While Cincinnati entrepreneurs successfully pursued manufacturing schemes, to the west another group of Americans was beginning to exploit related opportunities, namely, extracting the mineral wealth of the Tri-State region of southwest Missouri, southeast Kansas, and northeast Oklahoma. The founders of the Picher Lead Company, like others who settled the Tri-State during the mid-nineteenth century, in part fulfilled the dreams of a generation of expansion-minded Americans. The lure of material wealth, accompanied by the mystique of the mining bonanza, produced a colorful and unique heritage. Images of a settler working a grubstake to earn enough money to bring his wife and children to his side struck a chord of sympathy and respect among Americans. The rugged individualism associated with the Tri-State personified American ideals and remained a crucial part of the region's culture.

Although tales of gold and silver mining bonanzas have most often been associated with America's westward expansion, the story of lead and zinc mining is neither less intriguing nor less important to American history. The discovery of rich lead and zinc deposits in the Tri-State not only shaped the social and economic character of the region but proved to be a tremendous national asset. The Tri-State remained one of the most important lead and zinc regions in America from the late nineteenth century until the Second World War.

Among the chief commercial contributors to the economic growth of the Tri-State was the Picher Lead Company, initially a lead and
zinc smelting company, later expanding into pigment production, and, finally, integrating its operations by mining and milling non-ferrous ores. In 1915 the company discovered and began to exploit one of the world’s largest zinc and lead fields in northeast Oklahoma. The Picher field became the biggest bonanza in Tri-State history, and the success of mining operations provided the newly formed Eagle-Picher Lead Company with a commercial and cultural center that influenced corporate development for the next thirty years.

The evolution of the Tri-State in the late nineteenth and early twentieth centuries is marked by increasing tensions between the individualistic character of the region and the commercial development of district resources that gradually eroded the influence of the individual capitalist. Picher Lead and its successor stood at the center of this struggle, which would reach a boiling point during the 1930s. Initially a struggle between large and small capitalists, as resources dwindled and interests consolidated, reverence for the lone miner, a commercial impossibility after 1900, was transferred to the individual laborer in the mines, mills, and smelters who became the standard bearer of the Tri-State ethic. Labor’s struggle against district companies eventually produced, after considerable delays and tremendous human cost, a viable union movement, the seeds of which began to take root during this period.

Early Commercial Development

In the early nineteenth century Indian tribes such as the Quapaw, Peoria, Seneca, Ottawa, and Miami inhabited the Tri-State, hunting in forests and streams and occasionally mining shallow lead deposits to sell to traders who earned their livings along the water routes of the Louisiana Territory. The gentle, rolling prairie and fertile river and creek valleys, combined with a temperate climate, also enabled the cultivation of hay, grains, and forage crops.¹

However, farming became the district’s economic safety valve after settlers discovered major lead deposits in the region during the 1840s. Southwest Missouri became the first commercially developed area of the Tri-State. Evidence of Indian mining activity and the discovery of high-grade surface ore had provided clues to the district’s hidden treasures. Although most early settlers relied on agriculture
to make a living, evidence of mineral wealth led many farmers to explore their lands for lead deposits. The district's first commercial mining venture, developed by William Tingle in 1848, began on his farm several miles northwest of Joplin. His discovery attracted other prospectors, usually experienced miners from the rich lead fields of eastern Missouri. Soon the area around Tingle's farm teemed with settlers and a mining camp called Leadville appeared, claiming a population of one hundred persons by 1850.

The fever associated with a bonanza soon spread through the area as more people came to seek their fortunes. Other mining camps and small towns appeared. By 1860 the population of southwest Missouri exceeded 25,000 persons, and the commercial character of the region began to take shape. In the early mining camp days, miners often prospected alone or with the aid of their wives and children. This custom provided the source for the district's reputation as a haven for the individual entrepreneur.

However, after miners had excavated most of the surface deposits, they formed partnerships to amass the necessary capital for deeper prospecting. Yet the economic advantages of the partnership did not guarantee a successful venture, for marketing the product proved to be a difficult task. The lack of efficient transportation inhibited commercial growth until national railroad lines reached the district after the Civil War. In the meantime, rivers provided a conduit for commerce, and lead loaded onto flatboats eventually arrived in Saint Louis or New Orleans for distribution to the East.

Although the Civil War temporarily hindered the district's development, the end of the war in 1865 brought a renewed push for further exploration and development. The bonanza was clearly not over, and the prospect of quick wealth lured additional settlers into the area. New mining camps arose from the prairie as miners discovered new deposits and vanished just as quickly when the mines played out. The wealth of the soil alone dictated the social and political development of a particular location.

Perhaps the most significant postwar commercial development was the rise of mining land and smelting companies. The proliferation of these companies in the years following the Civil War signaled the beginning of a new era for the Joplin district. As more companies built smelters and obtained leases for large tracts of land, the commercial character of the district changed. Independent miners now
had less freedom because companies often required all miners who leased company lands to deliver ore exclusively to company smelters. This system greatly restricted the power of individual miners, and most found themselves working for a weekly wage rather than as independent producers. One of the largest companies in the district, the Granby Mining and Smelting Company, accumulated over nineteen thousand acres of mineralized lands and erected numerous smelters during the 1860s and 1870s.

Despite significant national postwar economic uncertainties culminating in the Panic of 1873, the development of new ore deposits and related enterprises provided Joplin with a vigorous economy. The depression that followed the Panic of 1873 did not seriously affect the mining industry until 1877. Thus, the favorable commercial climate in the years immediately after the war propelled a variety of businessmen to follow the example of the Granby Company.

