Reuben Wells Locomotive

The Reuben Wells Locomotive is a fifty-six ton engine named after the Jeffersonville, Indiana, mechanic who designed it in 1868. This was no ordinary locomotive. It was designed to carry train cars up the steepest rail incline in the country at that time—in Madison, Indiana. Before the invention of the Reuben Wells, trains had to rely on horses or a cog system to pull them uphill. The cog system fitted a wheel to the center of the train for traction on steep inclines. You can now see the Reuben Wells at the Children’s Museum of Indianapolis. You can also take rides on historic trains that depart from French Lick and Connersville, Indiana.
The Age of Industry Comes to Indiana

[The new kind of young men in business downtown . . . had one supreme theory: that the perfect beauty and happiness of cities and of human life was to be brought about by more factories.]
— Booth Tarkington, The Magnificent Ambersons (1918)

Life changed rapidly for Hoosiers in the decades after the Civil War. Old ways withered in the new age of industry. As factories sprang up, hopes rose that economic growth would make a better life than that known by the pioneer generations. Economic growth there was. United States census workers counted more and more miles of railroad track, tons of steel, and crates of shoes and canned tomatoes.

Hoosiers were at the center of this unprecedented growth. By the end of the nineteenth century Indiana was among the top ten manufacturing states in the nation. It was, along with other midwestern states, America’s industrial heartland—the envy of the world.

Origins of Growth

At the center of economic growth and change was the railroad. Bands of iron and steel crossed the state to link farms and factories to markets. Massive steam locomotives pulled long lines of freight cars loaded with commercial goods and passenger cars to towns such as Terre Haute, Indianapolis, and South Bend, transforming them with more people, more business, and more available goods to purchase.

New kinds of manufacturing also powered growth. Before the Civil War most families made their own food, clothing, soap, and shoes. Blacksmith shops and small factories produced a few special items, such as wagons and plows. Small flour and grist mills were the embodiment of pioneer manufacturing. In the late nineteenth-century businessmen built large and complex factories that were at the cutting edge of innovation and productivity. The number of workers under one roof grew from a handful to hundreds and thousands, producing an immense output of items for sale. At the Pennsylvania Railroad shops in Fort Wayne, employees manufactured more than twelve thousand freight cars between 1867 and 1917.

Size mattered. A small number of big businesses began to dominate the Hoosier economy. By 1919 Indiana’s 302 largest manufacturing companies—which together represented only 4 percent of the total number of manufacturing establishments in the state—employed 58 percent of the state’s workers and produced 72 percent of its total value of manufactured goods. Locally owned small businesses continued but played diminished roles in economic growth. The future belonged to big business.
Indiana’s Rail Network

This map, ca. 1906, illustrates the train and interurban networks in Indiana at the beginning of the twentieth century. Notice that Indianapolis is a major rail hub with many lines coming into the city. You can tell where the other major cities are by finding other hubs, such as the Calumet Region in northwest Indiana; Fort Wayne in northeast Indiana; and Evansville in southwest Indiana.
Even as Indiana became a major manufacturing state, it continued as one of the nation’s top agricultural producers. New technologies changed agriculture, too. Farmers adopted new methods and more machinery to grow more crops with less labor. Farm and factory became linked, as factories began to manufacture farming equipment and process crops into canned goods.

**Everyday Consequences**

Economic growth often meant a better life. Log cabins gave way to wooden frame and brick houses. Cast iron stoves replaced the open fireplace to cook food. Spinning wheels went to the attic as women and their families wore store-bought clothing. Villages grew into towns and even cities. In the new restaurants in Indianapolis, Fort Wayne, and Evansville it was possible to eat fresh oysters, oranges, and lettuce in winter.


There was more time for cultural activities. Indeed, some labeled the decades around 1900 as a Golden Age because of the outpouring of literature and art. The poetry of James Whitcomb Riley, the Pulitzer Prize-winning novels of Booth Tarkington, and the paintings of T. C. Steele attracted state and national admiration. Public libraries sprang up across the state, many funded by local citizens and also by Andrew Carnegie, the steel magnate. By the early twentieth century Indiana had more Carnegie-funded libraries than any other state.

Just as some Hoosiers reaped more benefits from these changes than others, some parts of the state thrived more than others. Central and northern Indiana prospered more than hilly, southern Indiana, where there were fewer railroads and factories. Indianapolis and the Calumet Region, the northwestern section of Indiana, became the centers of industrialization, with growth also in South Bend, Fort Wayne, and Muncie.

Industrial growth also brought harm to the environment. Factories dumped their waste directly into rivers, as did most town sewers. The Wabash, White, Ohio, and other rivers became grossly polluted. Smoke

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**Montani Grocery Store**

This 1905 photograph of the Montani Grocery Store in Indianapolis’s City Market shows how industrialization affected every aspect of the Hoosier way of life. In this image you can see advertisements for coffee, tea, pickles, olive oil, spices, baked beans, and chocolate. All of these items would have been shipped from different places all over the country. These items provided dietary variety for Hoosiers as well as providing easily accessible convenience items.
poured from factories—a sign of progress, many believed—but it was also a threat to cleanliness and health. As Booth Tarkington’s hometown of Indianapolis embraced manufacturing and grew into a city, the novelist lamented it, stating that as Indianapolis “heaved and spread, it befouled itself and darkened its sky.”

Finally, the age of industry brought troubling questions about the role of government. Should government interfere with the marketplace? Should government regulate railroads, prevent young children from working in factories, or limit pollution of water and air? Initially, Hoosiers tended to answer no to these questions. Most preferred a government that was small and weak. Most put protecting individual freedom at the top of government responsibilities rather than forcing people to do this or that. Yet, massive industrialization with its unprecedented changes pushed more Hoosiers to call for regulation.

