Location of the plant is in keeping with a basic program of Timken-Detroit, which closely follows recommendations of the National Security Resources Board regarding dispersal of manufacturing facilities. In response to an inquiry concerning industrial location the following interesting

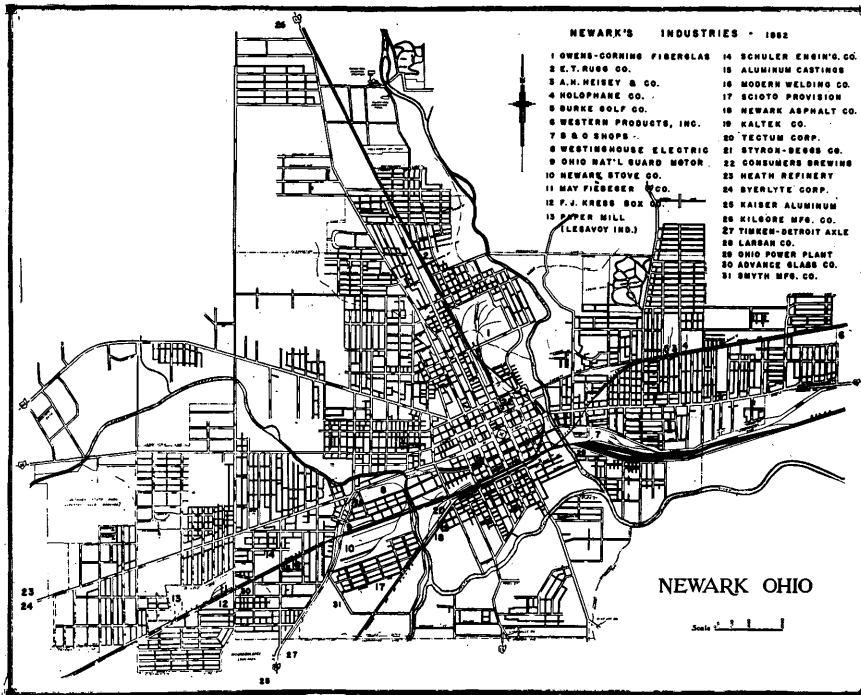


FIGURE 2. Newark's leading industries—1952.

comments were made: "This plant (Newark's) is a fine example of the growing trend toward decentralization. The motor trucks, which carry a continuous stream of materials to Newark, actually function as part of our assembly line. We are now operating nine production plants in strategically located centers: Oshkosh, Wisconsin; Detroit and Jackson, Michigan; Utica, New York; New Castle, Pennsylvania; Kenton and Ashtabula, and now Newark, Ohio."

Although containing but three of the city's 31 major industries, the northern industrial section of Newark is conspicuous in total number of persons employed. Here is the Owens-Corning Fiberglas Company, employers of approximately 2,600 workers and producers of insulation for home appliances, as well as for building construction. During the World War II period Owens-Corning received a great impetus to its growth through receipt of war contracts, mainly for the Army Air Force, which could use very effectively the light-weight insulating

materials. Owens-Corning is attempting to meet rising competition by improvement of processes and materials, reduction of costs, and creation of new products, thereby developing greater diversity.

The eastern industrial section of Newark lies in the broad valley of the Licking, just east of the North and South Fork junction (fig. 2). Only 700 people are employed by its industries, yet this is perhaps the most homogeneous collection of factories in the city, since two of the three major plants are associated with glass products. Two of the three divisions of the glass industry are represented: the A. H. Heisey and Company, manufacturers of fine table glassware, and the Holophane Glass Company, producers of illuminating and prismatic glass. Since the end of World War II, Heisey has been receiving a substantial amount of foreign competition which is due, to a great extent, to the new or rejuvenated glass industry of Japan. The Heisey Company, with an employment of from 500 to 600 people, reports an output of 300,000 barrels of table glassware annually. At one time Heisey manufactured all the glass that Holophane used but today the company does not subcontract.

The Holophane Glass Company, producers of illuminating and prismatic glass, employed 220 workers in 1950, a decided increase over the 125 figure reported for 1940. Its product is of a durable nature and its market is in the international commercial and consumer construction field. To meet the problem of a world-wide market the company has established subsidiary plants in Canada, England, and France, with a new plant being constructed in Mexico. Holophane is thus locating near the market.