**Picher Lead and Zinc: Frustrations of the Early Years**

In 1875 Judge Oliver Hazard Picher came to Joplin eager to participate in the commercial growth of the district. Born in 1845 in Madison, Illinois, Picher had attended Knox Academy in Galesburg, Illinois. In 1864 he left the academy to serve in the Union Army as the first lieutenant of a company composed of student volunteers. Two years later Picher moved to Springfield, Missouri, and studied law with a local firm. The following year he moved to Carthage, Missouri, and formed a partnership with M. G. Morgan. In 1869 Picher left his practice to become a judge in the Jasper County Court of Common Pleas. He left the district in 1874 to join a law firm in Chicago but returned the next year to begin a career in business.

Judge Picher came to Joplin with his younger brother, William Henry Picher, born in 1850 in Madison and also a graduate of Knox Academy. Recognizing the opportunities for success in the smelting business, the two young men built their first lead smelter south of Seventh Street near Joplin Creek and formed a partnership called the Picher Lead and Zinc Company. Oliver became president and William served as vice-president and secretary. Disinterested at first in mining operations, the company purchased or leased land and subleased it to miners on the condition that the miners sell the ore exclusively to Picher Lead and Zinc.
The expansion of smelting operations occupied the brothers during the first year of the company's existence. By 1876 the Pichers operated six scotch hearth smelting furnaces in the Joplin area. Paying employees $2.50 per day for a six-day week, the company smelted an average of six thousand to nine thousand pounds of lead ore each week with a 60–70 percent recovery rate.13

As a smelting operation, the fortunes of Picher Lead and Zinc remained closely tied to the vagaries of the lead market. London, New York, and Saint Louis served as the major centers for lead trading in the Western world. Typically volatile, the lead market had been relatively stable since 1873 despite a major contraction in the national economy.14 During its first two years in business, the company developed a relationship with Oscar E. Schmidt and Company, a metals commission house in New York City. Picher Lead and Zinc sold most of its pig lead production through Schmidt to eastern white lead manufacturers. The Pichers also occasionally dealt with John Wahl and Company, a pig lead commission merchant in Saint Louis.15

The commission merchant played a vital role in the development of the national market economy. Along with brokers, jobbers, and manufacturers' agents, commission merchants performed a variety of essential economic functions for producers like Picher Lead and Zinc. From 1815 until large firms arose toward the end of the century to assume the distributing function, commission merchants and other middlemen guided the flow of goods across the country.16

Commission merchants differed from the general merchant of the colonial era because they specialized in a particular line of products, and from brokers because they sold on their own account instead of acting as pure middlemen. Commission merchants became important because they offered producers a number of valuable services. Foremost, commission houses broadened markets for small producers. Located primarily in New York and other major trade centers on the eastern seaboard, they could effectively market the products of a number of small producers to large customers. Often, small producers found that by working through a commission merchant they could sell more goods to fewer customers. This also avoided the problems inherent in dealing with smaller merchants in a number of different regions.17

Commission merchants also became a key source of credit to producers and supplied working capital by making advances on sales
gered a variety of disinformation campaigns against one another. Oscar E. Schmidt became the target of a particularly insidious plan formulated by the New York metals house Thomas J. Pope and Brothers. Pope played on the suspicions of the Joplin producers by distributing a circular and a series of letters reporting the condition and prospects of the lead market exactly the opposite of the information that Schmidt and Company had been distributing to district companies. Pope also alleged that Schmidt did not care about the southwest Missouri interests, or any domestic producers, since Schmidt held contracts for European lead production that it valued above anything else. Consequently, Pope claimed, Schmidt wanted a depressed market to force domestic producers out of business.  

In mid-September the Joplin producers held a meeting to discuss the information contained in the Pope circular. Confused and suspicious, the producers agreed to have Judge Picher draft a letter to Schmidt confronting the firm with Pope’s allegations and requesting an explanation. Schmidt and Company’s lengthy reply arrived at Judge Picher’s office in early October. The letter began with an attack on Pope and Brothers, explaining that since they were only a small firm and not a true brokerage house, they bought and sold lead only on their own account. Consequently, Schmidt observed, “they know about as much of the lead market as they do the stock market. . . . Their whole report and the substance of their letter . . . is a lie from beginning to end.”

Schmidt and Company proceeded to answer a variety of allegations contained in the Pope circular. Schmidt reported that they had not “directly or indirectly” contracted for any foreign lead. Furthermore, concluding that domestic production would satisfy consumption, Schmidt asserted that they had reorganized during the previous two years to concentrate on domestic business. “The rapidity with which we changed from our identity with foreign lead . . . has more than once been the subject of commendation and example,” Schmidt claimed.

Pope also alleged that Schmidt had attempted to corner the lead market. Schmidt’s angry response pointed out that the firm did not control any speculative lots of lead in the United States or abroad, and that it had “confined [itself] for a long time to a simple and legitimate commission business.” The criticism and suspicion directed at Schmidt and Company shocked the firm. They responded
that the company had always consulted the views and opinions of the Joplin producers before making any advance sales. Schmidt found it "simply ridiculous" that anyone would believe wild rumors concerning the company's alleged plans to corner the market and drive domestic producers out of business.32

Schmidt and Company closed the letter with two proposals. The firm offered to pay traveling expenses to New York for a delegate of the Joplin interests so that he could witness the state of the market firsthand. Schmidt also requested that Judge Picher read the letter to a gathering of local producers so that an accurate account of Schmidt's position would be made public.33

Satisfied for the moment, Picher Lead and Zinc continued its relationship with Oscar E. Schmidt and Company. The New York market remained the best place to sell pig lead in view of its proximity to large eastern white lead manufacturers. Additionally, the large volume of the market allowed it to remain generally more stable than the Saint Louis market and therefore less susceptible to wide price swings caused by the actions of one or two large commission houses.34 With its fears allayed that Schmidt and Company sought to control the market to the detriment of the Joplin producers, Picher Lead and Zinc maintained cautious dealings with the firm.