For some traditional Hoosiers there remained doubts about the new age of noisy railroads, smoky factories, and congested cities. Hoosier poet James Whitcomb Riley captured this sentiment in 1895:

You kin boast about yer cities, and their stiddy growth and size, / And brag about yer County-seats, and business enterprise, / And railroads, and factories, and all sich foolery— / But the little Town o’ Tailholt is big enough for me!

Fast forward ninety years. At the end of the twentieth century (and even today), some Hoosiers still agree with Riley. Singer-songwriter John Mellencamp echoed the poet’s feelings in the lyrics to his 1985 hit song, “Small Town”:

Got nothing against a big town
Still hayseed enough to say
Look who’s in the big town
But my bed is in a small town
Oh, and that’s good enough for me

Inland Steel Workers

In this 1942 image steel workers stand in front of the Inland Steel Harbor Works in East Chicago, Indiana. Factories such as this often employed immigrants who moved into surrounding neighborhoods. The haziness in this photograph makes it easy to realize the negative effects of industry—dangerous working conditions, smoky skies, and polluted waterways.

Collections of the Caufield & Shook, Indiana University Northwest
5.1 Indiana in the Railroad Age

The transportation of our people is at the mercy of men who never see us, who know nothing of us, and care nothing for us.

— Indianapolis Daily Journal, February 27, 1873

Railroad construction in Indiana began booming in the late 1840s to early 1850s, as it did in the rest of the nation. In just one generation, pioneer modes of transportation were partially replaced with this dependable, rapid phenomenon.

Completed in 1847, the Madison and Indianapolis (M&I) was the state’s first major railroad, stretching from the Ohio River to the capital city. The M&I’s north-south route was distinctive from later railroads, which ran east-west. Its route illustrates two characteristics of early Indiana railroads: (1) they were feeder lines intended to help—not replace—river transportation, and (2) Indianapolis, a major destination for many, was a magnet, drawing the metal rails to it, and eventually becoming a hub with many spokes. [See Indiana’s Rail Network map on page 116.]

The New Albany and Salem Railroad (later known as the Monon) was the longest of the early Indiana railroads. It ran for 288 miles and connected the Ohio River with Lake Michigan. When the line was completed in 1854, Indiana had eighteen railroad companies that had laid more than 1,400 miles of track. Most were short-line railroads of fewer than 100 miles. Small-town politicians, businessmen, and farmers could see the economic advantages for their town being on a railroad line. An unconnected town could not prosper, and would eventually fall behind and die.

Madison and Indianapolis Railroad

The president of the Madison and Indianapolis Railroad released this document about railroad operations when his company took over building the Madison–Indianapolis line in 1843. The entire line was opened in 1847. Along the top of this document is a picture of an early steam locomotive, likely from around the 1830s, pulling railroad cars that look similar to stagecoaches.
Railroads became the nation’s first big businesses. Early Indiana railroads eventually hooked up with the vast national networks when the great east-west trunk lines moved from New York, Philadelphia, and Baltimore to connect with Chicago and Saint Louis. The Pennsylvania and the New York Central were the two largest systems. By 1920 these two companies operated almost half of Indiana’s 7,812 miles of track.

In spite of the convenience and economic benefits the railroads provided, they also had many critics. Hoosier farmers with only one line serving their area complained bitterly of the resulting unfair monopoly rates they were charged to ship their produce and goods. Other people resented the Eastern control, or, as one critic expressed it, control by “combinations foreign to our State, whose local interests and business sympathies are elsewhere than in Indiana.” The choices made by the Pennsylvania Railroad in its headquarters in Philadelphia, Pennsylvania, had lasting effects on Hoosier towns and on much of the state.

In general, northern and central Indiana benefitted more from the expanding railroad networks than did the southern part of the state, where the hilly terrain made it more difficult and expensive to lay track. Tunnels and bridges cost big bucks. In Greene County, in the southwest part of the state, the Tulip Trestle (also known as the Greene County Viaduct) was the state’s longest and most spectacular railroad bridge and cost much more than track laid on flat lands to the north.

**Tulip Trestle**

The Tulip Trestle, also known as the Greene County Viaduct, was built in 1906—a year before this photograph was taken—near Bloomfield, Indiana. The bridge, one of the longest of this type in the world, stretches nearly half a mile over the fields below and is still in use today.
Indianapolis, the Railroad Hub

*Indianapolis bids fair to become the largest inland capital in the Union.*

— Lafayette and Indianapolis Railroad Company
*Annual Report, 1851*

Before the 1850s, Indianapolis was the state’s political center, but it was significantly behind cities such as Madison and New Albany in industry. However, the town’s central location was ideal for the new mode of transportation—the railroad. In 1847, when the M&I Railroad connected Indianapolis with the Ohio River, Indianapolis quickly evolved from an ordinary country town to a city with an expanding population and economic activities. This sudden growth was no flash in the pan. By 1860 Indianapolis was the focal point of the state, tying together all corners of the state because it was the center of Indiana’s railroad system. According to historian Carl Abbott, Indianapolis “was the nerve-center where churchmen argued dogma, reformers planned crusades, and politicians scratched each others’ backs.”

Everyone knows that when it comes to real estate, it’s all about “location, location, location.” The railroads turned Indianapolis’s central location from an arguable disadvantage in terms of its accessibility to a strategic advantage. Not only did the railroads connect the city to all parts of the state, they made it accessible to neighboring states. This resulted in economic as well as cultural growth.

The completion of the M&I spurred a manufacturing boom in Indianapolis by reducing the cost of coal transport from the Ohio River. Factories sprang up to process everything from pork to lumber and to produce machinery, furniture, carriages, and other goods.

City promoters argued that because it was within a half-day journey of eighty of the state’s ninety-two counties, Indianapolis was an ideal site for “any Institution or business that looks to the patronage of the people of the State.” Newspapers supported the city’s bid to host the 1860 Republican Convention and argued for moving Indiana University to Indianapolis. However, as successful as the city was in many areas, Abraham Lincoln received his party’s 1860 nomination at the Republican National Convention in Chicago and Indiana University remained in Bloomington.

