HISTORY OF MORENCI, ARIZONA

by

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A Thesis

submitted to the faculty of the

Department of History

in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

in the Graduate College, University of Arizona

1956

Approved: Russell B. Nye, Director of Thesis Nov. 24, 1956, Date

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TABLE OF CONTENTS

ILLUSTRATIONS

PREFACE

The writer has attempted to show the development of Morenci, Arizona, from the time it was first visited by scouts in search of marauding Indians to the present time. Emphasis has been placed on the earlier history of the area. The first part of the work discusses the earlier explorers and prospectors who have left little but their names and some locations they founded. William Church, the founder of the town, is discussed, and after his departure the Phelps Dodge Corporation became an important factor in the town. The mines and the railroads each tell a story, as do the lives of the people.

Morenci is a town of 6541 population located in the Peloncillo Mountains between Eagle Creek and the San Francisco River in eastern Arizona. The town is not directly connected to any main transportation system; the road from Morenci connects in Chase Creek to state highway 666 and the company-owned railroad connects with a branch line of the Southern Pacific Railroad in Clifton, Arizona.

The outstanding feature in Morenci is the great open pit mine. Mining has always been the most important single factor in Morenci, but the development of this new pit revitalized Morenci and saved it from the status of a ghost town.

This work has been compiled through the use of various sources: books, bulletins, mining journals, magazines, newspapers, and personal interviews. The source that has proved of greatest value is the newspaper. Accounts in the newspapers are not always complete and some papers were published for only a few years and then ceased to exist,

but by reading many newspapers a history of the town was available.

Many people have been of great help in this work. Ryder Ridgway of Safford, an authority on Graham and Greenlee counties, contributed much material as well as inspiration. Miss Sarah Sloan, of the Historical and Pioneers Library, and Mrs. Good, of the Archives in Phoenix, opened many new avenues of research. The Copper Era staff in Clifton was most helpful and provided many contacts which aided in this work.

CHAPTER I

EXPLORERS AND PROSPECTORS

Indian scouts were among the first who visited in the Morenci area. The scouts were searching for Apaches who had plundered ranches. Some of these scouts returned to the district and hunted for mineral wealth. Later, Henry Lesinsky, a prospector, created the first settlement in what is now known as the Clifton-Morenci district.

Morenci, Arizona, is situated in the Peloncillo Mountains, six miles west of the San Francisco River,[1] twelve miles north of the Gila River, and six miles east of Eagle Creek.[2] Twenty-five miles east of the town is New Mexico, and one hundred and eighty miles south is Mexico. Morenci Canyon originates south of Copper Mountain and spreads out like an amphitheater in which the town is located. Below Morenci the canyon is narrow but not exceptionally deep, limestone and quartzite forming the walls of the canyon. The countryside consists of barren rocky ridges and hills of a color ranging from the light brownish yellow of the porphyry to the bluish gray of the limestone or the dark brown of the quartzite cliffs.[3] In the area the principal vegetation is yucca, maguey plants, and small cactus.

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1. The San Francisco River originates in western New Mexico and flows into Arizona above Clifton, Arizona. The Blue River flows into the San Francisco and the San Francisco flows into the Gila River about twelve miles southeast of Morenci.

2. See map, p. 3.

3. Waldemar Lindgren, Copper Deposits of the Clifton-Morenci District (Washington: Government Printing Office, 1905), p. 5.

Morenci is in Greenlee[4] County, but at other times it has been a part of Yavapai and Graham counties. The county seat is Clifton, which is six miles from Morenci. In that six miles the altitude rises from 3,466 feet at Clifton to 4,991 feet at Morenci. There is one road out of Morenci, down Morenci Canyon to Chase Creek where the road intersects with Highway 666, or Coronado Trail.[5]

The Indians used this trail as a highway until the white men came; later, Indian scouts used the same trail in search of marauding Indians. In the early 1870's Morenci was in the tract that was considered Apacheland by both Indians and the prospectors. After many of the Indians were placed on the San Carlos Reservation,[6] the Indian problems continued. Morenci is only a few miles east of the reservation. In the 1870's, when agents were changed frequently on the reservation, there were many desertions and recaptures of renegade Indians. Two of the more famous warriors who traveled

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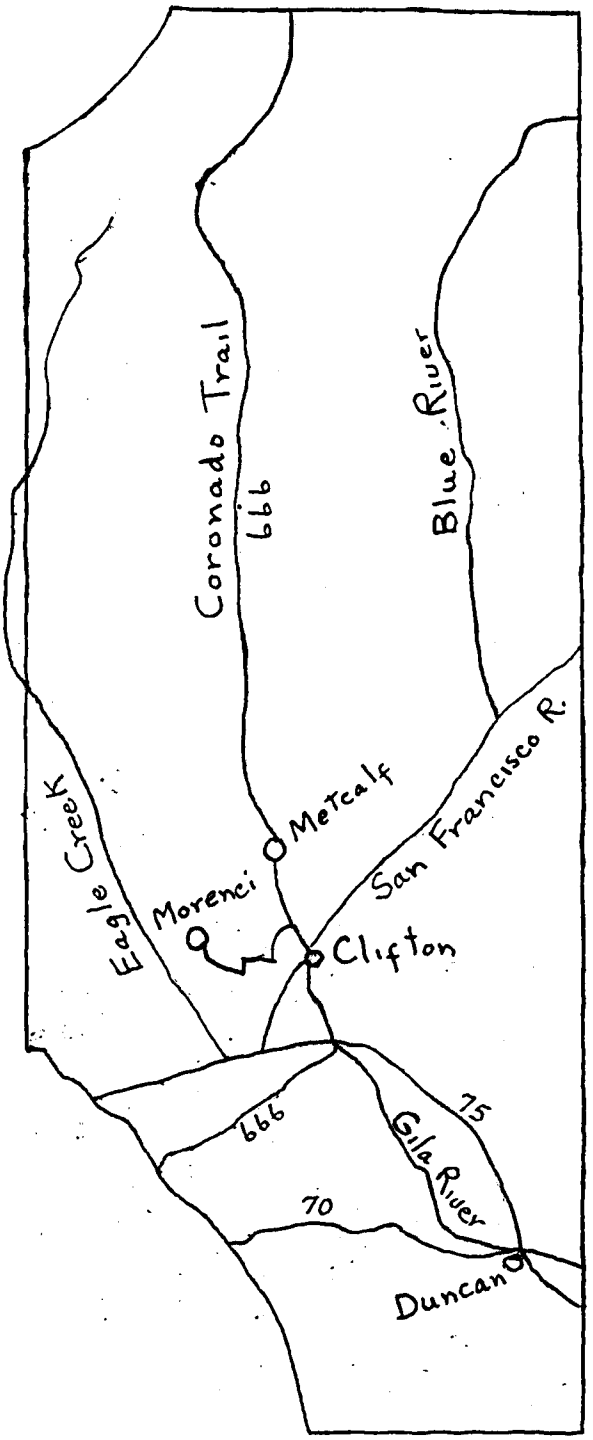
4. Named for Mace (Mason) Greenlee, an early prospector.

5. Some relics have been unearthed in the Duncan Valley which encourage belief that Coronado traveled up the San Francisco River to Clifton and through the White Mountains over what is now Highway 666. An authoritative reference gives the following information: "There is no ground for thinking that Coronado went east from Chichilticale to Clifton, or that he was anywhere near the 'Coronado Highway' (No. 666) which runs over the White Mountains to St. Johns." According to this account Coronado followed the San Pedro River out of Mexico and traveled through Eagle Pass, an opening between the Pinaleno and Santa Teresa mountains. He crossed the Gila River at Bylas, swung around the west end of the Gila Range, and marched northeast to Ash creek. He went north across Natages Plateau and forded the Salt River near the mouth of Bonito Creek. He crossed the White River just below Fort Apache. This route was far west of the trail that bears his name. Herbert E. Bolton, Coronado Knight of Pueblas and Plains (Albuquerque: University of New Mexico Press, 1949), p. 109.

6. The San Carlos Reservation, a part of the White Mountain Reservation, originated in 1872 with the abolition of the Camp Grant Reservation. It was created by an executive order on December 14, 1872. The Works of Hubert Howe Bancroft, History of Arizona and New Mexico 1530-1888 (San Francisco: The History Company, 1889), p. 566.



Greenlee County

through Morenci Canyon in early days were Geronimo and the Apache Kid.

The Indians played an important part in the founding of the Morenci mining district. Scouts who were pursuing Apaches were the first to see the mineral wealth of the place. In 1863 General James H. Carleton, the commander of the California Volunteers, sent an Indian scouting expedition into the district.[7] Carleton wrote to Salmon P. Chase, secretary of the treasury, and Major-General Halleck, in Washington, of the minerals sighted in the district. In his letter, he reported that his scouting parties found gold "as high as forty cents to the pan," and that if he could have enough troops to defeat the Apaches he could have prospecting parties explore the country.[8]

In the summer of 1870 a Captain Chase, a Civil War veteran, led a scouting expedition into the district following Apaches who had been raiding cattle ranches near Silver City, New Mexico. The expedition camped by springs near the present site of Clifton. From this point the scouts scattered in various directions searching for the Indians. Joe Yankie, one of the scouts, following the trail down Gold Gulch[9] toward Morenci, stopped for a drink of water and saw gold in the sand. As Yankie started to collect samples of gold, he was given a signal by another scout informing him that Apaches were near and were signaling to other Apaches in the Gila Valley.

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7. Company A of the First Regiment of Cavalry under Major William McCleave camped at the San Francisco January 31, 1863. At the same time Company C under Captain Edward D. Shirland and Captain Charles P. Nichols camped on the San Francisco River. Richard H. Orton, Records of California Men in the War of the Rebellion 1861 to 1867 (Sacramento: State Office, J. D. Young, Superintendent of State Printing, 1890), p. 79.

8. Thomas Edwin Farish, History of Arizona (Phoenix: Filmer Brothers, 1916), Vol. III, pp. 21-22.

9. About one mile west of the present site of Morenci.

Two of the scouts, Robert and Jim Metcalf, who had followed a trail up Chase Creek, saw the copper ores of what later became known as the Longfellow Mine. Further up the trail the Metcalfs found the green-stained rocks that were typical of the mineral deposits near the place later known as the town of Metcalf,[10] named for Robert Metcalf. Both Yankie and Metcalf determined to come back some day and explore the country for minerals. In February, 1870, the first claim was located in the district by Yankie, Jim Bullard, and John Swisshelm,[11] who came to the district from Silver City, New Mexico. This claim was called the Arizona Central Mine.[12]

When the locators of the Arizona Central Mine had made a ten-foot shaft on their claim, they started prospecting in the surrounding hills. In those days no one was looking for copper; gold and silver were the metals that attracted prospectors. About one mile west of Morenci they discovered some rich gold ore in Gold Gulch, which was considered of more promise than the Arizona Central Mine. Taking samples of the ore, the three men returned to Silver City.

In Silver City they told their story of Gold Gulch and the rich mineral country. The story aroused interest among prospectors and fortune hunters,

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10. Metcalf at one time had a population of 2,868. U. S. Bureau of the Census, Thirteenth Census of the United States: 1910 (Washington: Government Printing Office, 1913), Vol. II, p. 71. Today only the foundations of some buildings mark the site of the former town. Even the graveyard has been moved to make way for the dumping of waste from the Morenci Open Pit Mine.

11. Swisshelm is spelled "Swishelm" in some accounts. Swisshelm will be used in this work. The Swisshelm Mountains near Douglas, Arizona, are named for John Swisshelm, who later prospected in these mountains.

12. Lot No. 38, General Number 4, Plat of the Arizona Central mining claim, in Bureau of Land Management, Department of the Interior, Room 235, Post Office Building, Phoenix, Arizona.

with Isaac ("Ike") Stevens and Robert Metcalf showing perhaps the greatest interest. The samples of ore seemed to justify a trip to the mineral country for a more thorough examination of the area. In July, 1870, a party of forty-six men left Silver City on their way to Gold Gulch.[13]

This prospecting party included Bullard, Yankie, Swisshelm, Stevens, and Metcalf. Before they left Silver City, they made crude "rockers" for washing the gold, the party carrying one rocker to every two men. Some of the men were on burros, some on foot. All the men were carrying tools and were heavily armed to defend themselves against the Apaches. When they arrived in Gold Gulch, they found that the summer rains had not started, and the gulch was dry except for one small water hole. The water was so "coppery" that it was almost unfit for use. Although they prospected for several weeks, waiting for rain, they finally returned to Silver City because of a shortage of food. In Silver City the group disbanded. There seems to have been no other activity in the district until 1872.

Very little work was done on the Arizona Central claim until after the passage of a congressional act on May 10, 1872.[14] According to this act, any citizen could locate and hold a mining claim 1,500 linear feet along the course of any mineral vein or lode subject to location. The lateral extent of the location could not exceed three hundred feet on each side of the middle of the vein at the surface. In order to hold a possessory right to a location made prior to May 10, 1872, not less than one hundred dollars'

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13. Arizona Mining Journal An Industrial Review of the Southwest, Norman Carmichael and John Kiddie, "Development of Mine Transportation," Vol. VIII (December 1, 1924), pp. 7-8.

14. 17 United States Statutes at Large 91.

worth of labor had to be performed or improvements made thereon within one year from the date of such location and annually thereafter. In default of this required labor the claim was subject to relocation by anyone else having the necessary qualifications, unless the original locators or heirs or representatives resumed work before such a relocation. The locator could go down as far as desired vertically, but the surface of another's claim could not be entered by the locator. Parties establishing a claim were entitled to all the dips, spurs, angles, variations, and ledges of the lodes coming within the surface ground.[15] Later an amendment to this act provided an extension of time for the annual assessment work. This act provided protection by Congress instead of by local legislation and customs. After the act was passed, it was necessary to register all locations with the recorder of the district in the county in which the lode was situated.[16] When they complied with the act of 1872, locators of properly-surveyed claims received their patents.

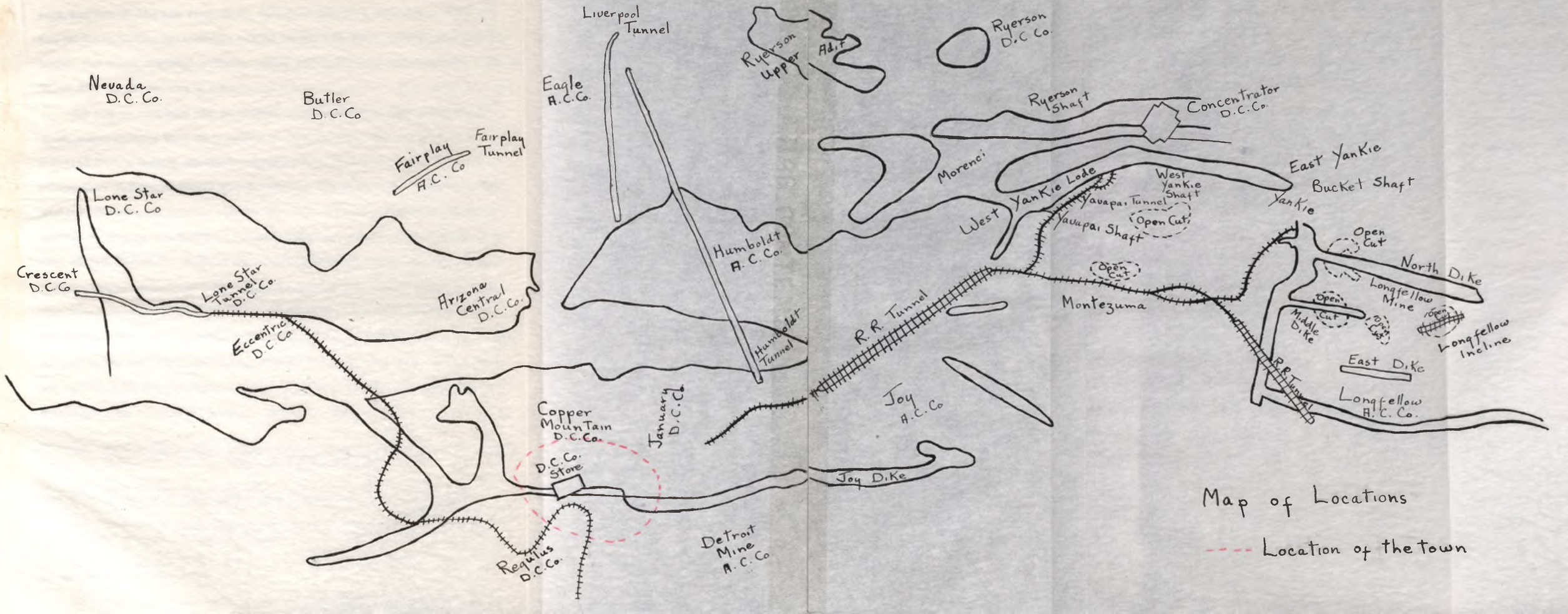
In June, 1872, Colonel William L. Ryerson, Swisshelm, Bullard, and Yankie left Silver City for a trip to the Morenci district, where they established three more claims near the Arizona Central: the Copper Mountain, Yankie, and Montezuma.[17] After the required amount of assessment work was completed, the party returned to Silver City.

In August, 1872, Edwin M. Pearce, who was a mining expert with headquarters in Silver City, secured a bond from Ryerson, Yankie, Bullard, and

15. Richard J. Hinton, Handbook to Arizona Its Resources, History, Towns, Mines, Ruins, and Scenery (San Francisco: Payot, Upham and Company, 1878), Appendix IV.

16. Form will be found in Appendix A.

17. See map for location.



Map of Locations

---- Location of the town

Swisshelm on the four claims they had established in the district. Pearce took samples of the ore from these claims to Detroit, Michigan. While he was in Detroit, Pearce sold the claims to Eben B. Ward, a wealthy steamship owner, for eight thousand dollars. Ward sent a retired ship captain, Captain Miles Joy, to survey his claims.

Joy was to complete the assessment work required by the government which would entitle Ward to a patent on his claims. Joy had been appointed a United States Deputy surveyor, authorized to survey mining claims. At Silver City Joy met Stevens, who had been prospecting near Lordsburg, New Mexico. Stevens accompanied Joy to Morenci. All the properties were claimed by Pearce and filed in Yavapai County as a part of the Copper Mountain Mining District. Each of the claims contained twenty and six-tenths acres. The Arizona Central was surveyed November 9, 1872.[18] The same day, the Copper Mountain was surveyed.[19] On November 11, 1872, the Montezuma[20] and the Yankie[21] were surveyed. Two days later, on November 13, a mill site of four acres was also surveyed.[22] The camp established near these points was called Camp Joy for Captain Joy, a name which lasted for some time but which was later changed to Morenci, after the town of Morenci, Michigan, on

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18. Plat of the Arizona Central mining claim, Lot No. 38, General Number 4, in Bureau of Land Management, Phoenix, Arizona.