Conducting business within an atmosphere of distrust and uncertainty required extreme caution to ensure effective and safe communication. Picher Lead and Zinc and Schmidt exchanged letters to verify transactions or to exchange information. However, to order a specific transaction, such as the sale of a carload of lead at a certain price, the firms communicated by telegram using a code for frequently used phrases and for price quotations. The code employed by the companies utilized a list of words taken in order from randomly selected pages in the dictionary. For example, the phrase assigned to each code word might be "we have sold," "telegram received," "how much shall we offer," or the name of a city, a lead company, or the number of carloads of lead that Picher Lead and Zinc desired to sell.35 This method of communication not only saved telegram charges but afforded confidentiality between the firms and protected them from price cutting by competing firms that might somehow intercept an uncoded telegram.

As lead prices continued to decline, white lead manufacturers, Picher Lead and Zinc's largest customers, suffered the worst effects
of the depression. "There has never been so little money in the white lead business as to-day," Schmidt reported to Judge Picher. Over-production and price cutting had crippled the industry, and corroders remained unable to effect price agreements. Since white lead required approximately three months to produce, declining prices especially hurt corroders. They could not recover the money paid for pig lead at, for example, 6 cents per pound if lead prices during the next three months dropped dramatically. Foreshadowing the numerous consolidations in the industry to occur during the late nineteenth century, Schmidt told Picher that he could purchase a white lead factory for a nominal investment. Unwilling to take that step because of the chaos of the white lead market, Picher followed Schmidt's advice and reduced production of pig lead.

Facing a reduction of the pig lead business, Judge Picher considered entering the lead pipe business. Soft Missouri pig lead made excellent pipe, and he believed that profits from the new product could offset losses on sales of pig lead. Picher consulted Schmidt and Company in November. Schmidt advised against it for two reasons. From a remote location like Joplin, freight rates to markets in the Midwest and the East would virtually eliminate any profits. Also, Schmidt warned that the company's small operation could not produce the product as efficiently as large eastern manufacturers who relied on economies of scale to achieve competitive prices. Although agreeing that Picher Lead and Zinc could create "a nice little business," Schmidt remained unconvincing that the company could match the price or service of large established manufacturers. Following Schmidt's advice, Picher Lead and Zinc remained exclusively in the smelting business.

In December 1877 Judge Picher received a letter from John Wahl and Company of Saint Louis lobbying for a larger share of Picher's business. Commission houses in the Saint Louis market desperately needed business, and Wahl offered some persuasive arguments to Judge Picher. Selling pig lead with commission merchants at both markets hurt the company, Wahl reasoned. If the company's lead is offered simultaneously on both markets, prospective buyers would always choose the lower price. However, if Wahl handled all the company's lead, this situation could be avoided.

Wahl promised specialized service to Judge Picher, indicating that the firm would pursue an aggressive advertising campaign by send-
ing circulars to all buyers in the country praising the merits of refined Joplin lead for corroding purposes. Wahl also offered a $5,000 loan to Picher at 7 percent interest 'to assist you financially where wanted.' An agreement to handle all of Picher's production would have provided Wahl with an important first step toward controlling the entire production of the Joplin district, a prize the firm could use to exploit the New York commission merchants. As Wahl pointed out, 'as long as Joplin lead is sold in part by New York houses we have to conform partly to [the] N.Y. market, whenever that interest is taken away from there we can control the N.Y. market.'

When Judge Picher wrote Schmidt and Company concerning Wahl's letter, Schmidt responded with a carefully crafted, logical response that was characteristic of the firm: 'We can only say that if the Joplin producers go back again to depend on the St. Louis market as their natural market they will make a great mistake . . . and we desire to be understood as saying this independently of the fact that we have handled so much of the S W Missouri product.' Without the New York market as an outlet for excess pig lead production, Schmidt argued, the Saint Louis market would have already collapsed and ruined many of the Joplin producers. The Saint Louis market simply could not handle the overproduction of pig lead by itself and depended on the New York market to relieve the pressure. As Schmidt observed, "the comparative rapidity with which we have sold all our consignments ought by this time to have convinced all the producers that their interest is with us."

The reduced volume of trading that accompanied the decline of the lead market during 1877 engendered comparisons with previous recessions. "Not since the Civil War has there been so dull a month, in all branches, as last November," observed one lead sales agent traveling through the South in December 1877. Schmidt wrote that "business was desperately dull and unsatisfactory" and that "this has been in a general way one of the most disastrous years we have ever had." However, compared to the decline of lead in 1878, the lead industry would gladly have relived 1877.

During 1878 pig lead fell from 5.49 cents per pound to 3.61 cents per pound. The pressure within the industry became unbearable for many firms. Although Picher Lead and Zinc survived the decline, many other companies suspended production, attempted other business ventures, or went out of business altogether. Nowhere was the
strain more evident than in the relationship between pig lead producers and commission merchants.