"Waterloo Station"

Goods on freight wagons wait to be loaded onto this incoming train at Waterloo Station in Waterloo, Indiana. Trains provided speedy travel for Hoosiers while also supporting commercial interests by shipping goods and raw materials.
Interurban Traction Terminal

Passengers gather at the Traction Terminal, the interurban hub in Indianapolis. Before automobiles were readily available, interurbans were a way for people to commute from their homes in smaller towns to Indianapolis. These people may have been commuting to work, shopping, or conducting other business in the capital city.

The Rise of Interurbans

The interurban business has developed into a great industry in Indiana, furnishing employment for a great army of men at very good wages. It is also very advantageous to travelers. They can come or go at any hour of the day, where previously they had to spend half their time waiting for trains.

— Fred B. Hiatt, Indiana Magazine of History, September 1909

After the innovation of steam-powered locomotives and railroads, the next development in transportation was the quieter electric-powered cars of the interurban. The first interurban lines opened in the 1890s and were specifically designed for the short distances between towns and cities. In 1914 there were 1,825 miles of interurban rails in Indiana—second only to Ohio.

The first interurban entered Indianapolis on January 1, 1900, and the city soon emerged as the center of the state’s extensive interurban system. By 1910 thirteen lines and nearly 400 trains daily served the city. The Terre Haute, Indianapolis and Eastern Traction Company alone stretched 402 miles from the eastern to the western border of the state and linked Indianapolis with cities such as Crawfordsville, Danville, Frankfort, Lafayette, Lebanon, and Martinsville, as well as extending from Terre Haute in three directions, to Clinton and Sullivan, Indiana, and to Paris, Illinois. Most of the lines stopped at the Indianapolis Traction Terminal, on the corner of Illinois and Market streets. Designed by the famous architecture firm of D. H. Burnham and Company, the Traction Terminal comprised two massive buildings. One was a shed for interurban cars. The other was a modern nine-story office building that provided many conveniences for travelers, including a restaurant, stores, barbershop, and a ticket office and waiting room.

Interurbans Phased Out

The use of interurbans declined after World War I. There were many accidents on the lines. The worst occurred in Wells County in 1910 when a head-on collision killed forty-two people. Few new lines were built after 1911 because there was little potential for profit. The growing popularity of the automobile and motor buses also presented a major threat to interurbans. The electric railways limped through the 1920s until the Great Depression hit in 1929 and dealt the final blow.

In 1941 the last interurban train departed the Traction Terminal, and the majestic building became the main bus station. By the late 1960s, its train shed was destined for the wrecking ball, and in 1972, the Traction Terminal Building was also demolished. All that remains of the razed landmark are two stone eagles that once stood at the entrance to the train shed. Today, they guard the steps of the former Indianapolis City Hall, built in 1910 on Alabama Street.
5.2

Changes in Agriculture

Oh, the moonlight's fair tonight along the Wabash,
From the fields there comes the breath of newmown hay
— Paul Dresser, “On the Banks of the Wabash,
Far Away” (1897)

In 1913 Hoosiers designated “On the Banks of the Wabash” by Paul Dresser their state song. It was a nostalgic choice. Freshly mown hay and hog pens remained, but farming and rural life had been changing for decades.

Though Indiana remained a farm state, fewer men were working on farms—from 66 percent of Hoosier men working on farms in 1850 to only 31 percent in 1920. Manufacturing, transportation, trade, and urban service jobs gradually replaced farming as the main ways Hoosiers made a living.

Mechanized Farming

Down on the farm, pioneer methods were giving way to modern methods as farmers acquired new, labor-efficient machinery. By the 1880s farmers began replacing wooden plows with iron and steel plows, specifically James Oliver’s chilled-iron plow, produced in the world’s largest plow factory in South Bend. They also began using seed drills to sow seeds, mechanical mowers to cut hay, and reapers to harvest. With the new machinery, came more horses. Replacing human power with horse power meant that a single man could farm more acres. Steam power also increased productivity, especially with the massive threshing machines that separated grain from chaff.

Such changes were happening throughout Indiana, but they were concentrated in the northern and central parts of the state, where the land was flat and fertile. Farming in southern Indiana lagged behind. Due to the hilly terrain and poor soil quality, southern Indiana farmers had less money to invest in new technology.

The Oliver Chilled Plow

Early pioneer plows were made of wood and later ones from cast iron. They were heavy, often difficult to use, and the metal was subject to breakage in hard soil full of rocks, stumps, and roots. In 1857 James Oliver, a Scottish immigrant in South Bend, Indiana, patented a new kind of plow using steel and iron and a new cooling process that created a durable blade that would stay sharp over many uses. His factory in South Bend produced thousands of plows per year and sold them to farmers across the country during the late-nineteenth and early-twentieth centuries. In these images, ca. 1885, you can see the Oliver Chilled Plow at work.
and so used traditional methods far longer than their northern counterparts. With fewer railroads and less industry, southern Indiana grew even more distinctive.

**Farming as Big Business**

At county fairs and agricultural societies, farmers learned about new farm technology and techniques. In 1852 the first state fair presented exhibits and awards for examples of new agriculture. The farming network expanded with help from media, too. Farm magazines such as the *Indiana Farmer*, established in 1866, informed farmers of new developments, as did organizations such as the Indiana Corn Growers Association and the Patrons of Husbandry, generally known as the Grange.

Founded in 1869, Purdue University was the epicenter of formal agricultural knowledge. Researchers there experimented with new farming methods, published bulletins, and worked with the federal government and farm organizations. In 1913 the Indiana General Assembly began to fund a statewide network of county agents—full-time resident advisers to local farmers—to spread Purdue’s innovative knowledge and methods about agriculture that enabled more food to be grown on less ground.