19. Plat of the Copper Mountain mining claim, Lot No. 37A, General Number 5, in Bureau of Land Management, Phoenix.

20. Plat of the Montezuma mining claim, Lot No. 39, General Number 7, in Bureau of Land Management, Phoenix.

21. Plat of the Yankie mining claim, Lot No. 40, General Number 6, in Bureau of Land Management, Phoenix.

22. Plat of the Mill Site of the Copper Mountain mining claim, Lot No. 37B, General Number 8, in Bureau of Land Management, Phoenix.

the Michigan-Ohio state line. Maybe it was the birthplace or the home of Captain Ward.[23]

About the same time, Metcalf again arrived in the district and established claims on a hill, which was named for him. He also discovered the Longfellow Mine[24] near present-day Morenci; however, the town that developed adjacent to the mine was known for a long time as the town of Longfellow.[25] Stevens was at this time working on the Yankie claim and adjoining claims, all of which were situated in the Morenci area.

In August, 1872, men who were working on mines in the district came to Joy's Camp to organize what is now known as the Copper Mountain Mining District. At that time the district was in Yavapai County, and all claims were registered in the county seat at Prescott. It was to the advantage of the group to organize a district and elect a recorder who would file the location notices. According to the mining law of 1864, any group of persons, not less than twelve in number, could create a new mining district by holding a meeting, selecting a name for the district, and electing a recorder.[26] Yankie was elected as the first recorder of the Copper Mountain Gold Mining District.[27]

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23. Mining and Metallurgy, May, 1942, p. 301.

24. See map, p. 8.

25. The name has been used in Morenci for the mine, a settlement, a school, and a hotel. Mrs. Maud Metcalf James said her father had no reason for using the name other than that he liked the name.

26. Mining Laws of the Territory of Arizona 1864 (Prescott: Office of the Arizona Miner, 1864).

27. Records are in the Bureau of Land Management, Post Office Building, Phoenix, Arizona.

After the district was organized, Metcalf returned to Silver City to try to obtain financial backing for the development of his Longfellow claim. It happened that nearby in Las Cruces, New Mexico, was a man by the name of Henry Lesinsky, who had the needed money and was interested in mines.

Lesinsky had worked in the gold mines in Australia and in the silver mines in Nevada. About 1868 he arrived in Las Cruces, New Mexico, where his brother, Charles Lesinsky, and uncle, Julius Freudenthal, were doing business as traders. The two took Henry in as a third partner in the enterprise. It was not long until Henry heard that silver mines had been discovered within a hundred miles of Las Cruces, near a settlement that was later to be known as Silver City. Friends who knew of Henry's experience in mining brought him samples of the ore which proved to be rich in silver. He decided to make the journey to the mines to see if it would be to his advantage to participate in the development. When he arrived at the mines, he found that the formations were new to him. Instead of investing in the mines, he opened a store to provide supplies for the prospectors and miners. Thus, he was in a position to gain early knowledge of any important discovery. Placing Eugene S. Goulding in charge of the store, he returned to Las Cruces. Soon after Lesinsky left Silver City, Metcalf called on Goulding and showed him some of the rich copper ore which he had taken from the Longfellow.

Goulding sent the samples of ore to Lesinsky, who had never encountered copper ore, but could see that the samples were rich. The temptation was great, and in a few months a party consisting of Metcalf, Lesinsky, Gould-

ing, and four well-armed men set out for the Longfellow.[28]

The trip was uneventful until fresh Indian tracks were discovered on the trail. Traveling by night and resting by day, the group attempted to elude the Indians. Metcalf, familiar with the country, was sure that even though they lost the trail, they would come to the Gila River, and from there the route would be easy. On the sixth day they traveled up Chase Creek and camped at the foot of what afterwards was known as the Longfellow Incline. The following morning, after hiding their supplies in a cave and climbing the mountainside, they arrived at the Longfellow location and investigated the ore.

When they returned to camp, they found that the Indians had stolen their provisions and horses. Evidently, the Apaches had been following them for days. That night they camped on the banks of the San Francisco River, stopped at the nearest ranch, and secured enough food and a pack horse to make the trip to Silver City.

Appearing to be disinterested in the venture, Lesinsky returned to his business after the trip. Metcalf, too, seemed reluctant to make any business advances. Finally, Metcalf's patience gave way and he asked Lesinsky to be his partner. Lesinsky, a shrewd man, argued that the Apaches would make mining impracticable in the area. Then Metcalf offered to sell a controlling interest for ten thousand dollars. Lesinsky was to furnish supplies from his stores, and Metcalf was to pay in proportion to his interest. On this basis an agreement was made in 1873. Lesinsky returned to Las Cruces to discuss the new enterprise with his uncle and his brother. He offered

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28. Robert Glass Cleland, A History of Phelps Dodge, 1834-1950 (New York: Alfred A. Knopf, 1952), p. 80.

his two partners equal shares in the new venture, warning them that they might make a fortune or lose everything they invested. The three decided to take equal interests and to name the company the Francisco Mining Company.[29] Later the name of the company was changed to the Longfellow Copper Mining Company. The officers of the company were: Henry Lesinsky, president and general manager, Charles Lesinsky, vice president, and Julius Freudenthal, treasurer. Many problems confronted the new company: the Indians, the smelting of the ore, a place to market the metal, and transportation of the metal to market.

The following spring found all three partners busy with different phases of the new business. Henry went to El Paso to hire Mexicans to work in the mines and to smelt the ore. Freudenthal journeyed to New York and made an agreement with Pope, Cole and Company to refine the copper. Charles remained in Las Cruces in charge of the mercantile business, and devoted his time to ordering a supply of materials that would be required in a mining operation.

After Henry Lesinsky met Metcalf and Goulding in Silver City, the party returned to the Longfellow. There Goulding was placed in charge of the operations. The first smelter, known as the Stone House, was erected in Chase Creek. Lesinsky, aware of the skill of the Mexicans in the craft of smelting, left them without interference to build and operate the first smelter in the district. The Mexicans in their native country for many generations had been engaged in mining and smelting copper ore. Their knowledge of mining had been gained from Indian and Spanish ancestors.

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29. Arizona Mining Journal, December 1, 1915, p. 7.

From 1535-50, under the administration of Antonio de Mendoza, much of the mining north of the line of settlement was developed.[30] For many years the Mexicans and Spanish had worked mines in what was later Arizona Territory. From 1855 the Ajo Mine was worked continuously,[31] smelters were erected, and the ore treated there. From this background came the first furnaces used in the Morenci district.

The first furnaces were crude and impermanent; however, they were not difficult to replace. "Sandstone was taken from Silver City to build furnaces at Clifton and it stands well. The first smelting in a furnace built of stone was made in five days and yielded 5,500 pounds in copper and 6,500 pounds of silver ore which was shipped away October 17."[32]

Fuel for the furnaces proved to be quite a problem. Many Mexicans were employed to scour the hillsides and cut mesquite and scrub oak, used to make charcoal. The charcoal was used as the fuel for the furnaces; the blast was furnished by bellows made from cowhides. The hills surrounding Morenci at one time were well covered with a growth of mesquite and scrub oak, but today, the hills are quite bare because of the diligence of the Mexican wood choppers. Later Lesinsky hired Isidor Elkin Solomon, better known as I. E. Solomon, to go into the Gila Valley and to cut the large mesquite trees growing there in order to supply the smelter with charcoal.

Solomon was a member of a Jewish mercantile family that had emigrated

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30. Encyclopaedia Britannica, 14th Ed., Vol. XV, p. 388.

31. Farish, History of Arizona, Vol. I, p. 279.

32. Arizona Citizen, November 8, 1873.

to this country from Germany along with the Lesinskys and the Freudenthals.[33] Solomon married into the Freudenthal family. In 1876 Solomon came west and worked with the Lesinsky-Freudenthal firm for a time in Las Cruces. There he became restless, and Lesinsky gave him the opportunity to supply charcoal for the smelters. At first Solomon worked alone, cutting the mesquite by day and burning it by night to make the charcoal. Before long he had twenty-five teams on the road, cutting trees and hauling the charcoal. He then established a store and an irrigated ranch where he raised produce to supply the Lesinsky stores. An adobe town, called Solomonville, grew and became the first county seat of Graham County.

The provision of fuel for use in the furnaces partially solved the problem, but a satisfactory furnace was still needed. The furnace remained a problem until Louis Smadbeck began to experiment with fire-resisting materials. Smadbeck found that copper, the material at hand, was the best substance to use in the furnace walls.[34]

After the problem of the furnace was solved, the price of copper was down, and Lesinsky was losing money. It was said that the profits from the stores kept the company in business.[35] Flour was sold at ten dollars

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33. Ernest J. Hopkins, Financing the Frontier: A Fifty Year History of the Valley National Bank (Phoenix: Arizona Printers, Inc., 1950), p. 11.

34. Another story relates that Lesinsky, who was a quiet man, was wondering one day what kind of material the gates of hell might possibly be lined with, when one of the workers interrupted him, saying that the furnace had burned through again. Lesinsky noticed nearby a piece of copper plate and told the worker to plug the hole temporarily with it. He was greatly surprised some time later to look at the plate and find it intact. Arizona Citizen, July 21, 1877.

35. The Lesinskys adopted their own system of exchange for trading in the camp. They printed their own money, called "boletas." This money was good for merchandise in the Lesinsky stores. In order to convert it to real money there was a discount of twenty-five per cent. Sunset Magazine, April, 1911, p. 456.

for a hundred pounds; bacon and sugar, each forty cents a pound.[36]

Getting supplies into the camp and sending copper out of the camp proved another problem. At first the Lesinskys hauled supplies from Silver City. These commodities came to Silver City from Independence, Kansas. Later, supplies were shipped from La Junta, Colorado, and Las Vegas, New Mexico, to Silver City and then to Clifton.[37] Provisions were brought by wagon trains, which in turn took the copper from the district. One such wagon train brought from Silver City eight thousand pounds of sandstone and a trial lot of fire brick for the furnaces, a large ore scale, a Roort blower, and forty thousand feet of lumber.[38] The hauling was done by Mexican teamsters who lived along the Rio Grande River. On the trips the teamsters generally stopped for a few weeks to renew acquaintance with their families and to put in a crop before continuing their journey.[39]

Labor in the camp, too, created a problem. It was difficult to keep the men at work because the Mexicans were afraid of Indian attacks. Often the Mexicans would leave camp and not return when Indians were reported in the vicinity. This difficulty was partially solved by bringing in married men with families. To cut expenses, in 1877 the company negotiated with a San Francisco firm for one hundred and fifty Chinese laborers.[40] Chinese labor was desirable because they would work for less than the Mexican laborers, and they would work in dangerous underground passages where the

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36. Arizona Citizen, September 20, 1873.

37. Transactions of Mining and Metallurgical Engineers, Vol. LXX, p. 829.

38. Arizona Citizen, March 21, 1874.

39. Sunset Magazine, April, 1911, p. 456.

40. Arizona Citizen, April 14, 1877.

Mexicans refused to work. It was said that the mines were operated on the "scientific plan of taking ore wherever it could be got easiest."[41] When a series of chambers had been formed, and a great cavern made, the superintendent coolly said, "We can now mine without blasting," and this view prevailed.[42] Labor was a problem, but the partners also had difficulties among themselves.

In 1874, when it looked as though the ore body had been exhausted, Metcalf sold his interest to Lesinsky.[43] The Lesinskys were now the sole owners. Some years after this, Metcalf, through a failure of Lesinsky to do the annual assessment work, relocated the Metcalf mines.[44]

The company continued to make progress after the withdrawal of Metcalf. In 1874 the company built a water wheel and dug a ditch three miles long, capable of carrying enough water to furnish forty horsepower. By this time the company had established six mines: the Boulder Mine, by Henry Lesinsky;[45] the Horseshoe Mine, by Julius Freudenthal;[46] the Coronado, by Morris Lesinsky;[47] the Copper Crown, by William Grant;[48] the Crown Reef, by Louis Smad-

41. Sunset Magazine, May, 1904, p. 62.

42. Ibid.

43. Arizona Bulletin, souvenir edition, published in 1900, says that Lesinsky and Metcalf had a serious disagreement which nearly ended in a killing, and that Metcalf sold his interest in the Metcalf and Longfellow mines for five thousand dollars.

44. See letter from Metcalf's daughter in Appendix B.

45. Plat of the Boulder mining claim, Lot No. 58, General Number 210, in Bureau of Land Management, Post Office Building, Phoenix.

46. Plat of the Horseshoe mining claim, Lot No. 57, General Number 209, in Bureau of Land Management, Phoenix.

47. Plat of the Coronado mining claim, Lot No. 56, General Number 208, in Bureau of Land Management, Phoenix.

48. Plat of the Copper Crown mining claim, Lot No. 54, General Number 206, in Bureau of Land Management, Phoenix.

beck;[49] the Matilda, by Charles Lesinsky.[50] These were defined originally as separate discoveries, but when it was found that they were all on one large vein, they incorporated. These articles of incorporation were filed with the Arizona Secretary of State in September, 1874, with a capital stock of sixty-thousand dollars, which was divided into shares.

The company continued to be burdened with the Indian problem. Warring Apaches made transportation a great risk; therefore, under the guidance of Nicholas S. Davis, a narrow gauge railroad was constructed from Longfellow to Clifton to prevent Indian attacks on the wagon trains. In 1862 Geronimo led a band of Apaches on the warpath. While examining some mines in Gold Gulch during this time, a group of mining men was ambushed by the renegade Apaches. Three of the group were killed and two escaped. The war party then proceeded down Morenci Canyon, killing several teamsters along the way.

This Indian attack disturbed Lesinsky,[51] so that when approached by F. L. Underwood of Kansas City, who offered to find a buyer for the Longfellow property, Lesinsky consulted his partners, who agreed to the sale. A group of Scottish investors of Edinburgh, Scotland, interested in the property, sent William Farish and a professor of chemistry from one of their universities to examine the property and the books. The report was evidently satisfactory, for the Longfellow property was sold to the Arizona Copper Company, of Edinburgh, Scotland, in September, 1882. The three partners in

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49. Plat of the Crown Reef mining claim, Lot No. 55, General Number 207, in Bureau of Land Management, Phoenix.

50. Plat of the Matilda mining claim, Lot No. 55, General Number 205, in Bureau of Land Management, Phoenix.

51. Lesinsky was invited to accompany the group to Gold Gulch but remained at the mine where he thought that he was needed that day.

the Longfellow Copper Company received for their property $1,200,000, which was equally divided among the partners.[52]

The Indians, who originally traveled on trails through Morenci and its environs, departed as the prospectors moved into the area. The mark of the prospector remained as names of claims which were established in the district. Lesinsky, who gambled on the wealth of the mines. created the first settlement, bringing Chinese and Mexicans to supply the labor. After he departed, the community was to forge forward under the guidance of another who was willing to take a risk.

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52. James Colquhoun, The History of the Clifton-Morenci Mining District (London: John Murray, 1924), p. 15.

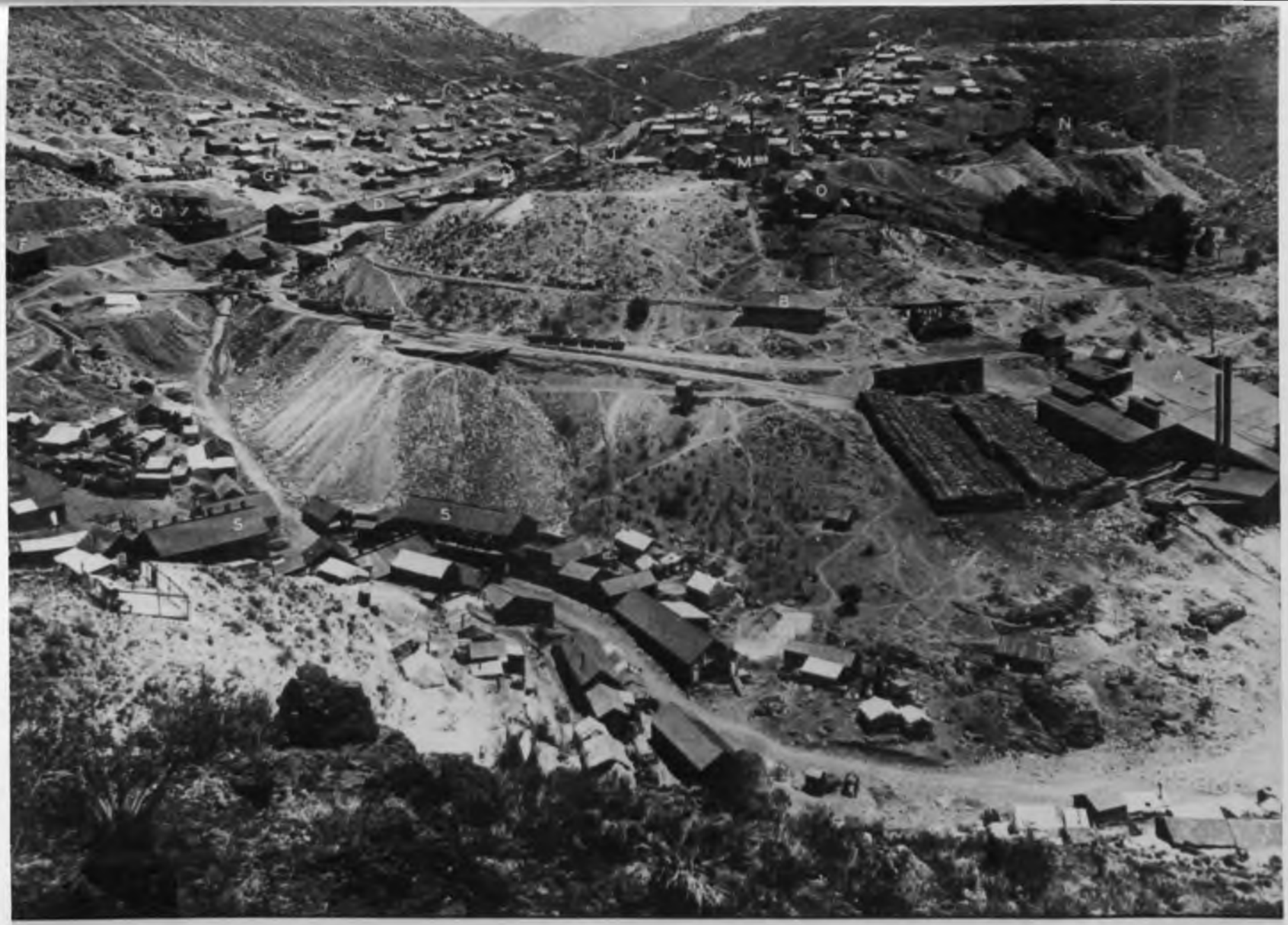
CHAPTER II

WILLIAM CHURCH, FOUNDER OF THE TOWN

By the late 1870's, the Morenci area was little known except by the prospectors and miners from around Silver City. The Lesinskys had established a mining industry on a small scale in the district, and a few people from other parts of the country had purchased claims in the region with the idea of speculation. It remained for William Church to convert the mining claims into a thriving industry and to build a town at the site of the mines.

William Church was born in Quincy, Illinois, on January 22, 1845. After receiving his early education in Quincy, he went to Chicago when he was seventeen years old, where he began business life as a clerk in a book store. There he remained until he was twenty-one, when he left by wagon train in 1866 with a party of friends for Colorado. At that time the danger from the Indians was such that the military regulations of the plains required at least forty armed men in every company attempting to cross.[1] After a safe trip Church settled in Central City, where he engaged in mining for five years. Then he moved from Central City to Georgetown, where he was active in mining as well as acting as purchasing agent for the Boston and Colorado Smelting Company. Remaining in Georgetown four years, he then

1. Letter from Dorothy Stuart to the author, dated June 21, 1954. Dorothy Stuart is Assistant Librarian, State Historical Society of Colorado. The information in the letter was taken from History of the State of Colorado by Frank Hall (Chicago: Blakely Printing Company, 1895), Vol. IV, 2nd ed., p. 499.