One of Picher Lead and Zinc's competitors, the Lone Elm Mining and Smelting Company, also a customer of Schmidt and Company, failed to uphold its obligations to the firm. Schmidt had agreed to advance money to Lone Elm against cars of lead that it sold at the New York market. As the price of lead declined, the amount of advances nearly equaled the value of the lead. When Schmidt asked Lone Elm to pay its obligations, the company refused and informed Schmidt that it would not send any more lead to the New York market. "We regret that these people should act so," Schmidt lamented in a letter to Judge Picher, noting that "it is as well we don't get the lead owing to the depressed market."^45

Facing the "further demoralization of the lead market," a movement within the industry lobbied for the exportation of surplus pig lead production to the European market. Edward A. Caswell, a commission merchant and noted commentator on the industry, became an unofficial spokesman for the cause. Writing to Picher Lead and Zinc in February, Caswell inquired whether the company would participate in the exportation of three to four thousand tons of pig lead to the London market. Caswell asked the company for a three hundred ton contribution and assured Judge Picher that the proceeds would be accurately prorated among the contributors. Consulting Schmidt and Company, Judge Picher decided to conduct any export business exclusively through Schmidt and Company.^46

The depression in the pig lead market had forced Picher Lead and Zinc to cut costs and reduce production. Pressed for cash, Judge Picher asked Schmidt and Company for a $10,000 loan. Schmidt replied that although "there is no person in the world to whom we would more readily lend money," the state of the market prevented the company from advancing any money to the Pichers.^47 From 1878 to 1880, despite significant cutbacks in production, Picher Lead and Zinc struggled to maintain operations. Fortunately, gradual increases in lead prices enabled the company to remain in business.

By 1880 the price of lead had reached 5.04 cents per pound, a significant recovery for the depression-plagued industry.^48 Although a number of factors influenced the recovery, the United States' return to the gold standard in 1879 provided a powerful stimulus to industrial confidence and greatly improved short- and long-term economic
prospects. The lead industry benefited from the recovery, although many problems persisted. Overproduction plagued white lead manufacturers, and the forces of consolidation gathered momentum during the decade, climaxing with the creation of the National Lead Trust in 1887.

Expanding the Firm

For Picher Lead and Zinc the 1880s held great promise, and Judge Picher remained committed to expanding the company’s leaseholdings and smelting operations. By the end of the decade the company would dominate smelting operations in the district. The smelting of zinc concentrates seemed to be one of the most promising opportunities. Content to enter the field slowly, the company participated in a cooperative smelting operation beginning in 1881. Long considered a waste by-product of lead mining, zinc ore, often called “jack,” was typically thrown into large piles by the miners. Some early mining towns used zinc ore to construct public buildings, only to tear down the buildings in later years when zinc became a valuable commodity.

Commercial production in the Joplin district had begun in 1872 with the initial shipment of zinc ore to the Mathiessen and Hegeler smelter in LaSalle, Illinois, one of the first successful commercial zinc smelters in the United States.59 New industrial applications had created a demand for the metal, and Joplin producers desired to exploit both their reserves and their smelting techniques to the fullest extent. The demand for zinc in brass foundries and for galvanizing processes had increased zinc mining and prospecting efforts around Joplin during the 1870s. The extension of several railroad lines into Joplin had also stimulated production by providing efficient transportation of the ores to smelters in the Midwest and the East.50

Anxious to capitalize on the production of zinc ores, a group of Joplin businessmen led by Judge Picher, T. A. McClelland, Tom Connor, and William Byers organized the Joplin Zinc Company in 1881. Two prominent outside investors, Thomas C. Tootle of Saint Joseph, Missouri, and Thomas K. Hannah of Kansas City, Missouri, provided land for the construction of the smelter.51 Consisting of twelve hundred retorts, the new zinc smelter operated for seventeen years and
consistently returned profits to the investors. Picher Lead and Zinc expanded its own smelting operations to include zinc during the 1880s.\textsuperscript{52}

Yet Judge Picher channeled the majority of the company’s resources into a new field. The manufacture of white lead and other paint pigments offered opportunities to obtain higher profit margins. In 1887 the company acquired the plant of the Lone Elm Mining and Smelting Company in northwest Joplin.\textsuperscript{53} Lone Elm had been one of the most important and successful Joplin companies and held the patent rights to a new process for making white lead. However, in recent years the owners of Lone Elm had expanded too quickly and encountered financial difficulties.\textsuperscript{54}

Founded by E. R. Moffett and J. B. Sergeant, the Lone Elm Company grew from a mining partnership in Minersville (now Oronogo) after the Civil War. Attracted by ore deposits around Joplin, the two men came to the city in 1870 and erected a lead smelter at the foot of Moon Range Hill, the site of the first large ore discovery in Joplin during the following year. The business prospered, and Moffett and Sergeant built two additional furnaces to keep up with the large supplies of lead ore from nearby mines.\textsuperscript{55}

Eager to expand their operations, Moffett and Sergeant purchased a portion of the Lone Elm tract in Joplin and organized the Lone Elm Mining and Smelting Company in January 1875. Moffett became president and Sergeant served as vice-president. The company built a large smelter and abandoned the old site near Moon Range Hill.\textsuperscript{56} In 1876 the company established a relationship with Eayre Oliphant Bartlett of Joplin, the inventor of a new process for making white lead from smelter fumes known as sublimed white lead or dry white lead.\textsuperscript{57}

The Bartlett process provided a means to capture smelter fumes previously released into the air and convert them into white lead. The first step involved diverting lead fumes into woolen collecting bags, where hot gases escaped through the cloth leaving lead sulfate, a heavy blue powder. The lead sulfate was then placed in a furnace and heated until it gave off fumes, or sublimed. These fumes, including what was now very fine white lead particles, were returned to the collecting room and again forced through woolen bags, where the white lead particles were collected.\textsuperscript{58}