By World War I, the typical Hoosier farmer was part of a complex national, even international, economic system, dependent on railroad agents, elevator operators, bankers, agricultural implement manufacturers, and market conditions. In 1919 the Indiana Farm Bureau formed to lobby state government for farm interests. Since weather and market economies made farming risky, farmers pleaded for government safety nets, such as those that would eventually be provided by the New Deal agricultural programs in the 1930s. In subsequent decades, federal farm subsidies included loans, disaster relief, price supports, and insurance. Critics argued that government subsidies helped the biggest farms and wealthiest farmers and neglected those who needed help most.

By the end of World War II, Indiana farms were increasing in size while declining in number. The traditional 160-acre farm had not been profitable for some time. As smaller farms failed, their land was absorbed by larger farms. In 1950 the U.S. census counted only two hundred Hoosier farms of more than a thousand acres. By 2007 there were almost four thousand farms in Indiana with more than a thousand acres. The number of small farms continued to decline. The federal

**Threshing, 1910**

After harvesting wheat or other cereals, farmers had to thresh the plants—meaning that they had to separate the edible grains (seeds) from the inedible stalks. Steam machines like those shown here sped up and simplified the process that previously had been done by hand. The machines blew the leftover stalks into large piles for future use and collected the grain in wagons or bags to be sold at market.
agricultural census of 2012 showed that Indiana lost 2,200 farms between 2007 and 2012.

In 1985 Hoosier rock-and-roll legend John Mellencamp and fellow musicians Willie Nelson and Neil Young organized the first Farm Aid concert to raise awareness that the traditional family farm was endangered, not only in Indiana but throughout the Midwest. By 2013 the organization had raised more than 43 million dollars to help small farms in crisis. At that time, Mellencamp said, “We’re still doing Farm Aid because it is contributing. It’s doing a job.”

Changes in Rural Life

As farming changed, so did life on the farm. Railroads, interurbans, and automobiles, along with telephone lines, lessened the isolation of rural living. Farm families were now able to enjoy the best aspects of urban society. By 1920 almost half of Indiana’s farm families had a car and two-thirds of them had a telephone.

Farm women especially welcomed the changes brought by modern transportation and communication. Their lives had been more isolated and lonely than those of their husbands because they had been spending long hours cleaning, cooking, and sewing without the aid of technology such as washing machines, dryers, electric stoves, and ready-made clothing. Mail order companies such as Sears, Roebuck, and Company and mass-produced consumer goods alleviated some of the drudgery of rural living for many farm women and lessened their workload. With free time that their mothers and grandmothers could only have dreamed of and the ability to visit by phone or car, farm women were able to have a social life off the farm, joining women’s clubs, volunteering at churches and libraries, and enjoying other activities.

Like their mothers, farm children and teenagers enjoyed the expanded social and cultural opportunities. Many young men and women left family farms for towns and cities and never looked back—either because they preferred city life or because there was not enough work available in rural areas as the number of farms declined and mechanization took the place of many farm workers. This rural to urban migration was so large that it became a subject of discussion for farm groups. The 1910 census underscored this concern when it showed that the number of rural Hoosiers declined for the first time. By 1920 Indiana’s urban population surpassed that of its rural population.

The Purdue Extension Bulletin

The Purdue Extension Bulletin was issued by the Purdue University Department of Agricultural Extension. In this 1929 issue the focus was on building practical hog houses. Farmers could read this for tips, measurements, and sketches that would help them build a better hog house. This and other issues of the bulletin informed farmers about topics ranging from soybeans to insects to keeping their cows healthy.
In the late nineteenth century, some people in Indiana worried that modern advances were tilling under Hoosier pioneer traditions and modest values, along with rural life. But the majority saw a better future coming through steady but gradual progress and adaptation. One historian called this a “bifocal vision of progress” wherein “Those who criticized Indiana’s slowness to change blamed farmers,” and “those who boast[ed] of the state’s stability praised them.”

Farm Hicks No More— The Era of Modern Farming

*Brainpower has replaced horsepower as the central ingredient of success on our farms.*


By the end of World War II, most Hoosier farmers had moved toward sophisticated agricultural practices. They could no longer be stigmatized as farm hicks. New farm equipment, seeds, fertilizers, and methods would prevail on Indiana farms into the last decades of the twentieth century.

Agricultural change improved the state’s and the nation’s general welfare—for the most part. There was more food, cheaper food, and a greater variety of food. But by the late twentieth century there was also a growing concern about food production methods. As studies showed that chemical fertilizers and pesticides were harmful to the environment, there was a backlash against them and against biotechnology, due to fears that it would prove harmful as well. Some favored organic foods and locally grown foods cultivated by traditional methods of crop rotation and use of manure.

Rachel Peden, a Hoosier farm wife and author whose work appeared in the *Indianapolis Star* and *Muncie Evening News* from the 1940s to the 1970s, once described a pitch-in dinner at her beloved Maple Grove Church in Monroe County that would make any reader hungry. Peden wrote that the church ladies brought “fried chicken, baked ham, chicken and dumplings, beef and new potatoes, new peas, tomatoes, tossed salad, coleslaw, green beans, baked beans, butter beans,” and “at least ten kinds of pies and cakes.” All the food was home-grown and homemade. Many twenty-first century Hoosiers, whose diets mainly consist of factory-processed food and fast food, can only imagine the tantalizing smells and tastes at that pitch-in dinner at Maple Grove Church.