-A- SMELTER
-B- OFFICE D C M CO & P O
-C- READING ROOM BUILDING
-D- BOARDING HOUSE
-E- D C M CO'S STORE
-F- LODGING HOUSE
-G- SUPT'S OFFICE
-H- CAGE SHAFT
-J- JOY SHAFT A C CO

MORENCI
1892

-K- SAW MILL
-L- SCHOOL HOUSE
-M- BLUE SHAFT
-N- DETROIT MINE A C CO
-O- RES DR DAVIS & MR FRAISSINET
-P- RES MR SWEENY
-Q- COPPER MOUNTAIN MINE
-SS- SALOONS
-T- CATHOLIC CHURCH

moved to Boulder, where he continued his mining interests.[2] Church was interested in stories he heard of mining activities near Clifton, Arizona, and acquired the stock from the Eben B. Ward estate in the Detroit Copper Mining Company.[3] In 1880, with his brother, John Church, and his brother-in-law, Edward Whiting, he made the journey to Arizona by team. The journey was an exciting one; at this time a band of Geronimo's hostiles were killing people both before and behind the three travelers. Sometimes they camped at ranches, where only a short time before the people had been murdered by the Indians.

The arrival of the party in Joy's Camp was later described by Don Venture Reyes, who, in 1894, was the oldest resident in Morenci. Don Venture and another Mexican were engaged in quarrying Limestone on the hillside for use in the Lesinsky smelters in Clifton, when the three men traveled up the canyon and camped beneath an oak tree.[4] For several days the three men prospected in the area where the school house and post office were located in 1894.[5] One evening, visiting the camp of Don Venture, the three prospectors asked the two Mexicans to have their evening meal with them. Don Venture remembered that they accepted the invitation with some suspicion. When they arrived for the meal, Church offered the guests a drink from a flask. Later in the evening Church made a business proposition which Venture readily accepted. Church asked Venture to cut timber for him to use in the mines and mill that he planned to operate.[6]

2. Ibid.

3. Arizona Mining Journal, December 1, 1924.

4. Tree was located in the part of town that today is the Plaza. Church would not allow the tree to be removed as long as he remained in Morenci.

5. See picture, p. 21.

6. Graham County Bulletin, January 26, 1894.

When Church acquired the shares of Ward in the Detroit Copper Mining Company, he held a controlling interest. The Detroit Copper Mining Company was incorporated in Wayne County, Michigan, and the charter was filed with the Michigan Secretary of State on September 24, 1872. This company had a capital stock of five hundred thousand dollars, and twenty thousand shares worth five dollars each were issued.[7] The company did very little with the claims it possessed other than the annual assessment work. At a meeting in the office of Ward in Detroit, on December 28, 1874, Edwin M. Pearce of Tucson was appointed as agent for the Detroit Copper Mining Company in Arizona. Another group of minutes disclosed that in 1878 the business office in Michigan was located in the law office of Herbert L. Baker. The directors of the company, at a meeting on December 27, 1880, appointed George W. Davison of Clifton, Arizona, as agent to represent the company in Arizona. At a meeting held in Boulder, Colorado, March 3, 1881, the stockholders of the company resolved that the general business office of the company within the state of Michigan would be located in Denver, Colorado. The offices were moved after Church assumed control of the company.[8]

It is impossible to say whether the town received the name of Morenci before or after Church assumed control. When Ward first sent Joy to the camp as his surveyor in 1872, the camp was called Joy's Camp. The name Morenci was taken from the town of Morenci, Michigan, which is on the Michigan-Ohio state line. It is known that Church had no reason to use

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7. See Appendix C for the stockholders.

8. From the articles of incorporation of the Detroit Copper Mining Company which are on file in the Office of the Corporation Commission in Phoenix, Arizona.

that name, and it is believed that Ward was the one to contribute the name of Morenci. It is not known whether Morenci, Michigan, was the home or the birthplace of Ward.[9]

Soon after acquiring his properties, Church began to develop the claims. Some construction was started in 1880. J. W. Evans, of Tucson, contracted in that year to build a mill and several buildings in Clifton for the Detroit Company.[10] The mill building, situated about four miles down the river from Clifton, was eighty-four by sixty-two feet when completed.[11] In the same location a combination store and boardinghouse was constructed, measuring thirty-six by sixty feet. Evans also constructed two cottages at the mill for the use of the Church brothers.[12]

Soon Church found that he needed financial aid in order to continue developing the claims and construction of a mill and smelter. This need for money led him to the Phelps Dodge Company in New York City. The principal business of the Phelps Dodge Company had been the exportation of cotton to England and the importation of tin and other metals to the United States. The Ansonia Brass and Copper Company, a subsidiary of Phelps Dodge, manufactured a great variety of tin, iron, and brass products and used more copper than any other company.[13] However, not until 1881 had this company shown any interest in the actual mining of copper; this interest brought the company in contact with Dr. James Douglas.[14]

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9. Mining and Metallurgy, May, 1942, p. 301.

10. Used in place of the longer Detroit Copper Mining Company.

11. At this time the reduction works were below Clifton and the mines in present-day Morenci.

12. Arizona Weekly Star, November 3, 1880.

13. Cleland, History of Phelps Dodge, p. 32.

14. Co-discoverer of the Hunt-Douglas electrolytic method of treating copper ore. He became interested in the ores of the Copper (cont. on p. 25)

Dr. Douglas first met with members of the Phelps Dodge firm when they called him to their offices to inquire whether smelting works could be advantageously erected on an island in Long Island Sound. The island had been purchased by the Dodge family years before for that purpose. Douglas told them that erecting smelters there would not be practical because soon the western ores would be smelted at the mines. During the conversation, Dodge said that a man had that morning entered their office and, without an introduction, had asked for a loan of fifty thousand dollars with which to build smelters near Longfellow, Arizona. The man requesting the loan was William Church. Church told the Phelps Dodge partners that by obtaining options on all the stock of the Detroit Company, he had secured undivided control of a number of claims adjacent to the Longfellow Mine. He needed money to develop the mines, mill, and smelter. The Dodges were interested because Ansonia was treating Copper Queen ore (Bisbee, Arizona) at the time. Therefore, Douglas was employed by the Phelps Dodge Company to investigate Church's properties and to make a report.[15]

When Douglas arrived he found that the four locations had little more than the annual assessment work to show what could be produced. He was allowed to examine the geological structures on the Longfellow Mine,[16] which had been operated since 1874, and on the basis of this and surface indications he made a favorable report to the Phelps Dodge partners. Ac-

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14. (cont. from p. 24) Queen (Bisbee) sent to Chemical Copper Company of Pennsylvania at Phoenixville, Pennsylvania. Some Eastern investors engaged Douglas in 1880 to go to Arizona to make a report on some newly opened copper mines.

15. H. H. Langton, James Douglas, A Memoir (University of Toronto Press, 1940), p. 59.

16. Owned by the Lesinskys.

cepting the report, the company advanced money to Church to develop the mines and reduction works. In his report Douglas gave some practical suggestions concerning the erection of a furnace and methods advisable for bringing the ore to the furnaces, together with an estimate of the cost. In May, 1881, at a stockholders' meeting of the Detroit Company in Denver, Colorado, it was decided to move the general business office from Denver to the office of the Phelps Dodge Company, No. 13, Cliff Street, New York City. John B. Church was appointed to represent the company in Arizona in the absence of his brother William, although William was the legal representative.[17] The financial aid given by the Phelps Dodge Company was of great help, but Church had other problems.

The immediate problem of the Detroit Company in 1882 was installation of the furnaces. John Williams of Tucson was engaged to install the furnaces. After their installation he remained in camp to operate them. Williams came of a family of experienced copper men; his family was largely responsible for the success of the Bisbee copper reduction works in the 1880's.[18] In April, 1882, the Detroit Company had two twenty-ton smelters, although it was operating only one. Since the ore was hauled by wagon train seven miles from the mines to the smelter, evidently the wagons could not keep the smelters supplied with enough ore to keep both smelters in operation. When a large body of high grade ore in the Yankie and Arizona Central mines was opened by the company in April, 1882, it was estimated that they were producing nearly ten tons of bullion daily with the one fur-

17. From the minutes of the meetings of the Detroit Copper Mining Company which are on file in the Office of the Corporation Commission in Phoenix, Arizona.

18. Arizona Weekly Star, January 12, 1882.

nace.[19] Church was convinced that his mines would produce more copper if the smelter were located at the mines. Moving the smelter from the river involved the problem of getting water to Morenci. Water had been a problem for the company from the beginning of its activity in Morenci.[20] In 1884, after the smelters were moved from the river to the town, the water had to be pumped from the river, a distance of more than six miles with a vertical rise of fifteen hundred feet. Two ninety-thousand-gallon water tanks were constructed to hold a reserve supply of water. The cost of these improvements was one hundred thousand dollars.[21]

New concentrators were in operation in 1886.[22] A tailings dam was constructed allowing the water that had been used in the concentrator to collect and settle in tanks so that it was possible to reuse the water. Since water was difficult to obtain, this was practical. The purpose in concentrating the ore was, and still is, to utilize low grade ores that otherwise could not be profitably reduced to copper.

In March, 1888, the company "blew in the 120 ton furnace,"[23] which indicated that the mines were in full production. William E. Dodge and James Douglas visited Morenci in April, 1888. This is the first record of

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19. Ibid., April 6, 1882.

20. For many years all the water used in Morenci was brought in on burros and sold from door to door.

21. Arizona Weekly Star, June 26, 1884.

22. Some of the appliances used in the concentrator were a Blake crusher, two sets of Cornish rollers, three revolving screens, each three feet in diameter and twelve feet in length, a slime apparatus, consisting of two jigs which separate the concentrates of a fineness of one and one half millimeters and six sets of jigs of varying sizes separating and grading the concentrates. Clifton Clarion, May 12, 1886.

23. Clifton Clarion, March 21, 1888.

any officials of Phelps Dodge visiting the town,[24] which had shown much progress since their initial investment in the Detroit Company.

The moving of the mill and the smelters to the mines had speeded the growth of the town. All the people who worked for the company were now bound together in a compact settlement in the canyon near the mines and the reduction plant. Church now had time to improve production methods.

Church was interested in reports of a new process for reducing copper matte to copper.[25] In July, 1895, Church and James Colquhoun traveled to Bisbee to inspect the Bessemer process for desulphurising copper matte.[26] It was claimed at the time that by using this process more matte could be reduced to copper in a day than could in a month by the process they were using. Impressed, Church installed a Bessemer converter in the same year. New equipment was installed in 1896: a new light plant, two new furnaces, and three new roasters. A large body of ore had been discovered in Copper Mountain, and a four-bin chute was built to handle the ore from this tunnel. In order to get fresh air into the tunnel, one thousand feet of four-inch pipe was placed in the shaft.[27]

The Detroit Company was fortunate in the mineral wealth found on their claims. For many years the Arizona Central was considered the best producer. In 1885 the Montezuma Lower and the West Yankie were reported producing a good quality of first-class smelting ore.[28] Two years later the company was

24. Clifton Clarion, April 4, 1888.

25. A crude mixture of sulphides formed in smelting sulphide ores of certain metals, especially copper, lead, and nickel.

26. See Appendix D for process.

27. Graham County Bulletin, June 7, 1895.

28. Clifton Clarion, December 16, 1885.

working the January Mine as well as the Copper Mountain, Yankie, Montezuma, Ryerson, and the Arizona Central.[29] In 1887 a second smelter was in use part of the time. The Blue Mine, a good producer of high grade ore, was reported as one of the best mines in 1893.[30] This increased production resulted in increased employment.

In 1882 the company had two hundred and fifty men at work in the mines, mill, and reduction works.[31] Some workers were also employed as teamsters. Labor was a problem for the company, but the employees, too, had problems. It was not always possible for the company to get enough workers; those that were accessible were not always the most desirable. The company could shut down at will, but this was a hardship for the employees. The workers had no means of security, and wages were such that they could not save for the time when they might be unemployed. Often the wages caused discontent among the workers of the Detroit Company.

The Detroit Company and the Arizona Copper Company released notices in January, 1885, stating that wages would be reduced two per cent because of the low price of copper. The companies had considered shutting down the mines, but decided that if expenses could be reduced, they could continue to operate. This announcement specified also that as soon as Lake copper was quoted at thirteen cents in the New York market they would restore wages to the old figure.[32] Again in 1887, when wages were reduced, the smelter workers called a strike. This strike did not last long, although wages re-

29. Ibid, May 25, 1887.

30. Graham County Bulletin, July 21, 1893.

31. Arizona Weekly Star, February 2, 1882.

32. Clifton Clarion, January 28, 1885.

mained in a reduced state for some time. In January, 1888, wages were advanced ten per cent.[33]

Church resorted to the use of Chinese labor in January, 1887, sending to El Paso for fifty Chinese to work in the Yankie Mine.[34] Chinese labor had previously been introduced into the district by the Lesinskys[35] for labor in the Longfellow Mine.[36]

The Detroit Company was not oblivious to the desires of the employees. Various holidays were observed by the company, usually in compliance with the wishes of the workers. Work was suspended in order that the Mexican miners could celebrate their independence day in September.[37] The mines also shut down to allow the Mexican miners to observe Good Friday.[38] In spite of these efforts of the company to better the welfare of the people, fear and danger were ever imminent.

An ever-present fear in a mining community where the mines are underground is of landslides which may entrap the miners. In July, 1887, a landslide occurred in the Yankie and Longfellow mines. The first report suggested that the slide started in the Yankie Mine. Church, denying this accusation, explained his belief that it started in the Longfellow Mine: (1) a similar slide in the Longfellow Mine had occurred in 1882, and (2)

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33. Ibid., January 11, 1888.

34. Ibid., January 19, 1887.

35. See above, p. 16.

36. A number of Chinese laborers were buried when a part of the Longfellow Mine collapsed. The story is often heard that when the new pit development was started remains and personal effects were found in this area, supposedly of these victims.

37. Clifton Clarion, September 16, 1885.

38. Ibid., April 19, 1889.

for several weeks before the recent slide heavy scales of ground had been falling in the old workings of the Longfellow.[39] No lives were lost in this disaster, but it was some time before the Yankie was producing again. Few precautions were taken in the early days of copper mining to make the underground levels safe for the workers. The main idea seems to have been to find a vein of high grade ore and remove it in the quickest possible manner. Church did not adhere to this idea; his mines were well timbered and considered safer than others in the district. In 1888 the Yankie Mine was opened by means of a tunnel three hundred and fifty feet long. When making the new tunnel, two well-defined veins of high grade carbonate ore were discovered. Therefore it appears that the slide was more of a benefit than a disaster for the company.[40]

Another fear confronting the people in Church's time was that of Indians. James Moore, after working in Morenci for a time, reported that the Detroit Copper Company had twenty-five stands of guns and ammunition.[41] In April, 1882, Geronimo planned an attack on the mines and the smelter. He divided his braves into groups: one group was stationed in Gold Gulch west of the town; another group held the site of the present smelter, and cut off communications between the mines and the smelter on the river; the third group occupied the commanding position on the mesa, between the mouth of the canyon and the smelter, shooting down teamsters and stragglers and taking all the livestock.[42]

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39. Ibid., July 15, 1885.

40. Ibid., June 2, 1886.

41. Arizona Weekly Star, February 2, 1882.

42. Arizona Bulletin, special souvenir edition, 1903.

Approaching the smelter, one band of the Indians fired into Church's house. Both the Church brothers took refuge in the cellar and returned the fire. Had the Indians rushed the smelter, they probably could have taken it. This move would have been worth their effort because of the ammunition stored there. As a result of this raid the mine and smelter workers organized for future attacks.[43]

Church had trouble, too, with robbers. One evening in November, 1882, three masked men entered the smelter store demanding that the Church brothers open the safe. The robbers took seven hundred and fifty dollars as well as all the guns in the store.[44]

These encounters with the Indians and robbers were minor in comparison to the difficulties arising between the Arizona Copper Company and the Detroit Company. For several years the two companies had existed amicably side by side. The Detroit Company used the Longfellow Incline and Coronado Railroad,[45] to carry their copper to Clifton. In Clifton the copper was shipped on the Arizona and New Mexico Railroad[46] to Lordsburg, New Mexico, where connections were made with the Southern Pacific Railroad. The first misunderstanding between the two companies arose in May, 1895, over freight

43. "The Indians came within two miles of town on the 21st. instant, and killed three of Smythe's teamsters and about all mules belonging to it. The teamsters killed were Bill Baxter, Bud Baity and Mormon Bill. Two other teamsters, recently from Galeyville, were killed and their horses and mules taken from their wagons and run off. This occurred between Church's smelter and his mines. The men were hauling ore. Another group started that morning from Clifton to look at the mines in Gold Gulch seven miles from Clifton. They were ambushed by the Indians and Captain Slawson, Detroit, Michigan, John P. Risque, and H. L. Trescott were killed. Four days ago eleven men, women and children were killed at the Stevens Ranch on Eagle Creek." Arizona Weekly Star, April 27, 1882.

44. Ibid., November 21, 1882.

45. Owned by the Arizona Copper Company.

46. Also owned by the Arizona Copper Company.

rates charged by the Arizona Copper Company. The Detroit Company closed the mines and reduction works, stating that the low price of copper and the low grade of ore made it impossible to operate without a loss.[47] Louis Sweeney[48] conferred with James Colquhoun, general manager of the Arizona Copper Company, but the difficulties were not settled and Sweeney left for New York the following day. It appears that the main purpose of closing was to force the Arizona and New Mexico Railroad to give cheaper rates to the Detroit Company. Previously the Arizona and New Mexico Railroad had made reductions in their tariff, dividing losses with the Detroit Company because of the low price of copper.[49] The New York office sent instructions that George Robison, an engineer for the Detroit Company, was to take a survey party and determine the most practicable route from the company pump on the San Francisco River to the Southern Pacific Railroad. Two routes were considered: one from the pump to Guthrie, a station several miles below Clifton, and the other down the San Francisco and Gila rivers to connect with the Gila Valley, Globe and Northern Railroad, near Solomonville.[50] Within the next two weeks the men were notified to return to work. This decision indicated that some settlement had been made. A rumor circulated that the Detroit Company would move its plant from Morenci to the pump, four miles below Clifton. Moving the plant would have necessitated building a siding from the Arizona and New Mexico Railroad to the plant and a narrow gauge road from Morenci to the plant to convey the ore.

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47. Graham County Bulletin, May 10, 1895.

48. General business manager of the Detroit Company.

49. Graham County Bulletin, May 31, 1895.

50. Ibid., May 31, 1895.

The rumor persisted until August, 1895, when the Detroit Company started work on a new pipe line between the pumping station on the river and the reduction works in Morenci.[51]

After Louis L. Sweeney was made general manager of the Detroit Company, Church spent more time in Denver than in Morenci. In Colorado Church and his brother, John, organized the Golden Pressed and Fire Brick Company to utilize the large deposits of clay found near Golden. There they built a plant which produced most of the brick that was used in some of the better residences and buildings in Denver.[52] John Church was manager of this business, although both held an interest in it. Church visited Morenci whenever Sweeney was away from the town. In March, 1896, after Sweeney's death, Church remained in Morenci to supervise the activities of the company. It was at this time that the Detroit Company sold its holdings to the Phelps Dodge Company. When Phelps Dodge purchased the Detroit Company in the spring of 1897, the original name of the Detroit Company was retained. This transaction was made for $1,500,000, of which Church received $600,000.