Marketed under the brand name Joplin White Lead, the product
found "a ready market" according to the *Engineering and Mining Journal*, largely because the ultrafine white lead particles mixed more easily and covered better than Dutch Process white lead. Sublimed white lead's biggest drawback, however, was that it did not have the initial whiteness of Dutch Process white lead, nor did it remain as white over time. Bartlett and others devoted considerable energies to this problem, which was never fully resolved.59

A widely acclaimed inventor, Bartlett possessed extensive experience in the industry. His father had founded the Bartlett Zinc Works in Bergen Point, New Jersey, and he had learned the many facets of the business at an early age. Described as "one of the noblest examples of unusual business ability . . . in the middle west," Bartlett brought a great deal of prestige to the company.60

Bartlett had developed the process for sublimed white lead with George T. Lewis, a white lead manufacturer in Philadelphia who provided the financial backing for the invention. Lewis held several patents on processes for refining zinc and lead ores. With Lewis's assistance, Bartlett began the construction of the process at the Lone Elm plant in 1876. Because the depressed lead market had put financial pressure on Lone Elm, the company negotiated a special agreement with Lewis and Bartlett to defray development costs. The original agreement stipulated that after Lewis and Bartlett had installed the process at their own expense, they would receive the product free of charge until repaid by profits from the sale of the product plus 6 percent simple interest. At that time, Lewis and Bartlett would transfer the apparatus and buildings to Lone Elm and grant the company a license to use the process in return for a royalty payment of 1 cent per pound of white lead sold.61

After much experimentation and many failures Lewis and Bartlett completed the installation, and commercial manufacture began in the fall of 1878. They had also applied for a patent, and the United States patent office granted them number 206,680 on 6 August 1878.62 The process seemed to hold great promise for the company. The *Engineering and Mining Journal* praised the invention: "For effectiveness and general applicability, for cheapness of construction and maintenance, and for economy in working, [it is] not only without a rival, but even leaves but little more to be desired."63

In 1880 a fire destroyed the entire works of the Lone Elm Company. However, Moffett and Sergeant immediately rebuilt the plant,
incorporating the latest improvements in smelting and in the Lewis-Bartlett process.\textsuperscript{64} After the company completed the new plant, Bartlett moved to Leadville, Colorado, and built a similar operation. Lone Elm paid Lewis and Bartlett $75,000 for the exclusive right to use the process in Jasper and Newton counties in Missouri and in Cherokee County in Kansas. The company eventually paid Lewis and Bartlett $500,000 for the exclusive right to the patents in the United States.\textsuperscript{65}

The new Lone Elm plant proved to be extremely successful. Employing over two hundred men, it produced an average of 2,500 tons of sublimed white lead and 12,000 tons of pig lead per year. Moffett and Sergeant expanded the plant throughout the 1880s. However, their zeal exceeded their finances, and creditors forced the sale of the plant to Picher Lead and Zinc in 1887 following a series of legal difficulties.\textsuperscript{66} Shortly after Picher Lead and Zinc acquired the property, Judge Picher contacted Bartlett and arranged to have him enlarge the plant. Bartlett agreed in return for a one-fourth interest in the profits from the plant, although he did not receive an interest in the company's other ventures.\textsuperscript{67}

With business booming, in June 1889 Judge Picher decided to incorporate the firm in Missouri as the Picher Lead Company. The Pichers and their families closely held the $100,000 capital stock.\textsuperscript{68} With an expanded productive capacity and the means to secure additional capital, during the next ten years Picher Lead began to extend the scope of the company. Previously, Judge Picher had handled virtually all sales, and the success of the company had resulted from many personal contacts with commission merchants. However, during the 1890s Picher Lead recruited additional salesmen in an effort to develop its own distribution system and deal directly with its customers.

In 1894 Picher Lead opened a sales office in Saint Louis. The new office enabled the company to improve its relationships with brokers and customers in the city. The next year Picher Lead hired one of its most promising new salesmen, Raymond W. Evans, who joined the company under unusual circumstances. Suffering ill health, he had left Joplin to recuperate in Colorado. In July, Picher Lead shipped a carload of white lead to a customer in Colorado who refused to accept the product. With the company in a quandary, Judge Picher contacted Evans and asked him if he could find a buyer for the carload of white lead. Evans agreed and sold the white lead immediately. Im-
pressed with Evans's effort. Judge Picher asked him to join the company. Evans eventually became first vice-president of Picher Lead. In 1896, the company opened a sales office in Chicago and in 1900 another in New York. Ray Evans's brother, S. Marshall Evans, managed the New York branch.69

The opening of regional sales offices reflected the nationwide trend among manufacturers in the late nineteenth century to abandon commission merchants and other middlemen in favor of company personnel.70 Although the diffusion of lead producers had particularly suited the commission merchant approach, by the 1890s the increasing consolidation of the industry under National Lead, in addition to the microconsolidations illustrated by Picher Lead's purchase of Lone Elm, brought the market closer to the manufacturer and encouraged development of proprietary sales and distribution networks.