**Canning**

*With the widespread availability of canned food, beginning in the 1880s, the eating habits of Americans changed. By 1900 home canning was also becoming commonplace. Farmers and home gardeners could now grow more crops and not worry about waste, and they could eat vegetables and meat all year long.*

CANNING WITH THE WIDESPREAD AVAILABILITY OF CANNED FOOD, BEGINNING IN THE 1880S, THE EATING HABITS OF AMERICANS CHANGED. BY 1900 HOME CANNING WAS ALSO BECOMING COMMONPLACE. FARMERS AND HOME GARDENERS COULD NOW GROW MORE CROPS AND NOT WORRY ABOUT WASTE, AND THEY COULD EAT VEGETABLES AND MEAT ALL YEAR LONG.
5.3

Industrialization

_They had a mania for factories; there was nothing they would not do to cajole a factory away from another city; and they were never more piteously embittered than when another city cajoled one away from them._

— Booth Tarkington, The Magnificent Ambersons (1918)

The water-powered flour and grist mills that processed corn and wheat from nearby fields in the mid-nineteenth century faded into history when the railroads came. Railroads brought new kinds of businessmen who built factories that used steam power, then electricity, and finally the internal combustion engine to mass-produce iron and steel, glass, electrical machinery, railroad cars, and automobiles. The new products did not replace meat and grain processing, but they soon dominated Indiana’s economy.

The Indiana Gas Boom

_“I was ten years old when they discovered it. Overnight, towns with five hundred people shot up to five thousand. They thought the gas would last forever, that the millennium had come.”_

— Jared Carter, “Natural Gas Boom, Tipton County”

The discovery of natural gas in east-central Indiana in 1886 jump-started the region’s industrialization. Within a few years, an eleven-county area became one of the main centers of heavy industrial production in the United States. Towns in the gas belt, including Anderson, Kokomo, and Marion, successfully enticed eastern companies to relocate with promises of free land and free access to the gas, which could be transformed into electricity. Muncie lured the Ball Brothers Company, a fruit jar factory, from Buffalo, New York, and it soon became the largest glass canning-jar factory in the world. These previously modest towns became bustling cities with established business districts and expanded residential neighborhoods.

In 1900 Indiana was the nation’s leading producer of natural gas. Other manufacturing also thrived. The United States census for that year ranked Indiana second among all the states in glass production, third in wagons and carriages, fourth in iron and steel products, fifth in agricultural implements, ninth in paper and wood pulp, and tenth in foundry and machine shop products.

Gas Well Flambeaux, ca. 1900

This gas well in Blackford County is flaring, a process by which a gas well is set on fire, perhaps to prepare the well for a new pipeline or even as a marketing promotion. Today allowing gas wells to flare is strictly regulated all over the world because of pollution and waste.
Ball Blue Book, 1941
The Ball Blue Book shows the large variety of food that can be preserved. The book was geared for home use and instructs women on how to can foods including fruits, vegetables, jams, and soups.
The Boom Goes Bust

They walked with a swagger—proud of the way they wasted it. They let the streetlamps burn night and day. Too much trouble to hire a man to go around and put them out each morning.

— Jared Carter, “Natural Gas Boom, Tipton County”

Despite Indiana’s status as the nation’s top natural gas producer in 1900, by 1890 state geologists were reporting a decline in supply. For more than a decade wells and flambeaux, the flames that were lit by the gas to show that it was flowing from the wells, had burned twenty-four hours a day, seven days a week—wasting approximately one hundred million cubic feet of gas each day. The conservation wake-up call came too late and was largely ignored through the 1890s.

The Indiana General Assembly passed legislation penalizing wasteful practices, and some companies complied. However, most consumers were too used to the inexpensive luxury to regulate their use. The horse was out of the barn, so locking the door did little good. The gas boom was over by around 1901.

Most of the gas works had closed by 1920. Some factories switched to using coal to fuel production. Although east-central Indiana never again achieved the same level of industrial supremacy it had experienced during the gas boom, it still remained a manufacturing center for most of the twentieth century. Today, the boom towns and cities of the old gas belt have a worn patina of the prosperity they enjoyed during their heyday.

Corporate America Comes to Indiana

With changes in technology came big business. Fewer companies produced more of Indiana’s total manufactured products and employed the majority of its workers. These were companies with plants scattered in several cities, states, and even countries. Their names indicate their size and scope: United States Steel, American Can Company, International Harvester, and American Car and Foundry.

Big businesses utilized mass production methods, new technologies, large workforces, and a new managerial structure. Machines often replaced hand labor. By 1917 machines at Eli Lilly and Company could turn out two and a half million capsules a day in the largest capsule factory in the world. Efficiency was the name of the game—on the factory floor and in the office. The Wooton Patent desk was a symbol of this new age of big business; it was manufactured in Indianapolis and sold as far away as England. The company promised its revolutionary desk would bring order to paperwork and management with “one hundred and ten compartments, all under one lock and key. A place for everything and everything in its place.”

In the Home

A kitchen without a cabinet is like a farm without a plow.

— The Hoosier Manufacturing Company, advertisement, ca. 1910

Factories and other big businesses were not the only ones to benefit from new technology and innovation. Women went about their business in new ways, too. Time-saving devices and methods enabled them to do chores more efficiently.

Ball Jar

Jellies and jams would fill this wide mouth half-pint Ball Special Jar that was produced between 1912 and 1923.
In the kitchen, the Hoosier Cabinet was the counterpart of the Wooton Patent desk. The first Hoosier cabinets appeared around 1900. A prototype of the cabinet was manufactured by a refurbished furniture factory in Albany, Indiana, near Muncie. Production of the Hoosier Cabinet moved to New Castle after a fire at the Albany factory. The Hoosier Cabinet had a lot of “bells and whistles” in the form of racks for storing dishes and spice jars, pullout shelves for storing pots and pans, utensil drawers, bins for storing flour, a built-in flour sifter, and an easily cleaned top of zinc or enamel. Its functional design saved the busy homemaker time and steps as she could do most of her food preparation standing at the cabinet. Later models were even more sophisticated and included meal-planning devices, daily reminders for grocery shopping, and helpful household hints.

Although the Hoosier Manufacturing Company was the first and best known producer of the Hoosier Cabinet, competing companies soon emerged and manufactured knock-offs. Nevertheless, the Hoosier Manufacturing Company effectively used twentieth-century mass marketing methods to sell the original cabinet. Eye-catching advertisements with clever slogans appeared regularly in publications with a female readership, such as *Ladies Home Journal*, *Good Housekeeping*, and *Better Homes and Gardens*.