For several years prior to the union of the Detroit Company with the Phelps Dodge Company, Church had been gradually selling to the Detroit Company the claims of which he was sole owner. Claims were sold to the company at the following intervals: (1) sixteen claims in 1888,[53] (2) the

51. Ibid., August 16, 1895.

52. Denver Republican, May 26, 1901.

53. These claims were: the Denver, Bonanza, Lady Franklin, Columbia, Prescott, Mikado, Josephine, Rip Van Winkle, Gem, Kingston, Prescilla, Rattlesnake, Evangeline, Minnehaha, Hypenion. Mining Deeds, Books I and II, Graham County, Recorders Office, Greenlee County Courthouse, Clifton, Arizona.

Ben Harrison Mining Claim in September, 1888, (3) six claims in August, 1891,[54] (4) the Montezuma Annex mining claim in 1892, (5) four more claims in 1894,[55] (6) five claims in 1895,[56] and (7) a patented claim, the Chalkos Mining Claim in 1897.

The reasons given for the disposal of the Church holdings were the low grade ore and the expense of processing this ore. Previously the Longfellow Company had been sold to the Arizona Copper Company for the same reasons. After Church had released all his stock in the company to the Phelps Dodge Company he moved to Denver.

Church is credited with persuading all the mining companies in the district to substitute the common law practice of definite vertical boundary lines for the apex rule, and of building in 1886 the first copper concentrator in Arizona.[57] In Morenci Church is remembered as a man of the highest integrity, untiring energy, large sympathy, and a stubborn will.[58]

Church returned to Denver to spend his remaining years. He died on May 25, 1901. Denver remembers Church because he brought new confidence to the city when they were having a difficult time recovering from the panic

54. These claims were: Pelican, Morenci, Hudson, Arthur, General Miles and Fairbanks. Mining Deeds, Books I and II, Graham County, Recorders Office, Greenlee County, Courthouse, Clifton, Arizona.

55. These claims were: Crescent Lode, Lone Star Patented claim, Crown Lode and Dives Lode. Mining Deeds, Books I and II, Graham County, Recorders Office, Greenlee County Courthouse, Clifton, Arizona.

56. These claims were: Colorado Lode, Montana Lode, Annie Ryerson Lode, and the Nevada and Oregon Lodes. Mining Deeds, Books I and II, Graham County, Recorders Office, Greenlee County Courthouse, Clifton, Arizona.

57. Cleland, A History of Phelps Dodge 1834-1950, p. 113.

58. Ibid.

in 1897. He invested in choice property, buying and selling, thus adding to his fortune. He was considered a careful buyer; however, he was liberal in making terms with those from whom he bought and was willing that they should make a profit. Though he belonged to no religious denomination, he gave to philanthropic and educational enterprises. Before the kindergarten became a part of the public school system, Church was impressed with its value, particularly in counteracting undesirable influences in the homes of children. He maintained, at his own expense, several kindergartens as well as a training school for the teachers until kindergartens were made a part of the public school system.[59]

Many changes had occurred in the seventeen years during the leadership of Church in Morenci. Church arrived in 1860 to find a settlement that was aptly named Joy's Camp. The smelter and reduction plant which were moved to the site of the mines encouraged the growth of the district. In only twelve years this small community developed into a typical mining town. Finally the Detroit Company became a part of the Phelps Dodge Company, introducing a new era.

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59. Denver Republican, May 26, 1901, material received by the author from State Historical Society of Colorado.

CHAPTER III

DEVELOPMENT OF THE MINES

It has been said that the story of Morenci is the story of the mines, and that the story of the mines is the story of Morenci. These mines and the locators of these claims gave Morenci its start as a prospectors' camp. The Lesinskys and Church, who were willing to risk developing these claims, brought permanent settlers to the district. Finally Phelps Dodge, through the development of these claims, made Morenci a leading copper town in the United States.

One of the best sources of information concerning the mines in the district is the result of a study made by geologists Waldemar Lindgren and John M. Boutwell[1] in 1901 for the United States Geological Survey. The survey made in the Clifton-Morenci district is known as the Morenci Quadrangle. The headquarters for the team was in Morenci, where work was begun in October, 1901. A preliminary survey was made of the district, then a detailed study, and last an underground survey.[2]

In his report to the government Lindgren listed the various companies in the district as the Detroit Copper Mining Company, the Arizona Copper Company, and the Shannon Consolidated Copper Company.[3] The smaller com-

1. See Appendix H for letter from John M. Boutwell describing Morenci.

2. Copper Era, November 21, 1901.

3. The Shannon Consolidated Copper Company was organized in 1901, and developed property near Metcalf. The company was financed largely by Boston capital. They operated a concentrator and smelter near Clifton and built a thirty-six-inch gauge railroad to their mines. The property was later purchased by the Arizona Copper Company. Mining Journal, May 30, 1929, p. 8.

panies were the New England Mining Company, the Clifton Consolidated Copper Company, Standard Copper Company, Markeen Company, and the Stevens Consolidated Claims. Lindgren determined the population of Morenci to be five thousand in 1901, with the source of labor largely Mexican. The average wage was quoted at three dollars a day for American miners; Mexicans were paid from two dollars and a quarter to two dollars and a half a day; and those employed in common labor were paid from one to two dollars a day.

In the study the geologists compiled a list of minerals known to the Clifton-Morenci district,[4] in which copper was considered the most important at the time.

In the survey they found that the principal mines worked by the Arizona Copper Company were the Longfellow, Detroit, and the Humboldt. The Detroit Company was operating the Arizona Central, the Copper Mountain, the West Yankie, East Yankie, Montezuma, and Manganese Blue.

The report of the geologists included also a brief description of the various mines of the two main companies in the district. In 1902 the Longfellow Mine[5] was producing about seven hundred and fifty tons of seven per

4. The more important minerals listed in the study were:

Copper	Limonite	Molybdenite	Epidate
Gold	Pyrolusite	Chalcocite	Biotite
Quartz	Coronadite	Covellite and bornite	Asbestos
Chalcedony	Cuprite		Kaolin
Zircon	Pyrite	Feldspars	Glauconite
Rutile	Chalcapyrite	Copper-pitch ore	Willemite
Magnetite	Zinc blende	Garnet	Calamine
Hematite	Galena	Amphibole	Chrysacalla
		Pyroxene	

Waldemar Lindgren, The Copper Deposits of the Clifton-Morenci District, Arizona (Washington: Government Printing Office, 1905), pp. 101-114.

5. Claimed to be the oldest mine in the district. The Lesinskys smelted the ore in a comparatively primitive way and transported the bullion by wagon to Silver City. It was necessary that the ore run at least twenty per cent copper in order to make the business profitable (cont. on p. 39)

cent ore per month. Lindgren reported that this ore was being taken from various points in the old workings, but the ore bodies were practically exhausted in this mine at that time. Outcroppings were first found at an elevation of 4,900 feet. The ore bodies under these outcroppings were partly worked by open pits[6] and partly by excavations underground for removal of the ore. The surface had collapsed and formed three large irregular depressions, causing the entire hill to settle. The workings in 1902 consisted of tunnels on four levels; the first, on the railroad level, and the fourth, two hundred feet below the first.[7]

The Humboldt Mine, located in the center of town at the southeastern foot of Copper Mountain, was described in 1902 as the largest producer for the Arizona Copper Company. The large bodies of chalcocite which were discovered about 1892 had been worked since that time. Up to May, 1902, the Humboldt was reported to have produced seventy-seven thousand tons of f first-class ore. The output in 1902 was approximately eight hundred tons of second class ore per day; this included the Fairplay Mine. The Humboldt tunnel (elevation, 4898 feet) entered from the southeast side of Copper Mountain, one hundred and eighty-two feet below the Liverpool level. The uppermost level was the Liverpool tunnel (elevation, 5076 feet), starting from the northwest side of the Copper Mountain and developing the lodes

5. (cont. from p. 38) at that time. It was necessary in order to make money that they stope only the richest pockets - and in doing so they left the ground almost wholly untimbered, and practically unprotected from collapsing. Timber for use in the mines was difficult to obtain and when available, very expensive. The company used as little timber as immediate safety required.

6. See map of mines, p. 8.

7. Lindgren, op. cit., p. 233.

between the Fairplay and Ryerson mines.[8]

The Detroit Mine, which was discovered in 1884, for some years produced several thousand tons of ore a month. This mine had a rich deposit of carbonates and cuprite in limestone. The ore bodies were opened by means of the Detroit Shaft, which was two hundred and twenty-four feet deep with four levels. The workings connected with the upper levels of the Joy Shaft, situated four hundred feet to the northeast from this point. The elevation was 4,889 feet. The Detroit Mine was located on the east side of the great Copper Mountain fault.[9]

Another mine owned by the Arizona Copper Company, enclosed on all sides by the properties of the Detroit Company, was the Yavapai. Producing porphyry and chalcocite ores, the Yavapai in 1903 had an average production per month of eight hundred and ninety-eight tons of first class ores and one thousand, six hundred and seventy tons of second class ores. This mine was developed by about three thousand feet of drifts[10] and winzes,[11] whereas the main Yavapai Shaft was one hundred and eighty feet deep, with an elevation of 4,863 feet.[12]

The Joy Mine, owned by the Arizona Copper Company, was situated between the Manganese Blue and Montezuma. This mine produced good smelting ore.

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8. Ibid., pp. 272-73.

9. Lindgren, op. cit., pp. 240-42.

10. A mine passageway driven on, or parallel to, the course of a vein or rock stratum.

11. A steeply inclined passageway driven to connect one mine working place with another at a lower level.

12. Lindgren, op. cit., pp. 269-70.

Opened by the Joy Shaft, the mine had four levels which connected eastward with the Detroit Mine on the two upper levels. In 1902 this mine was being worked from the Humboldt Shaft.[13]

The Fairplay veins, owned by the Arizona Copper Company, were on the west side of Copper Mountain. The Fairplay Tunnel had an elevation of 5,096 feet. This location produced concentrating ores, primarily chalcocite and pyrite.[14]

In 1902 one of the most important producers of the Detroit Copper Mining Company was the Arizona Central Mine located in the western branch of Morenci Canyon on the outskirts of the town. Chalcocite ore of a high grade was produced in this mine, which was opened by the Arizona Central Shaft at an elevation of 4,887 feet.[15]

In the center of town was the Copper Mountain Mine, owned by the Detroit Company. There the deposits were largely carbonate in limestone. The mine opening on three levels, had as its principal outlet the lower tunnel, which opened on the railroad level immediately back of the Detroit Company store at an elevation of 4,874 feet.[16]

The Manganese Blue Mine,[17] situated in the center of Morenci, was confined in the limits of the Copper Mountain claim. By 1902 its bodies were nearly exhausted. The property had been developed by the Old Blue Shaft,

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13. Lindgren, op. cit., p. 357.

14. Ibid., p. 278.

15. Ibid., p. 275.

16. Ibid., p. 276.

17. For many years this mine had been the main support of the Detroit Company.

four hundred feet deep, but was abandoned in 1902. The works in 1902 were north of the old workings and were opened by the Blue Shaft, situated five hundred feet northeast of the Detroit Company store. This mine, too, had four levels, the lowest having an elevation of 4,478 feet. Here the ores were found in limestone and shale deposits.[18]

The Ryerson Mine, considered one of the most important belonging to the Detroit Company in 1902, was situated about two thousand five hundred feet north of the center of town on the northeast stopes of Copper Mountain. The shaft had a surface elevation of about 4,990 feet. This mine was developed by drifts and crosscuts[19] with the western part of the mine opened by the Ryerson and West Yankie shafts. Ores in this mine of chalcocite type averaged an output in 1902 of over two hundred tons a day of concentrating ore, besides some high grade ores.[20]

Located south of the Yavapai on the north side of the gap between Copper and Modoc mountains and at the northern portal of the Montezuma railroad tunnel was the Montezuma Mine. Much of the ore in this mine was of a high grade. The elevation was 4,904 feet, and the total developments in the mine were about one mile in length.[21]

The East Yankie Mine was located on the Yankie claim, a part of the Longfellow ore body. The mine was situated in the little gulch descending toward Concentrator Canyon from the Longfellow Gap. The mine was developed by the Bucket Shaft at an elevation of 4,750 feet.[22]

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18. Lindgren, op. cit., pp. 245-47.
19. A mine working driven at right angles to an adit, drift, or vein.
20. Lindgren, op. cit., p. 260.
21. Ibid., p. 255.
22. Ibid., p. 250.

The Detroit Company in 1902 was exploring on the western side of the district by means of the Lone Star Tunnel. The east portal of this tunnel was situated in the west branch of Morenci Canyon, eight hundred feet west southwest of the Arizona Central Shaft. Piercing the ridge entirely, the tunnel, which was 2,700 feet long, emerged at the head of Gold Gulch on the west side of the ridge.[23] The Butler Tunnel, thirty-two hundred feet in length, was on the north side of the gulch opposite the Lone Star Tunnel and also pierced the ridge entirely.[24] Various other tunnels pierced ridges, some for transportation purposes, such as the one on Longfellow Ridge, which connected with the Longfellow Incline at an elevation of 4,780 feet.[25]

Lindgren reported the output for the Arizona Copper Company in 1902 as 42,020 tons per month.[26] The daily production of copper ore, in tons, from the mines of the Detroit Copper Company was, in 1902, one hundred and twenty-eight tons of smelting ore and three hundred and thirty tons of concentrating ore.[27] At the time of this survey the cost of mining was be-

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23. Ibid., p. 279.

24. Ibid., p. 280.

25. Ibid., p. 226.

26.

	Tons Per Month
First Class Ore (Humboldt Mine)	3,500
Second Class Ore (Humboldt Mine)	28,600
First Class Ore (Metcalf Mine)	920
Second Class Ore (Metcalf Mine)	9,000

Lindgren, op. cit., p. 46

27.

	First Four Months of 1902	
Mine	Smelting Ore	Concentrating Ore
Ryerson	90.80	211.33
Arizona Central	26.75	65.80
Copper Mountain	11.12	53.60
Total	128.67	330.73

Lindgren, op. cit., p. 36

tween one dollar and a half a ton to two dollars a ton.[28]

The Detroit Company ranked in 1902 as the fourth among the large producing mines of Arizona. The figures presented were between 1,300,000 pounds and 1,400,000 pounds of copper a month.[29]

The mines discussed so far were largely developed by tunnels and shafts, a fact which indicated that most of the work was underground. The Arizona Copper Company owned an area called the Clay Orebody which extended into the Detroit Company's holdings. When the Arizona Copper Company sold their property to the Phelps Dodge Corporation in the early 1920's, the most valuable part of this property was the Clay Orebody.

The first coordinated exploration of the Clay Orebody, by the Arizona Copper Company, began in 1903. The Clay vein, second class ore, was discovered in 1904, and for about twenty years the company continuously mined three to four per cent copper. In 1908 the low grade ore body was discovered, six hundred feet from the Clay Shaft and twenty feet below the main adit.[30] Exploration of the area disclosed that there was widespread mineralization of one and one half per cent to two per cent copper. The Arizona Copper Company continued their exploration, and from 1912 to 1917 blocked out over forty-seven million tons of ore. From 1918 to 1920 the company mill tested sixty-one thousand tons of low grade ore to determine a profitable method of extraction. In 1914 the exploration with churn drills was started in conjunction with underground development by the Detroit Company in the Colorado area adjoining the Clay.[31]

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28. Lindgren, op. cit., p. 35

29. Governors Report 1904 (Washington: Government Printing Office, 1904), p. 43.

30. A nearly horizontal passage from the surface.

31. Copper Era, April 21, 1943.

After Phelps Dodge acquired the Clay group of claims, they continued with a program of testing and sampling. In 1928 a drilling campaign was started to sample the ore and determine the extent of the ore body. Diamond drill holes were spaced at four-hundred-foot intervals, twenty being drilled from the surface and fifty-five from underground. A total of 23,835 feet was drilled. The core and sludge were saved from 22,763 feet. To check this drilling a selection was made of three blocks of ground which were drilled with holes at fifteen-foot intervals. Along with this drilling the company made parallel tests between a small piolet plant and a leaching plant for treating the ore. Since the results from both plants were almost equally promising, it was determined to adopt the usual method of concentrating.[32] In 1937 the decision was made to use the open pit development for the Clay Orebody. The operation required that fifty million tons of material be removed from the mountain in the initial development.[33] The following steps started the work: (1) two million tons of ore were sent to an experimental mill; (2) thirteen mining benches were established; (3) thirty miles of standard guage railroad and track were laid; (4) twenty miles of haulage road were built; (5) and ten miles of railroad track between Clifton and Morenci were standardized.[34] In order to determine the best metallurgical methods and equipment to be used, a large-scale test was carried on in the old No. 6 Concentrator in Morenci.[35] Various kinds of grinding and flotation equipment were tried out in the plant, which

32. Mining and Metallurgy, May, 1942, p. 248.

33. The waste was dumped in Fairbanks Canyon, north of the pit, and later in Coronado Canyon.

34. Mining and Metallurgy, May, 1942, p. 250.

35. Ruins of this concentrator are just above the present high school and football field.

handled about fifteen hundred tons a day from a portion of the open pit mine.[36]

One of the most important problems was the financing of the new project. The company raised twenty million dollars from the sale of debentures and laid aside the balance from earnings. In 1937 the company arranged a public offering of $20,285,000 of convertible three and one half per cent debentures.[37] After the financial problem was solved, they were ready to start work on the new plant.

A new plant site was selected half way between Morenci and Clifton.[38] The mountainous nature of Morenci provided only this one piece of comparatively flat land for the reduction works. At first there was a question as to whether this spot was suitable, as it consisted principally of a series of narrow ridges;[39] however, some of the ridges were cut down. Today the entire reduction works for the Morenci Mine is located at this site. The smelter chimney, one of the largest reinforced concrete smelters ever built, can be seen many miles distant.

Below the smelter, liquid tailings,[40] covering about a thousand acres,[41] flow downhill, build their own dams, and level off behind the dams. The chalky white residue from a distance looks like salt beds.

The open pit development was under the direction of P. G. Beckett,

36. Mining and Metallurgy, May, 1942, p. 249.

37. Ibid.

38. This location was formerly known as Bunkers.

39. Mining and Metallurgy, May, 1942, p. 258.

40. Liquid waste from the concentrator.

41. National Geographic, September, 1953, p. 362.

vice president of Phelps Dodge, and Harrison M. Lavender, the general manager. The Anaconda Company loaned the services of Wilbur Jurden, who served as chief designing engineer. After the plans for the project were made in New York, much of the testing was done in laboratories, test mills, and the Douglas smelter.[42]

During the second World War, in the 1940's, labor was a problem for the company. The mine was an essential industry. At this time Indians, both Navajos and Apaches, were employed, many of them remaining after the war. Women were employed to work in the reduction plant because of the scarcity of manpower. A few women remained, and today, in 1955, a few still work in the plant.