The prosperity of the Joplin district in the late 1890s resulted from a number of influences. High prices for zinc ore encouraged additional prospecting, and the district benefited from the wealth generated by new discoveries. Also, the discovery of large natural gas fields in southeastern Kansas encouraged district smelters to use gas instead of coal as a source of energy.71 Since natural gas provided cheaper energy, smelters could pay higher prices for ore and still maintain adequate profit margins. However, while the cheaper fuel source provided benefits to both miners and smelters, it also increased competition and drove many smelters who still relied on coal out of business. Picher Lead successfully converted to natural gas in 1898 and enjoyed its share of the nation's economic prosperity during the following years.72

As zinc concentrates reached record prices during 1898 and 1899, district producers reaped record profits. The district also witnessed an influx of eastern capital totaling over $12 million, which sponsored the creation of 186 new enterprises engaged in the purchasing and leasing of zinc-bearing lands.73

As O. H. and W. H. Picher approached retirement, the company faced a turning point in its history. In 1905 the National Lead Company proposed a merger with Picher Lead. The Pichers gave serious consideration to the merger and solicited advice from friends and family. When Ray Evans learned of the proposal, he called Judge Picher's son, Oliver S. Picher, an attorney in Joplin, and arranged a
meeting with O. H. and W. H. Picher. Evans convinced Oliver S. Picher that they could take over the company and prevent the sale to National Lead. The elder Pichers approved of the idea but wondered where Evans and O. S. Picher would obtain sufficient capital to purchase the business. Evans replied that he had heard that the Eagle White Lead Company of Cincinnati wanted to invest in a lead smelting company. If Eagle White Lead invested in Picher Lead, the independence of both companies could be secured by the mutually beneficial transaction. In a letter to Eagle White Lead president John B. Swift, Judge Picher offered the company to the Cincinnati firm for $800,000. During the first months of 1906 both companies considered the offer and arrived at a formal purchase plan. On 3 March Eagle White Lead agreed to acquire five-eighths of Picher Lead’s capital stock to be held in a trust. Formal approval by the Eagle board followed, and the two companies officially consummated the acquisition on 5 April.

The arrangement with Eagle White Lead solved several problems for Picher Lead. The elder Pichers could retire and keep the company independent of the National Lead Company. The family would retain management of the enterprise, and a secure outlet for the company's pig lead afforded protection from market fluctuations and guaranteed a fair price for the commodity. In April, the board elected Oliver Sheppard Picher secretary of the company and manager of the Joplin plant. The board also elected Ray Evans first vice-president in charge of sales. As secretary, Picher made an effort to learn every facet of the company’s business. In 1909, at age thirty-three, Oliver Picher became president of the company upon his father’s retirement to California.

A graduate of Stanford University and Columbia University Law School, Picher began his professional career in the law offices of Elihu Root, a prominent New York City attorney and secretary of war under Presidents McKinley and Theodore Roosevelt. After spending three years with Root’s firm, Picher returned to Joplin in 1904 with his new bride, Emily Stanton-Picher, and started his own law firm. After he settled in Joplin his father encouraged him to develop an interest in the company’s operations, and Picher found himself increasingly preoccupied with the business and less interested in law. Finally, his desire to perpetuate the family firm led him to close his practice and devote all his time to the Picher Lead Company.
During the first years of his presidency Picher expanded the capacity of the Joplin plant and encouraged the development of new products. Between 1909 and 1911 the company enlarged its sublimed white lead capacity by 200 percent with the addition of new furnaces. It also introduced two new products, litharge and red lead. Both oxides of lead, the new products represented important achievements since Picher Lead had developed production methods for both products entirely within the company. Anxious to continue this type of innovation, Picher organized a research department in 1912, erected a separate research building, and placed Dr. John A. Schaeffer, a metals scientist, in charge of product development.

With the basic components for expansion in place, Oliver Picher searched for opportunities to achieve greater efficiency. Increased demand for all company products had pushed the Joplin plant to capacity, forcing Picher to seek additional manufacturing facilities. In 1912 Picher Lead purchased a lead smelting plant in Galena, Kansas, from the Hammar Brothers White Lead Company of Saint Louis. The purchase relieved pressure from the Joplin plant and placed the company in the midst of the thriving Galena ore field.

Constructed in 1902 by the Galena Smelting and Manufacturing Company, Hammar Brothers had acquired a three-fourths interest in the company in 1906 in an attempt to integrate operations to protect the company from acquisition by National Lead. The Galena plant consisted of four jumbo scotch hearth furnaces with a smelting capacity of 45,000 pounds of lead ore per day. An important addition to Picher Lead’s productive capacity, the plant operated at capacity as miners discovered new ore bodies in the Galena field.

Bonanza

By 1913 Oliver Picher had established the company as one of the most important producers in the district. However, he desired to expand the company into other areas of the zinc and lead business. Mining had remained the only facet of the business in which the company did not directly involve itself. During subsequent years Picher Lead pursued this goal. The extreme northeastern corner of Oklahoma provided the site for the company’s foray into mining, and the success of the venture exceeded even the most optimistic predic-
tions within the company. The discovery of the Picher field, the last of the great bonanzas in the district, became the catalyst that propelled the company into district leadership and eventually to a merger with the Eagle White Lead Company to become one of the nation’s leading nonferrous metals companies. Like other ore discoveries in the Tri-State, though, the individual played a crucial role in its successful development.

Located near Tar Creek, northeast of Quapaw in Ottawa County, Oklahoma, the Picher field had been the site of oil and gas drilling operations in the 1890s. Early geological maps indicated extensive lead and zinc deposits east of the Spring River, which flowed several miles to the east of the Picher field, but none to the west. The Quapaw Oil and Gas Company and the Tar Creek Oil and Gas Company had explored the area without success. Although they found no oil or gas, both companies reported striking "something that polished the bit but did not dull it." Disappointed, the companies sold their leases, obtained from the Quapaw Indians through the Bureau of Indian Affairs, to the American Zinc, Lead, and Smelting Company for $9,000 in 1899. One of the greatest ironies is that American Zinc, expecting to find oil instead of lead and zinc, allowed the leases to expire and forfeited any claim to the hidden treasures of the Picher field.