Other manufacturers also marketed their products to women. In 1909 Muncie-based Ball Glass Works printed what would become the first *Ball Blue Book*, a guide to home-canning techniques. Unlike the pioneer woman, the twentieth-century homemaker could put up tomatoes from her garden in August and serve them to her family in February. What vegetables and fruits she didn’t preserve herself, she could buy processed in cans from her local grocery store.

**No Turning Back**

The triumph of big business and industrialization changed the map. Industry tended to move north from the Ohio River and concentrate in a few urban areas. With the exception of Evansville, river towns in southern Indiana declined in manufacturing importance. Meanwhile, Indianapolis emerged as the state’s center of manufacturing, a process that began with the railroads in the 1850s.

Indianapolis’s industrial growth was relatively steady. However, industrial growth in Indiana’s other major manufacturing area—the Calumet Region in northwestern Indiana—was more rapid and disrup-

**The Hoosier Cabinet**

The Hoosier Manufacturing Company promotes its Hoosier Cabinet in this ad from 1911. In this image you can see the built-in features of the cabinet, including the flour bin, flour sifter, spice racks, and other compartments. The company emphasized that the cabinet was an all-in-one package, so housewives could save “miles of steps” by not having to run around the kitchen. With the Hoosier Cabinet, kitchens, like factories, could be efficient workplaces.
The new industries of petroleum refining and steel production brought revolutionary changes to cities such as Gary. In 1906 the United States Steel Company founded Gary as the future home of its new factory and named it after the company’s founding chairman, Elbert Henry Gary. Nearly three years later, United States Steel’s Gary Works opened and was the largest and most efficient steel mill in the world. Freighters on the Great Lakes and a complex system of railroad lines transported iron ore and coal to the factory, and great quantities of finished steel moved out. By 1919 Lake County’s industries generated more than one-fourth of the state’s total value of manufactured product.

Manufacturing had replaced agriculture as Indiana’s primary economic activity by 1920. Many of the people who worked in Indiana’s factories alongside hundreds of other workers had pioneer parents and grandparents who had spent their days working alone in the fields or the house. Industrialization affected the lives of all Hoosiers. Growing numbers of people migrated from farms and villages to factories and cities. Abundant new jobs attracted African American workers from the rural south and new waves of immigrants from abroad, particularly from southern and eastern Europe and from Mexico. German, Polish, Czech, Russian, Spanish, and Yiddish accents mingled with those of the Deep South on factory floors.

Despite its progress, Indiana lagged behind its midwestern neighbors in most areas of manufacturing. Reasons for the lag are not clear. Hoosiers may have had a stronger attachment to farming and rural life, thus making the transition to manufacturing more gradual. Although Indiana lagged behind states such as Michigan, Ohio, and Illinois, manufacturing in Indiana grew more rapidly than in the nation as a whole, placing the state firmly among the leading manufacturing and agricultural states by the early twentieth century.
5.4

Labor

Those who produce should have, but we know that those who produce the most—that is, those who work hardest, and at the most difficult and most menial tasks, have the least.

— Eugene V. Debs, Walls and Bars (1927)

Not everyone shared equally in the growing economy. Many factory jobs brought low pay, long hours, unsafe working conditions, and frequent periods of unemployment. In 1881 the Indiana Department of Statistics published the first report on factory wages, which revealed that the average worker earned $1.00 to $1.50 for a ten- to twelve-hour workday. Skilled workers earned up to $4.50 a day. Ten-hour days and six-day work weeks were common. Industries with the longest working hours included manufacturing products such as gas, cement, paper and wood pulp, baked goods, and iron and steel. Steelworkers often worked seven days a week.

Some felt that state government should do more for workers, but political and industrial leaders of late-nineteenth-century Indiana were reluctant to interfere. Their stance was commitment to individual freedom and laissez-faire economics, a belief that the economy should be let alone without regulation. Only gradually did the state venture into the complex relationship between workers and employers.

Women in the Workforce

The sanitary condition of buildings in which girls were working are not generally at present what they should be to insure the best health and strength of employees.


Industrialization meant that more women worked in paying jobs outside the home. Although middle-class norms discouraged married women from working for pay, some single women with an education became store clerks or teachers. Women with less education worked in domestic service as maids or cooks; and many went to work in factories. In the factory, women worked in jobs specifically for women. Often the departments were even divided by gender. Industries that attracted the most women workers were garment factories, book binderies, paper-box plants, laundries, and pork-packing plants. In 1899 an Indiana state factory inspector’s report revealed that female workers in the state’s factories were paid about half what men earned for the same work. Working conditions were atrocious. The workers had to stand or sit for hours on end, often in environments with excessive noise, poor ventilation, unsanitary conditions, and lack of protective gear. Many factories qualified as firetraps—several stories high with overheated machinery and inadequate access to fire escapes.

Most industrial states responded to the needs of women workers before Indiana. It wasn’t until 1913 that the Indiana General Assembly initiated a study of women’s work. Conducted by the Department of Labor, the study focused on garment factories and retail stores, where nearly half of the women who worked outside the home were employed. Despite the study’s documentation of long hours, low pay, and generally poor working conditions, the resulting legislation called for only modest reform.

Child Labor

Cheap labor means child labor; consequently there results a holocaust of the children—a condition which is intolerable.

— Dr. Felix Adler, first meeting of the National Child Labor Committee, 1904

Children were also a huge part of Indiana’s industrial workforce, especially in the glass industry, coal mining, furniture making, and fruit and vegetable canning. As early as 1867 the state legislature passed laws prohibiting persons under age sixteen from working more than ten hours a day in cotton or woolen mills. For the next thirty years, additional attempts at child labor regulation were few and far between.
Kahn Tailoring Company

At this garment factory in Indianapolis in 1907 men and women are busy sewing, though they work at separate tables. Kahn Tailoring was founded in 1903 and produced men’s suits as well as military uniforms. Owner Henry Kahn, a son of Jewish immigrants, hired hundreds of newly arrived Jewish immigrants in his factory and provided his employees with social services such as doctors and night school.
In 1897 the Indiana General Assembly passed two pieces of legislation that began to correct the situation. One law prohibited factory employment of children under the age of fourteen and stipulated that children under sixteen could work no more than ten hours a day. The legislature also passed the state’s first compulsory school attendance law, requiring children between ages eight and fourteen to attend school for a minimum of twelve consecutive weeks each year.