Today, in the spring of 1955, the mine is never idle. Men work around the clock, in three shifts, both in the mine and the reduction plant. The policy in the last few months has been for everyone to work twenty-six straight shifts, with a general shut-down for two days.[43] During the shut-down a skeleton crew is maintained, as it is necessary to keep certain parts of the plant ready for operation at all times. As a result of this tremendous activity, this open pit mine today is the second largest copper operation in the United States.

Begun in 1937, the Morenci Open Pit Mine was a fabulous undertaking and a tremendous gamble on the part of Phelps Dodge. Since the first four claims had been established in the district, mining in Morenci has made steady progress and a reputation as a leading copper camp. The story of Morenci was once the story of the mines; today the story of Morenci is the story of the Open Pit Mine.

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42. Mining and Metallurgy, May, 1942, p. 247.
43. This work schedule has been in effect during 1954-1955.

CHAPTER IV

GROWING PAINS

After the foundations of Morenci were laid by William Church, the finishing touches were added by the Phelps Dodge Company when it assumed control of the Detroit Copper Mining Company in 1897. Moving the town site to a higher location, the new owners constructed buildings that are in use today. Soon the citizens, displaying a civic interest in the town, introduced improvements. Meanwhile, those who worked for the company gave vent to their grievances in three serious strikes. Then, in 1917, Phelps Dodge purchased the holdings of the Arizona Copper Company and became undisputed owner of the town.

When Phelps Dodge purchased the Detroit Company in 1897, Charles E. Mills was selected as the superintendent of the company's holdings in Morenci. At this time Morenci consisted of two parts: the town in the canyon, which ladies called "Old Town" and everyone else called "Hell Town"; and the residences made of adobe, tin cans, dry goods boxes, barrel staves, and anything else that could be nailed or plastered. The business section of Morenci, largely saloons, dance halls, and gambling houses, soon was reputed to be the toughest town in the area.[1] Shortly after Mills became

1. Mrs. Ringgold said in her book, "Morenci was, with the exception of Tombstone, the toughest camp in Arizona." Jennie Parks Ringgold, Frontier Days in the Southwest (San Antonio: The Naylor Company, 1952), p. 50.

John Boutwell, geologist for Phelps Dodge, recalled that very few mornings passed that a corpse was not found down the canyon in the days of "Old Town." Letter from John Boutwell in possession of Mrs. Russell Jones, 6231 E. 16th, Tucson, Arizona.

superintendent, fire destroyed "Old Town." The morning after the fire, notices to vacate were placed in the burned area, and a crew of workers graded the old town site. At the same time a new town site was graded, where the Morenci business section is now located.[2]

In the early part of 1901 the new company store was completed.[3] Harry S. Van Gorder drafted many of the plans for it. In 1900 a contract to construct the present building was awarded the Gillette Herzog Manufacturing Company. The architect and builder was Peter W. Delancey.[4] Constructed of steel and local building stone at a cost of one hundred and sixty-one thousand dollars, the store opened for business in March, 1901. At that time this establishment was an institution sponsoring the baseball team, serving as a meeting and loafing place, and housing the post office and train depot. It even offered delivery service, by muleback. The building of four floors, which is still in use today, was said to be the finest in the territory at the time of its completion. At the present time, in addition to this store, the company maintains similar businesses in Stargo, Plantsite,[5] and Clifton.[6] In 1911, because volume of trade in the stores located in other Phelps Dodge mining towns had increased so much, a transfer was effec-

2. Ernest J. Hopkins, Financing the Frontier (Phoenix: Arizona Printers, Inc., 1950), p. 9.

3. The store had its beginning in 1885, when William Church built the first store where the Royal Theater stands today. P. A. Balcom was the first store manager. Balcom was also chief clerk and postmaster. In 1892 Harry S. Van Gorder became store manager and postmaster. Copper Era, May 13, 1955.

4. Copper Era, May 13, 1955.

5. Residential areas for the employees of the company, both constructed since 1938.

6. The main store in Morenci has been completely remodeled and is a complete department store.

Morenci Club

Hotel Morenci

Phelps Dodge Company Store

Taken about 1937

Picture obtained from Risdon Studio, Clifton, Arizona

ted from the various branches of the company to the newly formed Phelps Dodge Mercantile Company. This move enabled the new company to purchase larger quantities of stock and produce. Even today each branch has central management; Arthur Smith manages all the stores in the Clifton-Morenci district.

A hotel was constructed adjacent to the store in 1901 by the same contractor, Delancey, who had built the store. This building, which followed a Moorish style of architecture, is in use today as the Hotel Morenci, although it has been completely remodeled in recent years. The plans for the hotel were prepared by Frost and Rust of Tucson. The original three-story building measured eighty by eighty feet on the ground floor. Located on the lower floor were the hotel lobby, the bank, and the post office; the second floor included offices, parlors, a guests' dining room, and a banquet room accommodating two hundred; and the third floor contained the guest rooms with accommodations for fifty.[7] Today, in 1955, situated on the ground floor of the hotel are the public library, the Water Company office, the Gas Service office, an insurance office, and a beauty shop. The remainder of the hotel is devoted to the lobby and guest rooms; there is no facility for dining.

In 1899 the company had erected the Morenci Club for its employees. The club had the following facilities: billiard and pool rooms, bowling alleys and baths in the basement; library, reading room, card, checker, and chess room, and gymnasium on the first floor; and club rooms on the second floor. Membership dues were $1.25 a month or $13.00 a year.[8] The Morenci

7. Copper Era, December 19, 1901.

8. Arizona Bulletin, special souvenir edition, 1903.

Club today is in the same building, although some changes have been made. At the present, in 1955, it is a three-tiered building of wood covered with expansion metal and stucco. Practically the same facilities are provided. now as were provided when it was first built. A second club, for the Spanish-Americans, is also maintained in the town.

All the building and improvements in the formative years were not confined to the efforts of the company. Two citizen-sponsored companies made additional improvements to aid health conditions and housing.

For many years the death rate in the town, as a result of typhoid fever and dysentery, had been exceedingly high. When George Robison, engineer for the Detroit Company, arrived in Morenci in the 1890's, one of the most frequent occurrences was the funeral of a child, generally as a result of typhoid fever or dysentery.[9] The situation was so deplorable that many citizens, among them the Robison family, determined to leave the town unless a good supply of water was made available.

As a result of the citizens' demands, the Morenci Water Company was organized on October 8, 1898. Formerly the supply of water had been furnished by the company from the San Francisco River. This source of water was unsatisfactory because of the mud and salts in the water. The river water had to be set aside to settle in barrels for several days before it could be used. The new source of water was a well five miles west of the town on Eagle Creek. The company installed a pumping station and by means of a four-inch pipe line forced the water up an elevation of fifteen hundred feet to the tanks situated three hundred feet above the town.[10] Most re-

9. Statement by Miss Merna Robison, daughter of George Robison, in a personal interview, May 15, 1954.

10. Arizona Bulletin, special illustrated edition, 1900, p. 23.

sponsible for the organization of the water company was Gordon McLean, the mine foreman. The officers of the company in 1900 were Gordon McLean, president; Harry S. Van Gorder, secretary and treasurer; W. J. Davis, Louis D. Ricketts, Gordon McLean, directors; and M. E. Thorpe, superintendent. After water was obtained from a safe source the general health of the town improved. The new water system also made it possible to build houses on higher ground. Improvements have been made in the Eagle Creek pumping station and in the pipe line, but water is still brought to the town from Eagle Creek.

Water presented difficulties even after an adequate supply and a safe source seemed assured. A tank, with a twenty-thousand-gallon capacity, was placed on the hill above the store in 1901, for the use of the Morenci Southern Railroad and for reserve in case of fire. At the same time an eighty-thousand-gallon tank was constructed at the smelter.[11] In September, 1901, a nine-thousand-gallon tank above the smelter collapsed causing a great amount of damage. Houses in the path of the flood were filled to a depth of two feet with mud; one house was lifted and carried fifteen feet. The old school house was wrecked and carried over against Gordon McLean's house. The Morenci Church lost all their hymn books in the flood. When the tank collapsed, work had already started on a new metal tank twenty-seven feet, four inches high and thirty-seven feet, eight inches in diameter. The new tank held two hundred and thirty thousand gallons of water.[12]

In July, 1905, Ben Williams,[13] of Los Angeles, was elected director in

11. Copper Era, June 20, 1901.

12. Ibid., September 12, 1901.

13. Discoverer of the Copper Queen Mine in Bisbee.

the Water Company to fill the vacancy left by the death of McLean. At the same time Ricketts was elected president of the company. It was decided at this time to issue and sell bonds in order to make some improvements.[14] Soon after the bond sale a new pipeline was completed. In the same year W. C. Crawford took a census for the Water Company. This census was used in several ways: (1) the houses lying on the Detroit Company ground were renumbered; (2) it was used as a check on the families and single men in the town; (3) it was used as a school census.[15] The Detroit Company from this census evidently determined who was living on its ground in order to collect a ground rent from the squatters. They issued a notice in the paper which stated that beginning April 1, 1905, a monthly ground rent of one dollar would be charged house owners for each house located on company ground.[16]

The Morenci Improvement Company was the second company organized by a group of citizens to improve the town. This company, incorporated in 1900, was established to build houses. The officers in the company were Gordon McLean, president; Harry S. Van Gorder, secretary and treasurer; M. E. Thorpe, manager. By March, 1901, the company constructed more than fifty residences of three to five rooms renting for twelve to twenty dollars a month. They also built a forty-two-room lodging house with connecting barber shop and bath.[17]

The third citizen-sponsored improvement was the creation of the first

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14. Morenci Leader, July 15, 1905.

15. Ibid., October 28, 1905.

16. Ibid., October 14, 1905.

17. Copper Era, March 7, 1901.

bank in the area. In 1899 the nearest bank was in Tucson or El Paso. The story of the bank began in March, 1899, when A. G. Smith, who had worked in a bank in Denver, decided to come West. Smith contacted Van Gorder, head bookkeeper for the Detroit Company, to ask about banking opportunities in Morenci. Under the leadership of Charles Mills, superintendent of the company, and Ricketts, Morenci was in the midst of a boom. Van Gorder, realizing the need for a bank, sent for Smith. When Smith arrived, Van Gorder sent him to Solomonville to talk to Isidor Elkin Solomon about starting a bank at the county seat, then in Solomonville. Van Gorder was aware that Solomon, the richest man in Graham County, had the capital to start a bank. Solomon hired Smith to work as secretary in his general store while he conferred with his associates concerning the banking proposition.[18] In October, 1899, a stock subscription list was in circulation with shares selling at one hundred dollars a share. Solomon invested six thousand seven hundred dollars in the bank, Freudenthal invested four thousand two hundred dollars, and Van Gorder invested five thousand dollars in the name of his sister, Emma V. Pickett. In January, 1902, the Gila Valley Bank was reorganized under the name of the Gila Valley Bank and Trust Company, and the first branch bank was established in Morenci. In 1902 Morenci was ready for a bank: the experimental concentrator[19] for low grade copper was a success, and the town on its new site was completed. In order to expand, it was necessary to sell more stock in the bank. The most prominent men in the town were the company officials; therefore, it was natural that they endorse the movement for a bank. Investing ten thousand dollars, Mills[20] subscribed

18. Hopkins, Financing the Frontier, p. 11.

19. Dr. Ricketts planned and supervised the building of this concentrator.

20. See Appendix E.

for one hundred of the new shares, thus becoming the largest single stockholder in the bank. McLean bought thirty shares valued at three thousand collars, and Van Gorder subscribed for ten shares in his own name. John Langton, consulting engineer for Phelps Dodge, bought ten shares. Mills encouraged Walter Douglas to buy ten shares for himself and ten shares for his sister, Elizabeth Douglas. Others in Morenci subscribed for a total of one hundred and fifty shares, whereas Clifton subscribed for sixty shares.

The Morenci branch of the bank occupied quarters in the new hotel. On the same floor was the office of the Morenci Water Company and the Morenci Improvement Company. The office housing these two companies had an outside entrance, and it was arranged that the bank, too, should be in that office and that M. E. Thorpe, manager of the two companies, should operate the bank. This was an economical plan for the following reasons: the quarters were rent free, the bank paid Thorpe nothing for his services, and the only expense was the hiring of an accountant to keep the books of all three concerns in one office.[21] Today, in 1955, the bank is the Morenci Branch of the Valley National Bank. It is housed in its own building adjacent to the Episcopal Church and across the street from the square.

The company-sponsored improvements produced a better town and encouraged better relations between the company and the employees. The citizen-sponsored improvements benefited the health and housing conditions, thus encouraging an educated and cultured group of people to make Morenci their permanent home. Nevertheless, in spite of these improvements, the working people had grievances which were made evident by three serious disputes terminating in strikes.

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21. Hopkins, op. cit., pp. 81-82.

The dispute in 1903 grew out of a disagreement over wages in connection with an act of the Arizona Territorial Legislature which established the eight-hour day for underground work. The strike, which resulted in some violence and bloodshed, lasted nearly a month.[22] The miners of both the Arizona Copper Company and Detroit Company were involved in the dispute. In all the Morenci mines the companies employed principally Mexicans and foreigners, while Americans were employed as shift bosses over the laborers.

The leader in this strike was Jack Laustenneau, a Roumanian, who had been working for the Detroit Company for nearly a year. Laustenneau was called "Three-Fingered Jack" by many of the employees, although the Mexicans generally called him "Mocho," which means crippled hand.[23] Laustenneau had some education and was quite shrewd. He encouraged the men to demand better working conditions and a wage increase of twenty-five cents a day. Working conditions were in a deplorable state. Change rooms were not provided, so men came off shift in wet clothes and walked to their homes. When the demands were presented in May, 1903, to Mills, the superintendent, he refused to listen to them. Previously the strikers had sent to Nacozari, Sonora, for a man by the name of Alvarez[24] to come to act as their mediator. When Alvarez arrived, the strike was called.

At the time of the strike Jim Parks was sheriff in Graham County, while Dave Arzatte, better known as "Little Dave," was a deputy in Morenci. One of the policies of the law enforcement officers was to cultivate the friend-

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22. Cleland, op. cit., p. 170.

23. J. H. Bassett, "Notes Dictated for the Arizona Archives While He Was in the Arizona Pioneers Home, March 15, 1936" (Arizona Archives, State Capitol, Phoenix, Arizona), p. 3.

24. Alvarez was well liked by the Mexicans because he had a good education. Inquiry did not reveal the first name of Alvarez.

ship of any of the foreigners who seemed to possess leadership in their group. For this reason Parks had fostered the friendship of Laustenneau.

After the strike was called in the last part of May, 1903, Mills notified the sheriff, asking him to come to Morenci. Mills wanted the assistance of the law officers because the strikers threatened to dynamite the company's plants. Many ranchers, cowboys, and employees of the company were deputized by the sheriff.[25] When some of the deputies talked to Laustenneau he explained the demands of the strikers. Aware that the strikers were in a destructive mood and violence might result, the deputies told Mills of the conversation, trying to convince him that the strikers' demands were not unreasonable. Mills, who was an obstinate man, refused to listen.

After Mills' refusal to listen to their demands, the strikers held meetings in an old lime quarry near Longfellow. During the meetings some of the strikers transported wine to the quarry in a barrel fastened to two poles.[26] Speeches were made in the quarry, many of them of a violent nature. It was reported that plans were made to capture and hold the sheriff and Mills as hostages, in order to force the company to grant their demands. Mills went into hiding to avoid capture.

The officers were stationed on Longfellow Hill, where they could look down and watch the strikers in the quarry. Remaining with the deputies on the hill, the sheriff sent scouts to report on the activities elsewhere in the camp.

When the strikers realized that the company was not going to grant

25. Bassett, in his notes, called these deputies "counter jumpers," probably because some of the store employees were deputized.

26. Bassett's notes, p. 2.

their demands and their supplies were almost exhausted, they appeared more threatening. Then the company officials appealed to the governor for aid. Isaac T. Stoddard, acting governor, sent both the Rangers and National Guard to Morenci.[27] Bassett reported that sixteen or seventeen Rangers[28] left Douglas; the rest, who were scattered over the state at the time, were to report to Morenci as soon as possible. United States Cavalry troops were ordered to report from Fort Huachuca and Fort Grant.

The deputies in Morenci were afraid that the strikers would attempt to dynamite the bridges of the Morenci Southern Railroad; therefore, many of the deputies were sent to guard the bridges. The strikers held another meeting in the quarry the afternoon of the day the troops were to arrive, then proceeded to Newtown[29] to patronize the saloons. Deciding that the town was not safe, Mills, with the aid of a guide, left on horseback by an old Indian trail that led to Tanque, where he boarded an Arizona Eastern train. When the strikers learned that Mills had escaped, they realized they must use drastic means to gain their objectives.

The strikers met on the morning of June 9, 1903, and the Metcalf miners joined them. Later that morning the strikers gathered in front of the Longfellow store, threatening to destroy the building. Paul Nicholas, superintendent of the Longfellow Mine, withdrew into the store, locked the door, and hid in a tunnel at the rear of the building. Parks and Arzatte moved

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27. Executive Order No. 4, sent to Colonel James H. McClintock, commander of the First Infantry, National Guard of Arizona, and Acting Adjutant General, dated June 9, 1903.

28. See Appendix F.

29. About a mile from the main part of Morenci, where most of the saloons were located at that time.

into the mob and tried to reason with them. Arzatte was seized and held by the crowd while Parks made his way to Laustenneau. Laustenneau asked Parks to send Nicholas to the company officials to secure the best terms he could for the strikers. Nicholas came out of hiding and reluctantly agreed to go to Clifton and talk to the officials. Before Nicholas left, Laustenneau agreed to have the strikers vacate the area around the store and release Arzatte.

At noon of the same day some of the deputies went to the company boarding house for their noon meal. About fifteen men stayed on guard duty. The strikers immediately emerged from houses along Burro Alley. One of the deputies tried to reach the boarding house to alert the sheriff, but could not get through. The sheriff, who had received word by other means, with some difficulty returned to the ridge. The strikers concealed themselves behind boulders on the hill facing the ridge where the deputies were stationed. It was merely a question of waiting for a shot to be fired. Nature took the situation in hand; a cloudburst poured from the sky. The water swept down the hills, and a wall of water rushed down Morenci Canyon. The cloudburst seemed to demoralize the strikers, but later that afternoon they held another meeting in the quarry.

When the leader of the Arizona Rangers wanted to move the troops into the main section of town, the local officers thought they might be surrounded by the strikers. The group remained on the ridge. Two Rangers, J. H. Bassett and Jack Foster, volunteered to go to the quarry to talk to the strikers. On the way to the quarry they met Laustenneau, arrested him, and took him to the hotel, where he was confined.[30] Others, who seemed to be leaders in the

30. Bassett's notes, p. 3.

strike, were soon arrested. At the trial District Attorney C. L. Rowlins conducted the examination for the territory. The most damaging testimony at the trial was given by Superintendent McLean, who had been ordered to close down the plant by the strikers. Laustenneau received a term of seven years in the penitentiary in Yuma, but was killed in a prison riot before his term expired. Three others were given terms of five years each, and the others received terms of a year and a half to three years. In July, 1905, seven of the Morenci rioters were released from prison.[31] Laustenneau was the only one of the group not released.

The strike of 1905 was violent. It ended with bitter feelings, and the employees gained little. Trouble was to appear again within a few years between the workers and the company.