In 1912, the mining partnership of S. C. Fullerton and W. W. Dobson, drilling on a lease two miles northeast of Commerce, Oklahoma, struck the first ore deposit in the Picher field. Picher Lead began its drilling campaign in 1913 near the Fullerton and Dobson discovery. George F. Braun, a field engineer for the company from Galena, directed the operation. The company had acquired an interest in these fields through Victor Rakowsky, a mining engineer who reported the availability of the lands to Picher. Picher approved the leases and the drilling began, punctuating the open prairie with many unsuccessful holes.

On a warm summer night in August 1913, Victor Rakowsky visited the home of a drilling rig operator, Dick Blosser, in Duenweg, Missouri. Rakowsky reported the acquisition of additional leases by Picher Lead on Indian lands. He then asked Blosser if he would move one of his five drill machines to Oklahoma and explore the area. Blosser agreed, but soon Rakowsky ran out of money to support the exploration. Blosser then began drilling for Picher Lead on land sev...
eral miles south of the Kansas-Oklahoma border. Although Blosser found some deep ore, O. S. Picher decided against further exploration since the ore deposit was not large enough to justify continuing. 87

Blosser closed down his operation and began to move the drill rig to Baxter Springs, Kansas, for shipment back to Missouri, where the Picher Company intended to employ him in search of shallow lead deposits on newly acquired leases. As he began his trip across the prairie, a hard rain began to fall and the land soon turned into a quagmire. Blosser’s rig eventually became mired in the wet prairie bottom. Soaked and frustrated, he abandoned his rig, now sunk over five feet in the mud, and made his way to nearby Commerce, Oklahoma. 88

The land where Blosser’s rig sat motionless in the muck had been originally leased by Victor Rakowsky and had recently been acquired by the Picher Lead Company. 89 Shortly after the incident, George Braun, Rakowsky, and Blosser met to discuss the situation and the failure of other drilling operations in the area. Blosser argued that the team needed to drill deeper to uncover larger ore bodies. He suggested that Braun obtain permission from the Picher Company to drill on the site where the rig was mired down, less than a mile south of the Kansas-Oklahoma border. Braun agreed and went to Joplin to discuss the matter with O. S. Picher. In November, the company gave permission for drilling, provided that the rig could be moved out of the mud and put in working order. 90

Drilling machines of the period were extremely difficult to move. Large steam boilers that provided the power for deep drilling made the rigs heavy and cumbersome. As the rains continued, removing the drill from the mud seemed impossible. Blosser and his son began a search for heavy boards to support the rig and soon located some oak planks at a nearby hardware store and hauled them to the drill site. Drilling tools and a drill crew also had to be brought to the site. The nearest crew was in Commerce, living in a twelve-by-twenty-foot one-room shack called a drill house. Work began as soon as the men arrived at the rig. With the help of jacks they raised the rig so that the planks could be pulled under the wheels. Muddy and exhausted, the crew finished the job and the drill soon descended into the earth. 91

Samples revealed no ore at one hundred, one hundred fifty, or even
two hundred feet. Disappointed, the men decided to go still deeper, and at two hundred seventy feet they struck ore. Rushing home one evening in early 1914, Blosser carried a water bucket full of drill hole samples containing over 50 percent ore, a very rich concentration. "We were right," he yelled to Braun over the phone. Braun then contacted Picher Lead, and an excited O. S. Picher met the men at the drill site the next day. Picher told the men to keep the find a secret since not all the land contracts had been finalized. For the next week Picher, Blosser, and Braun lived at the site in the drill house. Although Picher was unaccustomed to such an arrangement, the satisfaction of witnessing the last great ore strike in the district overshadowed any inconveniences.\(^2\)

Under the direction of Braun and Rakowsky, a systematic campaign of drilling, ore sampling, and assaying took place in the weeks following the first ore strike. Results from laboratory tests conducted by the research department confirmed the richness of the discovery. Ore concentrations averaged 25–50 percent for most of the samples tested.\(^3\) Although the ore contained both lead and zinc, the latter became the focus of the mining efforts and signaled the trend within the company to become primarily a zinc producer. The company continued to produce lead, but zinc remained the focus of expansion efforts.

In February 1915 Picher Lead publicly announced the results of its initial exploration of the field. The company revealed its intention to begin active mining operations "on its own hook." The Joplin \textit{Globe} reported that "the findings at certain places have been so rich that the company decided it could not afford to turn the land over to someone else, but should mine for itself."\(^4\) After more than forty thousand feet of experimental drilling, the company completed agreements to lease approximately three thousand acres of Quapaw Indian lands through the Bureau of Indian Affairs.\(^5\)

Picher Lead also announced the hiring of A. E. Bendelari, formerly the general manager of the Underwriters Land Company and an experienced mining engineer, to manage the company's mining operations in the Picher field.\(^6\) Additionally, O. S. Picher revealed that negotiations had been completed with the Frisco Railroad to construct a branch line into the field.\(^7\) The new line gave a tremendous boost to the area, for it opened the Picher field to Joplin merchants
and jobbers and provided a cheap method for workers to commute to the field.

Divided into eight 40-acre tracts according to the leasing agreement with the Bureau of Indian Affairs, the Picher lease revealed many consistent ore veins capable of supporting profitable mining operations. Although most of the deposits lay at 225–80 feet, drilling crews reported ore as near to the surface as 90–160 feet on other tracts. Of the five 40-acre tracts initially explored, the company reported more than twenty excellent ore strikes. However, O. S. Picher noted that the need to fight water would be the most pressing problem facing recovery.  