However, the child labor laws were not well enforced. Some parents allowed their children to work at factories such as Muncie’s Hemingray Glass Company, claiming that their families needed the children’s wages. In 1904 Hemingray employed 150 workers under the age of sixteen. The owner vowed to fight “any attempt to pass a law prohibiting children under sixteen [from] working at night,” since “it was better for them than running in the streets and did not hurt them anyway.”

The most persuasive exposure of child labor conditions around the country came from the camera of Lewis Hine. In 1908 the National Child Labor Committee sent Hine to Indiana to photograph children working in factories. His powerful images of children working the night shift appeared in the Indianapolis Star and in reformers’ reports. But, as Hine’s colleague Edward Clopper pointed out, “The people of Indiana are slow to take hold of any movement.”

A 1910 survey reported that Indiana ranked third highest for its proportion of child labor, below only Pennsylvania and Ohio. Only very gradually did state legislation address the worst abuses. In 1911 the general assembly passed a weak child labor bill. It extended the 1897 ban on employing children in factories under the age of fourteen to all other types of work except farming and domestic service. One exception to this ban was in the canning industry where children between twelve and fourteen were still allowed to work in the summer. It took another ten years (1921) for the general assembly to remove all industry exceptions, regulate which industries children could work in, and to set a rule that all workers between fourteen and sixteen had to have completed the eighth grade.

Lewis Hine Child Labor Photo

This Lewis Hine photograph from 1908 shows a boy taking boards away from a double cutoff machine, a type of saw in a woodwork factory in Peru, Indiana. As was typical of Hine’s photographs, it shows a child involved in a dangerous task.

Eugene V. Debs and Workers Rights

And there’s ‘Gene Debs—a man ‘at stands
And jes’ holds out in his two hands
As warm a heart as ever beat
Betwixt here and the Jedgment Seat!

— James Whitcomb Riley, “Regardin’ Terry Hut” (1916)

As the state government dragged its feet to improve working conditions, many workers decided to take matters into their own hands. During the 1850s and 1860s various trades attempted to form labor unions. After the Civil War several labor organizations joined forces to work for common goals, especially the eight-hour work day. Indiana’s first widespread—and violent—labor action took place during the depression of the 1870s and involved striking coal miners, who shut down mining operations several times, particularly in Brazil in Clay County. The strikes were broken as management brought in black workers from the South, but armed clashes ensued and eventually, at least one black man was killed. The most important labor unrest involved the railroads, particularly in the great strike of 1877. As part of a national protest against reduc-
tions in pay, Indiana workers stopped trains in Evansville, Terre Haute, Indianapolis, and Fort Wayne.

Terre Haute’s Eugene V. Debs (1855–1926) emerged as an iconic labor leader on the national stage in the early years of the twentieth century. Debs, who had worked on the railroad from the time he was fourteen, founded the American Railway Union in 1893. Within a year the organization had nearly 150,000 members. Debs gained national recognition and notoriety when he organized the Pullman Strike of 1894 in Chicago, which stopped all train movement west of Chicago as fifty thousand workers walked off the job because their pay had been cut by about 25 percent. His involvement in the strike earned him a six-month prison sentence on conspiracy charges. While in jail, Debs became a Socialist and his reputation as a working class hero grew. He ran for president five times as the Socialist Party’s candidate. He even ran for president while serving his second prison term for an anti-war speech during WWI; he got more than 900,000 votes. Debs used his incarceration as an effective campaign strategy; his campaign buttons featured his convict number and his face behind bars.

Debs’s ideas were radical for his day, but many entered the mainstream in the decades following the Pullman Strike. He advocated shorter workweeks, pension (retirement) plans, sick leave, medical benefits, and women’s suffrage. Most Hoosiers respected Debs, and residents of his hometown Terre Haute generally treated him affectionately even if they didn’t agree with his leftist politics. Debs and his friend, noted Hoosier poet James Whitcomb Riley, who tended to stay out of politics, frequently enjoyed a glass of good whiskey together. Riley visited Debs so often that the guest bedroom in the Debs house is still referred to as “the Riley room.”

Eugene V. Debs for President!

Eugene V. Debs ran for President of the United States a total of five times. This campaign poster is from his second campaign when he received just under 3 percent of the total vote and lost to Theodore Roosevelt. His campaign platform was based on workers’ rights and opposition to capitalism. Today the Debs house at 451 North Eighth Street in Terre Haute belongs to the non-profit Eugene V. Debs Foundation and is open to the public. Each year the foundation hosts a banquet to honor an individual whose work advanced causes to which Debs dedicated his life—workers’ rights, social justice, and world peace.

Diamond Chain Employees Unite!

In this 1913 flyer labor organizers call for employees of Indianapolis-based Diamond Chain Company, which manufactured bicycle chains, to organize into a union. Once in a union workers gained a voice at the negotiating table for safer working conditions, shorter work days and weeks, and better pay and benefits.
Selected Bibliography


Essential Questions

1. How did railroads and the interurban system fuel economic growth in Indiana?

2. How did new technologies available in the late nineteenth and early twentieth centuries change agriculture and rural life?

3. In what ways did the economic growth of the Industrial Age improve the quality of life for Hoosiers? In what ways did industrialization negatively affect quality of life?

4. How did the economic growth of the Industrial Age bring into question the role of government in the lives of individual Hoosiers?