In August, 1915, Guy Miller, a member of the executive board of the Western Federation of Miners, arrived in the district from headquarters in Denver. Tribolet Charpentier,[32] of Miami, Arizona, assisted Miller in the attempt to organize the workers in a union. The general public knew little of the activity of the organizers except for an occasional rumor during their first few weeks in the district. The first attempts to hold meetings proved unsuccessful. Although meetings were broken up in both Clifton and Metcalf, the union men did not discontinue their efforts. During the previous fifteen years there had been various attempts to organize

31. Morenci Leader, July 8, 1905. It was also reported in this article that one of the group was an Italian and a member of the Mafia. While in prison he collected five dollars weekly from the Mafia and had about ninety dollars at the time of his release. He and his companions celebrated their freedom in a state of intoxication "which has been given a place in the annals of the town of Yuma." After their release from prison, two went to Tucson, two to Phoenix, and three to the Pacific coast.

32. Copper Era, August 27, 1915.

the miners, but they had all failed. The efforts to organize always centered around the Mexicans and Italians, who were the chief source of labor in the district.[33]

In early September the union organizers pursued a vigorous campaign to organize the men in Morenci, Clifton, and Metcalf. In a speech Miller outlined the plan of the union in regard to their future course of action. The following were the outstanding points mentioned: (1) a local committee was to be appointed and present the demands to the companies; (2) if the demands were not granted a strike would be called; (3) the workers were to buy provisions to use if a strike should be called. Miller added that "... in case a strike was called and their provisions should become exhausted long before its termination then 'perhaps the union would come to the rescue.'" It was left to the workers to put their own interpretation on the latter part of the sentence.[34]

The strike started on September 11, 1915. The entire works of the three big companies were shut down, and Morenci was in darkness for three nights because the power plant was closed. A committee from the newly organized union requested an interview with the three managers. Milton McLean, general manager of the Detroit Company, said that he would not recognize the Western Federation. J. W. Bennie, of the Shannon Company, who was then at the Pacific coast, telegraphed that he would not meet with the Western Federation. The third manager, Norman Carmichael, of the Arizona Copper Company, was not in town, but stated that his reply would have been similar.

The three companies abandoning the attempt to protect their property,

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33. Mining Journal, August 26, 1915.

34. Copper Era, September 10, 1915.

relinquished it to Sheriff James Cash. From the first, the mine managers were willing to meet with an accredited committee, representatives strictly of the company employees, who would not ask for recognition of the Western Federation of Miners. For the first two weeks no such committee appeared, and the strikers attended mass meetings. President Charles A. Moyer, of the Western Federation of Miners, arrived in the district from headquarters in Denver. The main obstacle in the settlement of the strike seemed to be the recognition of the Western Federation of Miners. One member of a committee appointed to meet with the managers stated that he would participate in such a conference only as a representative of Morenci Local No. 80.[35]

During the first week of October, Governor George W. P. Hunt, accompanied by his secretary, Leroy Ladd, and Adjutant Harris, arrived in the district at the invitation of the sheriff to listen to both sides of the dispute. After the mine managers met with him, it was reported that the governor had stated that he thought the position of the mine managers was arbitrary and had asked them if they would like a reign of martial law in the district. The governor met also with representatives of the Western Federation, telling them he would move his headquarters to Clifton if necessary. The Western Federation presented the following complaints to the governor: (1) wages in the Clifton-Morenci district were not comparable to other districts; (2) and a hospital fee collected by the Arizona Copper Company each month from their wages was not fair, for one dollar a day was charged if the worker was hospitalized.[36]

The following week a parade of about three thousand workers from the

35. Ibid., September 24, 1915.

36. Ibid., October 1, 1915.

three camps was staged, resulting in property damage. In the parade strikers carried banners that read, "Sure, we'll fight before we starve," "Mine Managers are too proud to confer with us," and "We may have to go but mine managers will go first."[37] The three managers, fearing for their safety, decided to go to El Paso. Leaving Clifton by automobile, they made arrangements to board a special train at Hill's Addition. The strikers soon learned that the managers had departed, and a warrant was sworn out for their arrest on the complaint that they had incited a riot. Sheriff Cash and some deputies, by automobile, followed the train to Lordsburg to arrest the managers. Before leaving Clifton, they notified the sheriff in Lordsburg to hold the three as fugitives from justice. When Cash arrived, the Justice of the Peace in Lordsburg dismissed the case on lack of evidence. The managers proceeded to El Paso, where they established headquarters in the Paso del Norte Hotel.[38]

When the engineer and fireman, Thomas Simpson and Walter Penn, returned from Lordsburg after taking the managers there by train, they were mistreated by the strikers. They left their engine and were attacked by a group of strikers on their way home. Later in the evening strikers armed with clubs went to the homes of the two men and four deputies were needed to keep them from Penn's house. Simpson and Penn, forced to go to Duncan for safety, justified their action by stating that they were under orders to run the train and also under instructions from the Brotherhood of Locomotive Engineers.[39]

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37. Ibid., October 8, 1915.

38. Ibid.

39. Ibid.

When the mine managers went to El Paso and established their headquarters, the governor, ordering the National Guard to Clifton, accompanied the special train of troops as far as Tucson. About forty members of the Guard were sent under the command of Major H. H. Donkersley of Yuma. No reason was given for sending the militia, but the strikers appeared pleased.[40] After the militia arrived, the governor sent the mine managers an invitation to come to Phoenix to confer with him, offering to send Major Donkersley and Sheriff Cash to Lordsburg to meet them and escort them to Phoenix. The managers refused the invitation. One of the managers stated that they had left the district to avoid trouble and they believed they would be arrested as soon as they reached the Arizona state line. He added that all grievances could be settled if the Western Federation of Miners left the district.[41]

The managers were not the only ones who were afraid to remain in the district. Many who sympathized with the company also left. Most of them departed by train, some drove away in automobiles, and a few walked. A number of Englishmen went to France to join the army; some Spaniards went to Cuba.[42]

In the middle of October a conference was arranged between the managers and employees. The mine managers refused to meet with the first committee chosen by Cash and Adjutant Harris, because it was composed of officials of the Western Federation of Miners in the district. A list of fifteen names was then sent to the managers from which they chose five with whom they would meet. The expenses of the men on this committee were paid by the

40. Mining Journal, October 7, 1915.

41. Copper Era, October 8, 1915.

42. Mining Journal, October 14, 1915.

managers. The powers of the committee were limited in that no decision could be made until it was presented to the employees. At the conference several proposals were discussed, including wage scales and non-discrimination, but no agreement was made.

Meanwhile the strikers found it difficult to provide for the necessities of life. The relief committee of the striking miners in the district submitted a statement of the amount of goods that was supplied daily to the strikers and their families in the three striking towns. "As the largest number of strikers live in Morenci that place requires the largest daily shipment and the average daily amount sent up there each day from Clifton headquarters includes two tons of flour, one ton of beans, four hundred pounds of coffee, six hundred pounds of lard and one hundred pounds of salt."[43] The same article also mentioned that generous donations were sent from Globe, Miami, Bisbee, and other places by sympathetic workers. The company, too, made provision for the employees who remained loyal to the company.

A near riot occurred in Morenci when James S. Casey and M. Doyle arrived as representatives of the company to take affidavits on the strike situation. A rumor was circulated that they were professional strike breakers in the district for the purpose of furnishing transportation to Duncan, Arizona, to anyone who expressed a willingness to return to work. Efforts were made to deport Casey and Doyle, but President Rico of the union interfered, giving them a deputy escort to Clifton to take the train.[44] Actually the rumor to the effect that the companies were planning a haven

43. Ibid., October 21, 1915.

44. Copper Era, October 22, 1915.

for those who were not striking or who wanted to go to work was true. Many people from the district departed quietly for Duncan, where a camp was established for them.

Frank McLean, superintendent of the mines from Morenci, was in charge of planning the camp. The following were chairmen of the various committees: Frank A. Ayer, building committee; Jim Wester and E. M. Luckie, construction work; W. J. Donahue, reception committee; Larkin Neel, mess hall; and Biddie Doyle, chief of police.[45] The strikers insisted the camp was set up as a trick of the managers who would take deductions from future wages, thus compelling the refugees to pay for all they received. The strikers also stated that the companies would win the strike by starving the women and children. The companies released the information "that the camp would provide food and shelter for themselves and families...that there would be absolutely no deductions from future wages nor charge of any kind...that all men, union as well as non-union, are welcome without any questions asked; and that the companies took the position that the great bulk of the union men had been coerced into joining the union."[46]

Soon the camp developed into a thriving and active community. It was a tent city, but the tents were floored and equipped with electricity. Two large bunk houses accommodated one hundred and twenty men each, and an old farm house was remodeled and made into a mess hall which could accommodate two hundred at a time. A well was drilled which supplied a sufficient source of good water. Medical attention was available at all times in this clean and orderly camp.

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45. Ibid.

46. Ibid., October 29, 1915.

In the last part of October the local paper reported that everything was quiet. However, when the governor heard of the departure of many residents to the Duncan refugee camp he sent another hundred troops to Morenci. These troops were under the command of Major E. P. Grinstead.[47] Within a few days the situation was not so quiet. The strikers, seizing papers from the representative of the El Paso Times, destroyed them,[48] because they believed that the paper was favoring the side of the company in the strike.

Guy Miller returned to the camp in the middle of November to instill enthusiasm into the strike. The situation was then complicated by the abrupt withdrawal of two hundred of the militia who were returned to their homes, leaving one company in Clifton and one company in Morenci. The reason given for recalling the troops was that the militia warrants were not negotiable at the banks.[49] The warrants were not paid because of a dispute over the status of an appropriation bill which had been vetoed by Governor Hunt the previous spring. The auditor refused to honor the claims of the National Guard until the matter was sanctioned by the Supreme Court.[50] The militia was indignant. The general belief at the time was that they would not return if they were called out again. Soon after the withdrawal of the troops, Adjutant Harris insisted that the Duncan refugee camp was a concentration camp for strike breakers. He contended that he had sent a secret emissary to the camp who had returned with the report. The mine managers

47. Ibid.

48. Mining Journal, November 4, 1915.

49. Copper Era, November 12, 1915.

50. Ibid., December 3, 1915.

denied the report, saying that the camp was maintained for the care of those who had been deprived of their livelihood.

One incident that injured the cause of the strikers concerned the deportation of Andre T. Gondera. Gondera, a store employee in Morenci, while going home one day at noon, was forced by a group of strikers to go to Clifton, where he was taken before the union. There strikers placed a sash on him marked "scab," took him out of town, and forced him to walk barefoot, kicking him as he walked. The next morning he stumbled into Guthrie. Soon after Gondera was taken, people called the sheriff's office. They were informed "Sheriff Cash is out of town" or "We will see what can be done." L. J. Owen, manager of the store in Morenci, sent a telegram to Governor Hunt demanding that Gondera be permitted to return, as well as offered protection. Hunt referred the problem to the supervisors and the sheriff.[51]

Another incident also damaging the cause of the strikers concerned the annual assessment work. The mining companies had one task to complete annually if they were to protect their titles on their unpatented claims, the completion of the required amount of yearly assessment work on the claims by a specified date. In November, 1915, the companies checked with the sheriff about this work, who said that the workers would not be molested while doing assessment work. However, when some of the shift bosses arrived from the Duncan camp, Cash met them and said that he had been in error, thus forcing the workmen to leave the district. The Detroit Company, with some one hundred and forty claims to assess, filed in the federal court a bill of complaint,[52] praying for an injunction restraining the Western

51. Mining Journal, December 9, 1915.

52. Copper Era, December 24, 1915.

Federation of Miners from interfering with the workmen in the performance of this work.[53] Judge William Sawtelle issued a federal court order restraining the strikers from interfering with the assessment work of the Detroit Company on their unpatented claims. The judge stated that the owners of claims had the right to complete this work without the interference of third parties, and that the merits of the strike were not involved. The strikers insisted that it was merely a ruse to bring back the refugees from the Duncan camp. Meanwhile the Detroit Company posted notices in Morenci offering jobs of assessment work to old employees at five dollars a day; only fourteen reported.[54] Then the company brought in four hundred and eighty-six miners by special train from the Duncan camp. These men were under the protection of fifty United States Marshals while they were in Morenci doing the work.[55]

The sheriff and the Citizens' League[56] in early January notified the

53. Miss Merna Robison, in a personal interview on May 15, 1954, told of her father, George Robison, an engineer for the Detroit Company, going out and doing assessment work at this time. The Robisons remained in Morenci throughout the strike. At all times a man was stationed near their home and always followed Mr. Robison at a discreet distance. One day in December, Mr. Robison eluded the guard and walked out into the hills hoping to do some assessment work, but was stopped by a guard some distance from the town. Mr. Robison told the guard he was going after a Christmas tree, and was allowed to continue. He completed the assessment work and then searched for a tree. He found one, and with some difficulty cut it down with a large pocket knife. The tree seemed to satisfy the guard.

54. Governor Hunt said no such offer was ever made, basing his claim on a letter from Sheriff Cash in which Cash said that the five-dollar offer was never made. The superintendent said that it was made and only fourteen reported for work. Mining Journal, January 6, 1916.

55. Copper Era, December 31, 1915.

56. Made up of business men in the district. They were anxious to settle the strike, as it was ruining their business.

mine managers that at mass meetings in the three camps the strikers had decided the following: (1) they had renounced their allegiance to the Western Federation of Miners; (2) they had thrown away their union cards; (3) by unanimous vote they had sworn allegiance to the Arizona State Federation of Labor; (4) in the presence of witnesses they had turned over the three union charters to Sheriff Cash. The sheriff sent the charters, along with the union seals, to Ernest Mills, secretary of the Western Federation of Miners in Denver.[57]

This did not mean that the strike was settled because the employees were not willing to return to work on the old wage scale. The managers were asked to return and were guaranteed protection. Conditions under which work would be resumed in the Clifton-Morenci district as outlined by the managers were as follows: (1) the influence of outside agitation must be eliminated, and the men must return to work on the existing wage scale, which would be extended to meet the increased price of copper; (2) the managers agreed that no individuals of any nationality would be barred from re-employment because of their connection with the strike, except those guilty of acts of violence; (3) and the managers would meet employees' committees and talk over grievances, upon the resumption of operations.[58]

The refugees in Duncan wrote to the governor to ask what protection he could afford them if they returned to the district to work. The governor sent a letter to the Duncan News shifting the responsibility for the protection of the refugees onto the shoulders of the sheriff of Greenlee County.[59]

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57. Copper Era, January 14, 1916.

58. Ibid.,

59. Ibid., January 21, 1916.

After receiving the conditions proposed by the managers, the strikers sent counter proposals to the managers. The strikers were willing to go to work for fifteen days, provided that the refugees from Duncan were not allowed to return. The managers refused to accept this provision. The strikers then made another offer with the proviso that the refugees be brought back to the district in small groups rather than in one large group. The importation was to be left to the discretion of Sheriff Cash, Henry Hill, and R. R. Webster, all of whom had acted as mediators in the settlement.

Finally the strike was settled by a vote of the former employees, and the men returned to work on the old scale of wages, which was advanced to include copper selling at twenty-four cents a pound. The Department of Labor investigators urged the acceptance of the terms stating: "....there will be no more buying of jobs in this district; no more fake raffles; and your committees will be received with courtesy by the management."[60]

During the first week in February, 1916, the militia left the district, and the charter of the State Federation of Labor was received. Soon the mines and smelter were in operation. Many of the former strikers met the Duncan refugees who returned by the train load. By the last of February the wage scale was settled in a conference between the managers and a committee of fifteen employees who agreed to a new scale which granted the highest wages ever paid in the district. In the last part of March the final agreement between the managers and the employees was completed covering the general rules for working conditions and wages.

The strike in 1915 was a longer strike than that in 1903, but was of

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60. Ibid., January 28, 1916.

a less violent nature. The workers were not yet satisfied, however, and within two years another labor disturbance was to sap the vitality of the district at a time when the country was in dire need of copper.

The employees presented new demands, through the district grievance committee, to the mine managers of the three big companies on June 19, 1917. The committee gave the managers ten days in which to answer their ultimatum. The several local unions adopted these demands: (1) any grievance arising among men working on contracts shall be taken up in regular form by the grievance committee; (2) any employee who refuses a contract shall not be discriminated against or discharged; (3) seniority rule must apply in increasing and decreasing the force; (4) time and a half must be paid for all overtime and time and a half be paid to all craftsmen and their helpers for all Sunday work, the Fourth of July, and Christmas; (5) adoption of the Miami scale of wages.[61] Many people were of the opinion that these demands were a result of the activities of the Industrial Workers of the World,[62] whereas others thought it was instigated by German subversives. The labor force in the district was easily influenced and excitable because of the foreign background.

Meantime Sheriff Arthur J. Slaughter presented his stand in regard to

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61. Copper Era, June 22, 1917.

62. An article in the Copper Era in September, 1916, was entitled, "IWW Is Gaining Foothold in Morenci." The article mentioned that a meeting had been held on the plaza and speeches of inflammatory and anarchistic nature had been given. It was reported that in the talks they told the audience that they were above the law, and that the peace officers and law and order were to be ignored. They said that if it was necessary they could easily take possession of the camp by tearing up the railroad tracks; after this, they could rob, pillage, and plunder. Benito Mendina, a Mexican leader, was arrested and John L. Donnelly, of the Arizona State Federation of Labor, was called to Morenci. He tried to get the men to listen to reason; he reminded them of the last strike and said that the Western Federation of Miners was no comparison to this band of anarchists. Copper Era, September 1, 1916.

the proposed strike. He stated that he would favor neither side, would enforce the law impartially, and would protect all citizens and all aliens "in peaceful pursuit of their daily labor." The statement concluded with "It is difficult for me to believe, especially at this time, that any loyal American, or body of Americans, would contemplate anything which might in the slightest degree cripple the government of our country. The closing down or hindrance of the great copper industry in this section would be a direct blow and a heavy one to the government of the United States."[63]

John L. Donnelly, president of the Arizona State Federation of Labor, arrived in the district immediately after the demands were presented. By this time the strike was in operation in Bisbee and was gaining momentum in other copper camps. Federal Investigator Joseph Myers telegraphed both sides that they should continue negotiations until he arrived in the district to hear and consider the dispute. This request of Myers was ignored, for the strike was called July 1, 1917.

At the end of the first week Sheriff Slaughter appointed one hundred deputies to patrol in the three camps as a precautionary measure.[64] By the end of the second week the main question was, "Where is Joseph Myers?"[65] Donnelly was arrested in Phoenix at his home on the charge of murderous assault on a neighbor[66] during the third week of the strike. He was later released on five thousand dollars bond, and at the preliminary hearing, was acquitted.

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63. Copper Era, June 29, 1917.

64. Ibid., July 6, 1917.

65. Ibid., July 13, 1917.

66. The affair was a backyard quarrel over a fence. Donnelly was supposed to have shot at his neighbor, a man by the name of O'Leary.