Construction is to begin soon on a huge plant in Newark for the manufacture of aircraft parts for the United States Air Force. This plant will be located on a 380-acre tract along Hebron Road, a site now occupied by two large units of the Kaiser Aluminum and Chemical Corporation. This will be a government-owned installation and placed under the control of the United States Air Force. As the new installation will use a light metal, presumably aluminum, in the manufacture of aircraft parts, it is understood that the Kaiser plant will be designated to operate the facility. Included in the program are the design, construction, and operation of heavy forging and extrusion presses, larger than any heretofore built and operated in this country. Discussions have included the technical advantages and limitations of a forging press of a 75,000-ton capacity.

Until 1948 the Pharis Rubber Company, manufacturer of automobile and bicycle tires, was one of the city's principal industries. Its importance in the industrial structure is revealed in a payroll figure of 1,000 in 1940, an employment which increased to almost 2,000 persons during the war period. Concentrating on the brand-tire, mass-merchandise market, Pharis was able to prosper and meet competition largely because its production costs were lower than those of the big-name companies who dominated the markets. The local concern was able to hold its own in the replacement fields and against other independents, largely because of the wage differential which existed between the home operation and "big-rubber" in Akron. In 1948, without this differential and facing an increasing competitive market, Pharis could have little hope of producing a tire that could be sold for less and still profit sufficiently to justify remaining in business. This company was forced to liquidate its Newark plant.

The Larson Manufacturing Company, which moved to Newark in 1951, specialized in making hand saws. Two major processes are accomplished at the local plant: heat-treating of metal for the saws and cutting handles from laminated wood. Larson has made two contributions to the saw-making industry: (1) the development of a "hollow-ground" hand saw, and (2) the development of a stainless steel hand saw, which will be on the market in the immediate future. An unusually large proportion of the plant's 72 workers, about 60 percent, are women. The company has been experimenting with a greater number of women

employees doing this type of work and so far the reports have been exceptionally satisfactory.

Other industries which have located in Newark during the post-War II period include: the Westinghouse Electric Corporation, distributors of electric appliances; the Kilgore Manufacturing Company, producers of hand and rifle grenades and anti-personnel mines for the military program; Western Products, Inc., manufacturer of many types of cellophane packaging, aluminum foil, and vinyl; and Tectum, Inc., maker of a new construction material. Tectum is unique in that it was begun by local personnel and is based upon a locally developed process.

#### CONCLUSIONS

What then has caused this recent industrial acceleration in Newark? It may be that factors which explain industrial location here can explain the development of manufacturing in other small cities which have suddenly become industrialized.

The government-built plant of World War II has been converted to peacetime use. The Kaiser Aluminum and Chemical Corporation took over the city's single war-plant facility. This choice was made because of the available labor and accessibility, plus the fact that the national structure of the Kaiser Corporation seemed to make this a desirable location. These same two factors were likewise attractive to Timken-Detroit Axle Company in carrying out its functional decentralization policy of establishing a branch plant within the permissive range of the parent factories. These industries in turn have become attractive to other manufacturers. Accessibility and factory space have brought the Westinghouse Electric Corporation to Newark where it occupies a number of buildings vacated by the Pharis Tire and Rubber Company.

It would seem, therefore, that Newark is representative of some types of industries now exhibiting tendencies to recentralize, induced largely by the desire to secure a little cheaper and a more peaceful labor force. Newark's size and accessibility have enabled the city to participate in this recentralization of industry. Newark lies midway between the producers of special steels and the final assembly of some products. From observations the writer is inclined to believe that the nearness to Columbus' growing demand for labor may soon limit the number of industries that will be attracted to Newark.

Diversification of Newark's industries affords some insurance against a general collapse of its economic life. This proved to be the situation in 1948 when the Pharis Rubber and Tire Company was forced to liquidate its operations in Newark. Within one year its employees were absorbed into other manufactures, and within two years the principal building was occupied by the Westinghouse Electric Corporation for storage.

That available labor in Newark is being depleted is evidenced by the Newark Stove Company, which is drawing upon West Virginia counties for a part of its needs. One must conclude that Newark's factories accept this labor pool as an integral part of the economic complex. One must further conclude that the trend away from the home-owned-and-controlled manufacturing establishments to the branch plants of national concerns which are embarked upon a program of functional recentralization, is, in all probability, a permanent development.

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