5. Where is Indiana’s “gas belt”? How did the discovery of natural gas drive industrial growth in the state?

6. Why was the “gas boom” so short-lived?

7. How did the quest for efficiency change work and home life? Name at least one Indiana product that promised to increase efficiency at home, on the farm, or in the workplace.

8. What areas of Indiana experienced the most growth due to industrialization?

9. How did Hoosier workers experience industrialization? What particular challenges did women and children face in the workplace?

10. In what ways did Hoosier Eugene V. Debs try to improve the situation for laborers in Indiana and around the nation?*

*See student activities related to this question.

Activity: Eugene V. Debs and Indiana’s Labor Capital

Introduction: As noted in Chapter 5, the Industrial Age was an era of great promise and upheaval for Hoosiers. New products promised to improve quality of life; but life as people had known it changed drastically beginning in the 1870s. Natural resources and the hard labor of men, women, and children fueled economic growth. Many companies relocated to Indiana to take advantage of the state’s natural resources, labor capital, and transportation networks. With rapid industrial growth came new concerns about the need for improved infrastructure (roads, bridges, and so forth), the rights of laborers (particularly of women and children), and the effects of large-scale manufacturing on the environment.

Though Hoosiers remained skeptical about government interference in private enterprise, some began to see a need for regulation. Terre Haute native Eugene V. Debs tried to counter the vulnerability of working people by organizing labor unions and advocating politically for laws protecting workers. His radical ideas landed him in jail but also brought him into the national political spotlight.

- Re-read the part of Section 5.4 devoted to Eugene V. Debs on pages 134–35.

- Next, read the poem below written by Mabel Ervin in 1894. Ervin’s words were set to music by Mrs. Ione Hanna. The resulting song “This Grand Countrie” was dedicated to Eugene V. Debs. Read through the poem quickly and then carefully re-read it.

“This Grand Countrie”

What a grand and glorious country is this “free” America! / With its rich, expansive prairies, stately forests, flowery lea, / Largest lakes and longest rivers, tow’ring mountains, wildest sea— / With the mightiest of nations in this grand countrie! (1)
Fertile fields and fruitful gardens from a wilderness have sprung, / Mighty cities have arisen where before were vale and town / But what is all this grandeur, this magnificence to me / While a million men are starving in this grand country! (2)

Costly palaces and churches rear their lofty heads to heav’n; / Great achievements, vast adornments, show the wealth which God has given; / Lakes and rivers decked with steamers, workshops, mine and all you see, / Yield a bounty to the wealthy in this grand country! (3)

The “iron horse” goes bounding from the mountains to the sea / And the telegraph sings merrily the news where’er you be / Yet upon the wings of “Progress” this sad story comes to me: / A million children hunger in this grand country! (4)

Here were gathered from all nations of the earth, both near and far, / The most bounteous gifts of nature, types of peace and spoils of war; / Cunning handiwork of ages brought from far across the sea / But far greater was the splendor of this grand country! (5)

Titled ladies decked with diamonds, courtly princes of the crown, / Came with men of fabled opulence and men of great renown / Where a million sad-eyed maidsens toil in shop and factory / And can scarcely earn a pittance in this grand country! (6)

‘Mid all this glare and glimmer, this magnificence, this wealth, / Where Want is slave to Plenty, where Fraud with step of stealth, / Holds back the arm of Justice—is there not some power to save / The poor and weak from famine, from tyrant, from knave? (7)

Are there not some men among us—men of years and men of youth, / Men who dare assail th’ oppressor, men who dare uphold the truth, / Men who scorn a falt’ring coward, men to strike for Liberty, / Are there not some men of grandeur in this grand country? (8)

Lo! Behold a million working men, their banners lifted high! / You can see the fire of battle in each patriotic eye! / You shall hear their shout of vict’ry in the coming jubilee— / For those men shall be the rulers of this grand country! (9)

The general prosperity they quickly will promote; / To establish truth and equity their lives they will devote— / And the blessings of sweet Liberty the toilers all shall see / When this band of patriots triumph in this grand country! (10)

With a partner, choose a stanza to illustrate through some kind of visual representation of the content. As a class, make sure each pair of students illustrates a different stanza so that all ten stanzas are depicted. As you and your partner work on your illustration, consider the following and answer these questions:

1. What or who is the subject or focus of your stanza (e.g., nature/the environment, industrialists, laborers, or others)?

2. Is the subject portrayed in a negative or positive light by the author? Cite specific evidence for your answer.

3. Are there any unfamiliar words in your stanza? Look them up and write down the definitions.

4. What is the message of your stanza and how can you show that visually? What symbols might you use?
After you have completed your illustration, regroup with the other students in your class. In order from one to ten, each group should read their stanza and present their illustration to the class, explaining any symbols used.

As a class, discuss the meaning that you have derived from Mabel Ervin’s poem.

1. What specific examples of “progress” does the author give? Overall do you think she views this term positively or negatively? Why?

2. Do the song’s words describe one America or two Americas? Cite evidence from the text to support your opinion.

Remember that this poem is dedicated to Eugene V. Debs. Debs’s name is not mentioned in the poem, but the last two stanzas speak of a group of men that will restore general prosperity and close the wealth gap in America.

1. Do you think the author, Mabel Ervin, sees Debs as one of these men? Why or why not?

2. The stanzas describe this group of men as a “band of patriots.” How do you think the leaders of industry might respond to that characterization?

3. What reform policies did Debs include in his presidential campaign platforms that were intended to restore general prosperity and close the wealth gap in America?

4. What argument or reasoning did Debs’s opponents offer against such reforms?

Consider the 2014 debate over income disparity and increasing the minimum wage in the United States.

1. What do you think Debs would have to say about the wealth gap that exists in America today?

2. Would Debs support an increased minimum wage? Why or why not?

3. Who opposes/opposed a minimum wage? What are/were their arguments?

4. Do you support raising the minimum wage as a way to narrow the wealth gap? Offer your own arguments for or against this reform.

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