Major Lumley, of the Third Artillery, stationed in Douglas, was sent to the district to conduct an investigation of the strike and make a report to the commanding officer. Lumley first proposed mediation. If mediation were rejected, he suggested that a troop of cavalry be sent to the district. Walter Douglas, general manager of Phelps Dodge, after spending one day in the district, released the following statement: "Unless the men return to work under the old agreement, the properties in Morenci will be closed down indefinitely."[67]

On July 26, Federal Mediator Myers arrived in the district to confer with the unions and management. At that time the first evidence of violence was demonstrated when some of the strikers attempted to escort a man by the name of Acosta out of town. Acosta was obtaining the names of union men who desired to return to work. The strikers decided to send him out of town by the "tin can route," which had been a favorite pastime in the strike of 1915. The deputies arrested the ring leaders.[68] Another event which might have caused serious trouble occurred when a group of workmen unloading coke at the Detroit Company smelter were molested by the strikers. Deputies, who were armed, surrounded the strikers, forcing them to leave.

When Myers met with the managers, they informed him that they felt that the strike was without justification and had been induced by a small minority of the workers. They also said that there was need for better discipline in the ranks of the workers. The managers remained out of town most of the time during the strike, returning only when needed for a conference. Communications from the managers indicated that they were in no

67. Copper Era, July 20, 1917.

68. Ibid., July 27, 1917.

hurry to resume operations. At the end of the fifth week it appeared that many of the former employees were in favor of returning to work. Many felt that if a ballot were taken, the vote would prove that they were ready to return to work. The Italian element had appeared only slightly enthusiastic in regard to the strike when it started.

At the request of Secretary of Labor Wilson, Myers returned to the district in the latter part of August. The mine manager, who returned to confer with Myers, issued the following statement regarding their position: (1) the strike had been hastily called; (2) it was ill advised; (3) should the men see fit to end the strike, the companies would prepare to resume operations and continue the old agreement in effect, and discuss all grievances with the district committee as heretofore in an attempt to arrive at a fair and equitable adjustment of same.[69] They also maintained that they would not reinstate some of the former employees who had instigated the strike. Since it seemed as though many of the miners were ready to return to work, a ballot was planned for the three camps. The first ballot, with surprising results, was taken in Morenci, with 1,363 in favor of continuing the strike and 230 in favor of declaring the strike at an end. It was not necessary to take ballots in the other two camps, as the issue was still deadlocked.

On September 7 a citizens' committee met in Clifton. As a result of discussions, they adopted a proposition presented by H. Halter, International Organizer of the Boilermakers Union. Halter suggested that an arbitration board which would be binding on both the strikers and the mine managers be established, in the event that the mine managers would accept

69. Ibid., August 24, 1917.

such a board. It was proposed that three arbitrators be named by the mine managers of the district, one member be named by Samuel Gompers, president of the American Federation of Labor, and one member be named by the President of the United States.[70] Because the managers would not agree to the plan, it was not used.

The mine managers in answer to this proposal of the citizens' committee recommended the following plan: they would resume operations October 1, if enough workers appeared to work under the conditions of the agreement made between the company and the employees dated March, 1916. Wages would be paid according to the agreement made between the government and the copper producers on September 20, 1917.[71] The managers wanted the strikers to return to work, then allow the government to settle the strike. Work was not resumed on October 1. However, since all efforts to stop the strike had failed, the President of the United States appointed a commission to come to the district to investigate conditions.

The commission arriving on October 24 was composed of the following members: E. P. Marsh, president of the Washington State Federation of Labor; J. H. Walker, president of the Illinois State Federation of Labor; Colonel J. L. Spangler, coal operator in Pennsylvania; V. Z. Reed, mining and oil operator from Colorado; Secretary of Labor W. B. Wilson; and Felix Frankfurter of Washington, D. C., secretary and counsel to the commission.[72]

The strike was settled by the commission, and the men returned to work on November 3. The terms of the final agreement were as follows: (1) the

70. Ibid., September 8, 1917.

71. Ibid., September 21, 1917.

72. Ibid., October 26, 1917.

district grievance committee was discontinued, and each company was to have its own grievance committee; (2) a United States Administrator was appointed to hear complaints when labor and employer failed to settle disputes; (3) no man was to be prevented from working because of non-union membership; (4) striking workmen were to return to work unless they had made disloyal statements concerning the United States; (5) time and a half was to be paid for overtime, Sundays, Christmas, and the Fourth of July; (6) wage questions were to be settled by the United States Administrator.[73] So ended the third serious strike in the district. With labor troubles settled for a while, Phelps Dodge had the opportunity to enlarge its holdings.

The most important event in the history of Morenci as well as in the history of the Phelps Dodge Corporation was doubtless the acquisition of the property of the Arizona Copper Company. For many years the Detroit Company and the Arizona Copper Company had operated side by side in the district. The Arizona Copper Company had secured an interest in the district when they purchased the holdings of the Longfellow Mining Company from the Lesinskys. In 1919 the Arizona Copper Company purchased the holdings of the Shannon Copper Company, thus greatly expanding their holdings. At the time this seemed a good investment, but the price of copper suddenly dropped, a decrease which found the company over-expanded. The Arizona Copper Company, a Scottish-controlled company, during World War I was required to pay enormous taxes. In order to avoid paying so many taxes the company carried on a tremendous building program and purchased property, a

73. Sixth Annual Report of the Secretary of Labor For the Fiscal Year Ended June 30, 1918. Report of the President's Mediation Commission, "Disputes in Arizona Copper Districts" (Washington: Government Printing Office, 1918), pp. 12-16.

procedure which caused over-expansion. The holdings of the company were valuable, but the most important holding was the Clay Orebody, which extended into the property of Phelps Dodge in Morenci. By 1917 the Arizona Copper Company's engineers had blocked out forty-seven million tons of copper ore in this deposit, but the company did not have the capital to develop the ore body. It was a good time for the Arizona Copper Company to sell, but it was an even better time for Phelps Dodge to buy.

Before Phelps Dodge could purchase the Arizona Copper Company, it was necessary for Phelps Dodge to consolidate all its holdings into what is now known as the Phelps, Dodge Corporation. In 1908 the old partnership of Phelps, Dodge, and Company had been dissolved and a new corporation was formed. The new company was established by action of the stockholders of the four subsidiary mining companies of Phelps Dodge; the Copper Queen Consolidated Mining Company, Moctezuma Copper Company, Detroit Copper Mining Company of Arizona, and the Stag Canon Fuel Company.[74] In 1917 the company was reorganized with the purpose of simplifying the structure by changing it from a holding company to an operating company. The Copper Queen Consolidated Mining Company had been given the charter power to carry on the business of all the subsidiary companies belonging to Phelps Dodge. During this reorganization Copper Queen changed its name to Phelps Dodge Corporation, increasing its capital from two million to fifty million dollars. Then the new company took over all the assets and liabilities of Phelps, Dodge, and Company, Inc., and issued its own stock in return. The former mining subsidiary companies operating in the United States were changed to branches of the Phelps Dodge Corporation. In the change the

74. Cleland, op. cit., p. 155.

Detroit Copper Mining Company in Morenci became the Morenci Branch of the Phelps Dodge Corporation.[75] The transfer of the properties of the Detroit Company was recorded March 23, 1917, in the Greenlee County records.[76]

After the conversion of the Phelps, Dodge, Company to the Phelps Dodge Corporation, it was possible for Phelps Dodge to buy the Arizona Copper Company properties. The merger of the two companies was made in 1921, costing Phelps Dodge fifty thousand shares of capital stock, which were transferred to the shareholders of the smaller company. The Arizona Copper Company properties were then incorporated into and operated by the Morenci Branch.[77] Although the holdings of the Arizona Copper Company were all valuable, the most important to the future of Phelps Dodge was the Clay Orebody.[78] Today the Clay Orebody is the Morenci Open Pit Mine.

In the 1920's much exploratory work was completed on the Clay Orebody. However, when the depression began in 1929, the mines closed in Morenci. The high grade ore was exhausted, and many predicted the mines would never open again. Practically everyone deserted the town soon after the mines were closed. During the depression years, houses with all conveniences were rented for a few dollars a month. Farmers purchased houses for as

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75. Ibid., pp. 193-94.

76. See Appendix G.

77. Cleland, op. cit., p. 210.

78. An item in the Copper Era was entitled "First Owner of the Clay Orebody Dies at Morenci." Francisco Carrasco, who in 1899 staked claims on the Carrasco and Esperanza mines, the latter being located at what was then known as the Clay pool on the site of the present Morenci pit development, died Sunday in the Morenci hospital at the age of eighty-four years. He came to Morenci in 1878 and worked as miner and prospected on the side. About nine years later he disposed of the properties to the Arizona Copper Company for $50,000. He went to Mexico after the sale but returned in three years. Copper Era, January 15, 1941.

little as seventy-five dollars and trucked them away. The post office was almost the only business that remained open.[79] The company store was closed, although a small portion of the building was leased to individuals who operated a grocery store. Nevertheless, the "Copper Ghost" was to come to life again in the last years of the 1930's when Phelps Dodge started operations for the new pit mine.

Morenci, under the guidance of Phelps Dodge, had made great strides. A new town had been built with vast improvements. The citizens of the town displayed an interest for the first time in the development of the town. Three times labor instigated serious strikes. Most important of all the Detroit Copper Mining Company became a part of the past, and the Morenci Branch of the Phelps Dodge Corporation looked toward the future.

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79. Nation's Business, July, 1942, pp. 27-28.

CHAPTER V

DEVELOPMENT OF THE RAILROADS

Railroads and transportation were essential in the development of the Morenci district. The first means of transportation used by the Lesinskys were wagons and wagon trains. Later they constructed the first railroad in the Arizona Territory. Then the Arizona Copper Company built a railroad which connected Clifton with the outside world. Finally, under Phelps Dodge, the railroads in the district were standardized. Today the narrow gauge road beds winding about the hillsides in the district each have a story of their own.

The Lesinskys used wagon transportation within the district as well as for hauling the bullion to market.[1] Transportation remained a problem for them until they secured the services of Nicholas S. Davis. Davis, a Civil War veteran, had previous experience in building roads and proved to be an able engineer. When Davis first arrived in the district, he improved the wagon road to the mines. Soon afterward the Apaches under Victoria went on the warpath, making many attacks on the teamsters. The Indians attacked the teamsters to seize the horses or mules. Davis saw how much safer it would be to abandon the wagon road and build a railroad from the Longfellow Mine to Clifton. In 1878, with the approval of the Lesinskys, work was started on a twenty-inch gauge railroad along the bed of Chase Creek. The Longfellow Company released a contract for fifty thou-

1. The bullion was transported to Independence, Kansas, and the trip there and back took a year.

sand dollars[2] for the construction of this road. First a stone wall was built above the creek level to keep the mountain sides from rolling down to the tracks during the rainy season. Sam Freudenthal[3] supervised the building of the walls, remains of which may be seen today along the creek. Eight miles of railroad were completed along Chase Creek in 1879, with a grade often thirty feet to the mile as well as very sharp curves.

When the railroad first started operations, locomotives were not used. Mules were the motive power.[4] When the train started up the hill to the mines, the mules were hitched to the cars to pull the train. The cars were loaded with ore automatically from bins at the foot of the inclines. Then the train moved from the mines to Clifton by gravity with the mules riding down on the last car.[5] Freudenthal served as the first conductor on the mule train; he accompanied the train down the grade to set the brakes.[6] This first railroad was called the Coronado Railroad.

The first locomotive, ordered from the H. K. Porter Company in Pittsburg, Pennsylvania, was shipped in April, 1880, by steamer from New York City around the Horn to San Francisco. From San Francisco, it was shipped by rail to Fort Yuma, and from there, by ox team to Clifton, where it

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2. Arizona Weekly Star, March 9, 1882. The article does not mention who was given the contract.

3. Freudenthal was the first justice of the peace in Clifton. It was said that he married the Mexicans for boletas and divorced them for boletas. On Saturday night he always gave a big celebration with the week's accumulation of boletas - a cross between a Mexican supper and a Dutch lunch. Sunset Magazine, April, 1911, p. 456.

4. Two mules driven tandem to two cars.

5. Sometimes the mules were driven back to Clifton by a driver.

6. Sunset Magazine, April, 1911, p. 456.

arrived in the fall of 1880.[7] There the locomotive was assembled by Henry Arbuckle, who was the first engineer on the engine, which was named the Coranada.[8] Later the engine was named the "Little Emma."[9] The locomotives used on this road, weighing seventeen thousand pounds, traveled at a speed between twelve and fifteen miles an hour.[10]

In 1883 the Arizona Copper Company completed the Coronado Railroad. Although the road passed by the Queen, Metcalf and eight other mines owned by the company,[11] it was not built to the site of the mines, but was connected to the source of ore by inclines. Thus the railroad helped to solve the Indian problem, because the Indian found that shooting at a smoking locomotive was not as effective as shooting at teamsters and mules.

The inclines, constructed on the side of the mountain at a nearly forty-five degree angle, were from two thousand to three thousand feet in length. As the loaded cars were lowered, the speed was regulated by brakes controlled at the top of the incline, while empty cars were drawn upwards. The cars were held by an iron cable which determined if the cars would arrive at their destination safely.[12] At each end of the incline men seized

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7. Transactions of the Mining and Metallurgical Engineers, Vol. LXX, p. 830.

8. The makers of the locomotive misspelled the name.

9. One of the early engines of this road is in the Arizona Museum in Phoenix, and another is in the plaza in front of the Phelps Dodge Store in Clifton.

10. Arizona Weekly Star, June 21, 1883.

11. Ibid., January 25, 1883.

12. Nine men were killed instantly when the ore cars dashed down the Coronado Incline. Six men had a narrow escape by jumping at the critical moment. There was a concealed flaw in a drawbar which caused a break, releasing the cable as the cars were lowered over the knuckle (cont. on p. 85)

the cars, placing them in their proper positions. In 1883 four inclines were in use: the Longfellow,[13] Queen, Metcalf, and Coronado. For many years the people in Morenci rode the cars on the inclines when going to Metcalf or Clifton. Because this was a dangerous method of transportation, the mine managers finally prohibited the use of the inclines to the public. In November, 1885, signs printed in both English and Spanish were placed at both ends of the Longfellow Incline, forbidding all persons from riding on the cars or walking up or down the track or through the tunnel.[14]

The Longfellow Incline was most important to Morenci. Coke and other supplies, which were brought by the Coronado Railroad to the foot of the incline, were elevated to Longfellow, where they were transported by a narrow gauge railroad to Morenci. Ore and copper were lowered by the incline to bins, from which they were transported to Clifton. The Detroit Company constructed a narrow gauge railroad which operated in Morenci and connected with the Longfellow Incline. In 1887, the Arizona Copper Company and the Detroit Company purchased new locomotives to operate on the narrow gauge roads in Morenci. The Arizona Copper Company named their new locomotive "Colin McKenzie," and the Detroit Company named theirs "La Nena." These locomotives were transported by wagon to Morenci, one to be used on the narrow gauge at the Longfellow, the other, on Morenci Hill.[15]

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12. (cont. from p. 84) of the incline. The incline belonged to the Arizona Copper Company. For eight hundred feet the cars held to the rails and then for two thousand feet plunged down the mountain. Five Americans, two Mexicans, and two Italians were killed. Copper Era, August 15, 1913.

13. The Longfellow Incline was two thousand two hundred feet in length, with a rise of eight hundred feet.

14. Clifton Clarion, November 18, 1885.

15. Ibid., March 30, 1887.

A major problem of the Coronado Railroad at this time was the need for a connection with a major railroad. Soon after the purchase of the mines from the Lesinskys, the Arizona Copper Company built a narrow gauge railroad from Lordsburg, New Mexico, to Guthrie.[16] The new railroad, the Arizona and New Mexico Railroad, connected with the Southern Pacific at Lordsburg.[17] This road was planned by Captain Nicholas Davis, but the construction was completed by Hampson and Garland, railroad contractors. Later the road was changed to a standard gauge road and tracks were built into Clifton. The road was owned and maintained by the Arizona Copper Company until that company was purchased by the Phelps Dodge Corporation. After Phelps Dodge secured these properties, the road became a part of the El Paso and Southwestern Railroad. At the present time the road is a branch line of the Southern Pacific Railroad.[18]

One other railroad left its mark in the district in the early part of the century. The Shannon Copper Company built a thirty-six inch gauge railroad from their smelter and concentrator in Clifton to connect with their mines near Metcalf. Both the Coronado Railroad and the Shannon Railroad had tracks along Chase Creek. The Shannon Railroad was eventually procured by the Arizona Copper Company when they purchased the Shannon Copper Company in 1918.[19]

The most unique and picturesque of all the railroads in the district was the Morenci Southern Railroad. The building of this road was an ambi-

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16. A settlement a few miles south of Clifton which was created by the building of the railroad.

17. Los Angeles Mining Review, March, 1901, p. 10.

18. The El Paso and Southwestern later merged with the Southern Pacific Railroad.

19. Mining Journal, May 30, 1929, p. 8.

tious undertaking for the Detroit Company. For many years it had been thought impossible to build a railroad into Morenci because of the rough and rugged country. However, Dr. Louis D. Ricketts, a brilliant engineer, achieved what was once thought an impossibility.

Surveys for the preliminary work were made early in 1900. In March, 1900, Antonelle and Pagano were given a contract to grade the first two miles for the railroad starting from Morenci.[20] Streeter and Lusk were given the contract to build the railroad.

This road had an elevation of 1,350 feet to overcome in a direct line of less than seven miles. The road also crossed a divide between the San Francisco River and the Gila River, three hundred and fifty feet high. The bridge at the Gila River had two short approaches, one span measuring one hundred eighty-five feet in length. The deck of this bridge was one hundred and two feet above the river. At the San Francisco River the bridge and approaches were longer, but the elevation was about the same. Owl Canyon, a box canyon, was crossed by a single girder eighty feet long and over one hundred feet in the air. All the piers and abuttments were on concrete foundations. Altogether there were seven steel bridges on the line, all constructed by the Phoenix Bridge Company. The road had three tunnels and five complete loops; four of the loops were in Morenci Canyon in less than two miles. A gain in altitude of one hundred feet and six inches was made by the first loop.

A large part of the road bed was cut through solid formation of the mountain; most of this was rock. Although some mineral was found during blasting, none was developed. Four hundred and fifty thousand pounds of

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20. Copper Era, March 1, 1900.

Morenci Southern Railroad

Picture obtained from
Arizona Pioneer's Historical
Society

giant powder were consumed in blasting the rock for the road bed. Over one million feet of timber were used in trestling, in addition to the steel bridging. The old village of "Slag Town" in Morenci Canyon, which for many years had been the home of many people, was completely eliminated in order to make room for the road bed through the narrow canyon.

The track construction between the Gila River and the San Francisco River was all standard gauge; the bridges, trestles, tunnels and excavations were also standard gauge track. The maximum grade of the road was three and one half per cent with a maximum curvature of forty per cent.[21] This road connected with the Arizona and New Mexico Railroad near the Gila River.

Special engines had to be constructed for rounding the short curves on the Morenci Southern. Two locomotives, which were made by the Baldwin Locomotive Works, were brought into Guthrie in August, 1901. The locomotives, weighing ninety-one thousand pounds each, had a hauling capacity of about one hundred twenty-five tons of train and load, and were built in such a way that they could be adapted to broad gauge tracks at any time.[22]

The last spike, completing the Morenci Southern, was driven December 31, 1901. This spike was made from copper removed from the mines in Morenci.[23] For many years the depot for the Morenci Southern was located in the company store, but in 1913 a new depot was built on the plaza directly in front of the store.[24]

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21. Arizona Bulletin (Phoenix: Arizona Archives, typewritten manuscript, January 4, 1901).