In March Picher Lead began to sink the initial shafts in the field on the Crawfish tract, named after the Indian owner Harry Crawfish. Heavy rains made transporting boilers, hoists, and other equipment from Joplin an extremely difficult task. However, the lack of boarding and sleeping accommodations for the workers proved to be a still greater obstacle. Picher Lead erected three buildings, a boarding house, a bunk house, and an office in an effort to remedy the problem, and work on the shaft began shortly thereafter.

The initial success of the Picher field and the publicity surrounding its discovery and exploration soon attracted other companies to the area. A variety of small district companies secured leases on lands surrounding the Picher field. The most notable newcomer, the New Jersey Zinc Company, secured a sublease from Picher Lead for land in the northern section of the field and began drilling operations. According to the Globe, “this indicate[d] the high regard held for this particular section [the Picher field] better than almost anything else could. . . . The New Jersey Zinc Company would not bother with a small proposition.”

Picher Lead continued to sink new shafts in the field. Each shaft revealed high grade blende (the mining term for zinc ore) and galena. With mining operations progressing rapidly, the company began the construction of three concentrating mills. The first mill, completed in the early summer of 1915, had a three-hundred-ton capacity. Immediately after the company completed the first mill, the construction of two additional three-hundred-ton mills began.

The success of the mines and mills prompted Picher Lead to expand its zinc smelting operations. In May the company leased a zinc
The national labor movement, mainly through the Western Federation of Miners (WFM), achieved limited success in the Tri-State. As increasing numbers of independent operators assumed wage-earner status, demonstrations for changes in the terms and conditions of employment increased. After 1900 WFM organizers were active in the district, but they could not directly bargain with employers or offer any support mechanisms to striking miners. Economic necessity often dictated that miners return to work without an improvement in working conditions. The willingness of some mining companies in the district to extend concessions such as an eight-hour day and nine hours pay for eight hours work also frustrated WFM unionization efforts. Other attempts to unionize the Tri-State mineral industry suffered from the activities of company spies and strike breakers. For example, an attempt by the Federal Labor Union to organize smelter workers at Picher Lead in 1911 failed as a result of company spies who reported the union’s every move to top management.

However, as more miners found themselves trapped into working for mining companies, the union movement met with some important yet short-lived success. In 1910 the WFM established a local at Joplin. In June of that year the local’s 600 members went out on strike seeking a $1 per day raise and improvements in working conditions. But this strike failed when operators encouraged local merchants to cut off credit to striking miners.

Despite this setback, the WFM remained a force in the district and by 1914 boasted a membership of approximately 3,000. When another strike over the same issues failed in 1914 due to a lack of member participation, the WFM appeared to be defeated. However, in June of the following year the union called yet another strike over working conditions and the $1 per day raise. This time nearly all the union’s 3,000 members participated, and they marched through Joplin in an effort to recruit nonunion men to their cause.

Sensing a real threat for the first time, operators moved quickly to counter the strike. Companies closed down mines and vowed to remain closed rather than negotiate with the WFM. Three weeks later both the companies and the miners had had enough. When the union offered to raise money to extend the strike, the operators countered with an offer of a sliding wage scale based upon the average price of
ore, with a downside limit. The offer met the union's demand for a raise but did nothing to address working conditions.\footnote{115}

Once again the operators had effectively silenced a union movement in the Tri-State. After the failure of the 1915 strike, district mining companies did not face another union challenge until 1935. By then the entrepreneurial freedom that characterized the early Tri-State was but a memory, and unions, backed with newly gained power, represented the only recourse for economic protection. Yet tradition in the Tri-State died slowly. Pent-up hostilities, arrogance, and resistance to change that simmered from 1915 to 1935 set management and labor on a collision course that would rock the very foundation of the Tri-State labor system.

On 1 September 1915, shareholders approved an increase in the company's capital stock from $100,000 to $5 million. The new capitalization reflected more accurately the growth of the company's assets in recent years. Holding $1 million in treasury stock, Picher Lead distributed the remaining $3.9 million capital stock to shareholders, who received thirty-nine new $100 par shares for each original share.\footnote{116}

A fire at the Galena plant in January 1916 forced the company to rebuild and improve the facility, which reopened on 1 May. The company invested over $100,000 in the lead smelter for eight new jumbo furnaces capable of smelting 1.5 million pounds of lead per week. Brick and steel construction offered fire protection, and a variety of additional safety features captured the attention of district observers. The company furnished a bathhouse and a locker room for the smelter's two hundred employees that "for completeness of detail [was] not equalled by anything in the district," according to the Galena Evening Times.\footnote{117}

Other features included an employee dining room and a laundry room that provided employees with a place to wash their clothes at the end of each day. The architecture of the plant also served as a safety feature. A solid row of windows around the smelter served the dual purpose of allowing ample light and air to enter the building and providing ventilation to blow the gas and heat from the furnaces away from employees.\footnote{118} Attention to employee safety at the new
plant reflected efforts at Picher Lead’s facilities in Joplin. The *Missouri Trades Unionist* reported in 1914 that “the company [had] made more improvements and is taking better care of the workmen . . . than at any other similar plant in the State.”

During the spring of 1916 negotiations for a merger with the Eagle White Lead Company approached completion. The development of the Picher field and the great expansion of the company made the merger a promising proposition. The interests of the two companies intertwined at many levels of the lead and zinc business. Integrated operations and complementary product lines offered the new company powerful productive resources and caused great expectations in Joplin as well as in Cincinnati.