22. Copper Era, August 1, 1901.

23. Ibid., December 31, 1901.

24. Ibid., August 29, 1913.

The Morenci Southern has not operated for many years, although a trace of the road bed and an occasional steel rail may still be seen. Most of the track has been removed to make way for other improvements.

When the new pit mine was started, many miles of railroad, as well as truck roads, were constructed. In 1937 twenty miles of haulage road were built. At the same time ten miles of railroad track between Clifton and Morenci were standardized.[25] In the early stages of the pit development, trucks which were used because of their flexibility on the mining benches, carried the waste to the canyons where it was dumped. At the present time most of the material is handled by standard gauge locomotives and dump cars.[26] Railroad tracks connect the reduction works with the open pit mine. The locomotives are electric, and the ore cars used are marked "Morenci Mine." From the reduction works the bars of copper are taken by train to Clifton, where they are shipped to El Paso by the Southern Pacific Railroad.

At the present time there is constant change in the railroad around the mine and the reduction works. Track crews move track within the mine and above it to provide for changes made in the mine operation. In the spring of 1955, the track was extended at the reduction plant to open a new place for ore storage. New fills were made with a concrete underpass constructed to make a new roadbed.

Transportation has progressed from wagon trains to electric trains. The wagon trains, slow and clumsy, enabled the mining companies to bring in supplies as well as to carry out copper. The first trains, driven by

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25. Mining and Metallurgy, May, 1942, p. 250.

26. Ibid.

mule power, speeded up production, whereas the first locomotives defied the Indians. Railroad companies, such as the Arizona and New Mexico and the Morenci Southern,[27] connected with major railroads, thus bringing the district closer to the outside world. Without the constant improvement of the rail facilities the steady growth and development of the district would not have been possible.

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27. Called the "Corkscrew Route of America."

CHAPTER VI

SOCIAL GROWTH

The history of a town is to a large degree the history of the people who have lived in that place. The people in Morenci existed in deplorable conditions during the infancy of the town. Today Morenci is often cited as a model mining town. The same people who were compelled to reside in such miserable circumstances introduced the first churches to the community. In addition to housing and religion, the people desired some form of recreation and educational facilities. Perhaps they were thinking of schools as a method of teaching good citizenship, but in the early days good citizenship was usually the responsibility of the sheriff and his deputies. The sheriff always played an important role in the life of a western mining camp. However, these factors - poor housing, unsuitable forms of recreation, and a lack of education - contributed to the reputation as a "tough town" that Morenci acquired in early days.

The early prospectors who came to the district lived outdoors, preparing their meals over camp fires. Later, Church hired a contractor to build cottages for him and his brother, as well as boarding houses at the smelter and the mines for the workers. At this time the majority of the men in the camp were single or did not have their families with them. The Arizona Copper Company also provided boarding houses at Longfellow and in Clifton for their workers. Later more men came to the district with their families, causing a housing problem. Then people constructed their own houses from any available material: adobe, tin cans, barrels and boxes.

Many people lived in filth, for no sanitary provisions were provided.[1] Most of the houses were huddled close together in a small area along Morenci Canyon. It was to the credit of Charles E. Mills that a new town site was graded at a site farther up the canyon. When the Morenci Water Company organized in order to bring a good supply of water to the town, the health conditions improved.[2] Soon after the organization of the Water Company, the Morenci Improvement Company was established to build houses. These houses were not pretentious, though they were comfortable and clean. Beginning with the activities of the Morenci Improvement Company the general housing improved in the town. During the 1930's, the depression years, Morenci was nearly a ghost town. Very few people remained, as there was no work. A few people were hired as watchmen by Phelps Dodge, and a few with no place to go remained. Many houses in the town were sold for a small amount and moved away. In the latter part of the 1930's, when the company started work on the pit development, housing again presented a problem.

The company planned two new residential sites, which today house many of the workers.[3] One residential area is located in Stargo, a community

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1. In 1904 Hunter Spoon was given a contract to clean up the town. He had two pack mules and a force of men cleaning up all the tin cans and rubbish. Copper Era, June 9, 1904.

In 1905 Chief Clerk Thomas H. Donahue was superintending the removal of all the outside closets from Knob Hill, and the residents of that section had their houses connected with the sewer put in that fall. Morenci Leader, August 12, 1905.

2. The town had always had many cases of typhoid and dysentery until they acquired a safe water supply. Many children died from these diseases in the community. In 1904 there was an epidemic of typhoid and Dr. Tuthill sent a sample of the water to Chicago to be analyzed, but it was free from typhoid. Copper Era, October 20, 1904.

3. In 1953 Phelps Dodge provided 1,287 homes for its employees and other eligible residents in Morenci, Plantsite, Stargo, and Clifton. Arizona Republic, June 7, 1953.

of attractive homes east of Morenci. Many duplexes and small family homes are found there. Several miles below Morenci, immediately below the reduction works, is Plantsite, a new residential area, where houses for larger familes are located. Water and electricity for the communities are provided by the company.[4] The Natural Gas Service Company, an independent organization, has a permit to operate in Morenci.[5] At the present time, in 1955, Vilas Parker is the rental agent in charge of housing; Frederick R. Barr is in charge of the utility branch. One feature that is attractive to the worker is the low rent charged for these houses. Another feature which might discourage some people is that there are no dwellings for sale or lots to buy; Morenci is a company town, and less than a dozen people own their own land and homes.

In 1940 a new company-owned hospital was built, consisting of four main wings radiating from a central foyer.[6] This hospital, with a total of fifty beds, is staffed by doctors who are connected with the company. A dispensary is maintained in a part of the hospital for the benefit of the employees and private patients. Now, in 1955, Dr. Carl Gans is chief surgeon in the hospital.

Religious services were held soon after men brought their families to the town. These services were held in Morenci in 1885, when a Protestant minister served Clifton, Morenci, and Duncan, holding services in the

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4. Ibid.

5. Mining and Metallurgy, May, 1942, p. 297. The company purchases its gas from the El Paso Natural Gas Company, which built a high pressure line to serve the reduction works.

6. Identical plans were used for the company hospital built in Douglas, Arizona, in the same year. Mining and Metallurgy, July, 1940, pp. 330-331.

three places.[7] In 1896 religious services were conducted in the school house, with the Reverend W. G. Pollack in charge.[8] The Morenci Presbyterian Church, built through the combined efforts of the Arizona Copper Company and the Detroit Company,[9] was formally dedicated on December 8, 1901.[10] The first pastor of this church was the Reverend R. N. Illingsworth. This church, called the Morenci Chapel, although served by Presbyterian ministers, is active at the present time.

The Episcopal Church was for many years a mission of the Clifton church. Its services have been conducted in various places in the town. In 1919 and 1920 services were held in the Morenci Courthouse, across from the old high school. When a new high school was built, Frank Ayer, general manager of Phelps Dodge, was responsible for obtaining the old high school building for the church. This same building houses the present St. James Episcopal Church. One of its outstanding rectors was G. O. T. Bruce, who came to Morenci from Canada in 1923. During the depression of the 1930's, when only a few people remained in town, Bruce was the sole Protestant minister in Morenci, performing all of the Protestant work.

The Catholic Church in Morenci was a mission of Solomonville in 1888. Later, after Sacred Heart Parish was established in Clifton, Morenci became a mission of that parish. Monsignor Peter Timmermans, of the Sacred Heart Parish, who built the first Holy Cross Church in Morenci, " ... re-

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7. Clifton Clarion, May 20, 1885.

8. Graham County Bulletin, April 3, 1896.

9. Copper Era, December 19, 1901.

10. Ibid., December 12, 1901.

calls how the lumber was brought to Morenci on burros and how he carried the lumber on his back to the tower of the church."[11] The Catholics in Morenci today worship in Holy Cross Church, built in 1948, on a site above Longfellow Inn.

In 1955 the following churches have their places of worship in Morenci: Morenci Chapel, St. James Episcopal, Holy Cross, and the Spanish Presbyterian. The Catholics in Plantsite are making plans to build a church in that community. Two Baptist churches have church buildings in Plantsite; other groups meet in the recreation hall in Stargo.

Of the various forms of recreation available in the town, one of the earliest was cock fighting. In April, 1903, an amphitheater was constructed at the cock pit, where fights were promoted between Morenci entries and contestants from other towns. In one cock fight between a "nine pound Morenci rooster and a five pound Clifton bird" there was a purse of two hundred dollars.[12] Another form of entertainment popular about the same time was fights between badgers and dogs.[13] However, other forms of entertainment existed that were not as bloodthirsty as these fights.

Roller skating was first introduced into the town in 1885. Professor Charles Hogsett had charge of the first skating rink.[14] In 1907 a rink was constructed in front of the Detroit Company Hospital. This building, sixty by one hundred and ten feet long, contained a skating

11. History of the Sacred Heart Parish, Clifton, Arizona, Golden Jubilee Celebration, October 1, 1950. Pamphlet.

12. Graham Guardian, May 29, 1903.

13. Morenci Leader, June 9, 1906.

14. Clifton Clarion, April 15, 1885.

floor which was ninety by fifty-three feet. The structure included a gallery with a seating capacity of six to seven hundred, a smoking room for the men, a refreshment room, and a portable stage. The rink, which opened March 12, 1907, was used in the following ways: moving pictures were shown there, the school used it for a gymnasium, and it was used as an indoor baseball diamond.[15] On March 11, 1909, after a heavy fall of snow, the skating rink collapsed. However, it was rebuilt and used for many years.

Clubs were another popular form of entertainment appearing early in the history of the town. In the fall of 1885 a Literary and Social Club was organized. At one of the meetings Professor Hogsett "delivered a lecture on 'Progress of American Institutions' and Mr. John Cromwell discussed the Milky Way."[16]

The Morenci Club, which was built by the company in 1899, was the foremost recreational facility in the community for many years. While making his geological survey in the district, Dr. Waldemar Lindgren delivered a lecture to the public in the club.[17] A ladies' "gym" class was introduced in 1906 with the following activities: fancy work, pyrography, and bowling. At Christmas time each year the club gave an entertainment and treat to all the children in the community.[18] Usually the children took part in the entertainment. Various organizations used the

15. It was an annoying fact that there was not enough level ground in Morenci for a baseball diamond. The first indoor baseball game at the rink was between the Detroit Company store team and the rink team.

16. Clifton Clarion, September 30, 1885.

17. Copper Era, May 29, 1902.

18. The treat is still given the children in the community each Christmas, and various groups in the community help with it.

club to produce plays of local talent;[19] also theatrical companies which came to town presented plays at the club.[20] The club today maintains an important place in the community life. For some time two clubs have been in operation: the Morenci Club and the Spanish-American Club. For many years the Morenci Club was not open to Spanish-Americans, but within the past year the Morenci Club has been leased to private individuals, and Spanish-Americans are now admitted to the club.

Since 1940 the company has completed a new swimming pool, several playgrounds, tennis courts, and baseball diamonds. The swimming pool is maintained throughout the summer and during a part of the school term it is used by the physical education classes of the high school. During the summer hundreds of children attend the recreation program, which also is provided by the company.[21]

Other clubs and organizations have appeared in the town. As early as 1917 the Boy Scout Organization was active in the town.[22] Both the Boy Scouts and Girl Scouts have troops in Morenci at the present time. During the First World War a branch of the American Red Cross was formed.[23] At the present time the following clubs and fraternal orders hold regular meetings: V. F. W. Telles-Pelusi Post No. 9846, American Legion Auxiliary, Morenci Homemakers, Coronado Gun Club, Eastern Star, Knights of Pythias,

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19. One such play was "Men, Maids and Match Makers" given under the auspices of the Ladies Aid Society. Copper Era, January 24, 1913.

20. An appreciative audience enjoyed "The City" given at the Morenci Club. The play and players were above average of productions given in this place. Copper Era, January 10, 1913.

21. Arizona Republic, June 7, 1953.

22. Mining Journal, April 19, 1917.

23. Ibid., May 3, 1917.

Spanish-American Woman's Club, Lion's Club, I. O. O. F., Masonic Lodge, Morenci Garden Club, Rotary (Clifton and Morenci), Morenci Woman's Club, Stargo Garden Club, and the American Legion Lloyd C. Hill Post.[24] Some of the organizations that are connected with the local churches and meet regularly are: Phi Tau of the Morenci Chapel, Episcopal St. James Guild, Fidelis Society of the Morenci Chapel, Holy Name Society of the Catholic Church, and the Presbyterian Ladies Aid.[25]

In the winter of 1896 the Detroit Company provided a library and reading room for the use of the men. Those who used the reading room were required to pay one dollar a month, which was used for lights, fuel, papers, magazines, and the services of a librarian.[26] During the days when Dr. Douglas made frequent trips to Morenci, he usually brought books for the reading room, and if in town several days he gave lectures illustrated with lantern slides. Later the library became a part of the Morenci Club, maintained by the company. Today, in 1955, a fine public library is housed in the lower floor of the Hotel Morenci. The library is one of the projects of the Morenci Woman's Club with much of the work contributed by the women.

Music lovers, too, enjoyed musical activities in the early days. A singing association under the leadership of a Professor Gast was active in 1885.[27] A few years later some of the people were interested in taking music lessons; Professor O. H. Charton was employed to give private les-

24. Copper Era, August 5, 1955.

25. Ibid.

26. Graham County Bulletin, March 27, 1896.

27. Clifton Clarion, December 16, 1885.

sons and to organize classes.[28] In 1900 the Morenci Choral Society was organized.[29] The people were also interested in band music and several bands existed at one time in the community. One of these bands, which was called the Copper Mountain Band,[30] gave concerts from the veranda of the hotel. Music interests today are largely confined to the school and the churches in the community.

There were those in the town who were interested in a more active recreation. Baseball was one of the most popular of the spectator sports. Since Morenci did not have a baseball diamond in the early years, the game was played indoors at the skating rink. In 1908 a baseball association was organized for the purpose of building a ball diamond on the slag dump east of the Detroit Company smelter near the Arizona Copper Company concentrator. The Arizona Copper Company agreed to cover the field with tailings from their concentrator. Twelve years were required to fill the dump with slag before the tailings could be used to cover the field. When completed, it was said that "Morenci now boasts of the most costly baseball diamond in the world."[31] For many years the copper companies brought good ball players to the district from other parts of the country, keeping them on the company payroll,[32] although they were expected only to play ball. Ultimately the school became more sports minded and inter-

28. The undertaking was too ambitious and the community could not afford to pay a musician to come in and direct the band and choral group. Statement made by Miss Merna Robison in a personal interview, May 15, 1954.

29. Copper Era, October 31, 1901.

30. Ibid., October 8, 1903.

31. Morenci Leader, February 13, 1909.

32. Arizona Republic, June 7, 1953.

est in community teams died. Today the youth of the community are enthusiastic about their Little League teams that are sponsored by many of the business men. However, old-timers like to recall the days when Morenci was a "real" baseball town and produced some "real" ball players.

Another type of recreation of the spectator nature gained popularity in the early 1900's. Even though Morenci was isolated, the moving picture was not slow in coming to the town. Moving pictures were first shown at the skating rink. In 1908 pictures were discontinued at the rink when the Empire Theater, located near the Catholic Church, was opened. Performances were given every evening for an admission price of fifteen cents.[33] Later the theater was moved into the Morenci Club, where it remained until the present Royal Theater was constructed on the Plaza.

Fraternal Orders provided still another means of recreation for the community. The Knights of Pythias lodge was organized on July 8, 1902.[34] Another fraternal order, the Masonic Grand Lodge and Eastern Star, met in Clifton in 1907 for the twenty-sixth annual convention of the Grand Lodge. The outstanding event of this convention was the meeting place of the Masons, located in the Lone Star Stope, which had been fitted out as a lodge room.[35] In 1911 the following fraternal orders were active: Woodmen of the World, No. 20; Corinthian Lodge No. 18, Masonic; I. O. O. F. No. 22; Mountain Rebekah Lodge No. 15; and Morenci Lodge No. 24, Knights of Pythias. Many of these fraternal orders at the present time hold their meetings in the Morenci Club.

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33. Morenci Leader, January 11, 1908.

34. Copper Era, July 10, 1902.

35. Morenci Leader, November 23, 1907.

Some of the forms of recreation that existed were not considered the most desirable type. The saloons occupied a very prominent place in the town as well as in the lives of many of the people. In connection with some of the saloons were some very unsavory dance halls. Some of the more noted ones existed in "Hell Town" until a fire gave Charles E. Mills an excuse to move the town site. Most of the saloons and dance halls moved to Newtown when "Hell Town" ceased to exist. Many fights, some resulting in violent deaths, were brought about by over-indulgence in liquor or a quarrel over women. A serious fire destroyed "Hell Town," and later two fires destroyed most of Newtown.[36]

One form of recreation which appealed to young and old was the circus. The early circuses had little resemblance to our circuses today. The first circuses that visited Morenci included Mexican entertainers and a few trained animals. One such entertainment was described as having two black bears who rode on burros in the street parade.[37] Another circus, described as an acrobatic circus, was the Rodriguez Family Circus, which was held at the Mexican Hand Ball Court.[38] Morenci may have been isolated, but old-

36. Newtown is located about one half mile from Morenci. In 1907 a fire caused a great loss estimated at one hundred thousand dollars. The fire started in the back room of a saloon owned by Pedro Fuentes. It was supposed to have been set maliciously by two Mexicans, who laid the fire in straw in a beer barrel. As a result of the fire, Quan Dick, who was employed by Superintendent Mills as his cook, committed suicide by shooting himself three times in the head. Dick owned one of the saloons that was destroyed by fire and had invested heavily in it. Morenci Leader, June 29, 1907.

Within a few months another fire in Newtown burned four buildings. The fire started in a room back of a saloon owned by Grijalva and Sawaia. A woman burned to death in the room where the fire started; it was said that she used narcotics. Morenci Leader, January 11, 1908.

37. Graham County Bulletin, October 18, 1895.

38. When one such circus came to town, a small child (cont. on p. 103)

timers say that life was never dull. If recreation was not provided, the people were able to create their own entertainment.

In the very early days of the camp the population consisted almost entirely of single men; hence there was little need for schools. Later some men brought wives and families to the town, but the population was then primarily Mexican, who did not feel a need for education. Eventually another class of people arrived who requested educational opportunities for their children.

A school was in session in the town in 1890. Carrie N. Hunt taught that year in a one-room school provided by the Detroit Company.[39] In 1895 three separate schools seemed to be in operation: the public school, a "select school," and a private school. School was conducted in various places in the 1890's. The first school was located in a very small one-room building that was provided by the company,[40] whereas a later school was held in a lodging house. In 1902 the company constructed a school known as the Longfellow School. This building, built immediately south of the Hotel Morenci, was a one-story building to which later a second story was added. The cost of this building, which was built jointly by the Arizona Copper Company and the Detroit Company, was approximately

38. (cont. from p. 102) belonging to one of the group died. The child was buried in Morenci and may have had the most bizarre funeral in the history of the town. It seemed that it was the custom of some of the Mexicans to have a walking parade, sometimes with a band, to escort the dead one to the final resting place. In this particular parade the dead child was placed in a small rocking chair, with a canopy over the chair, holding flowers in her hand. The corpse was thus carried to the cemetery, near Fairplay. Statement made by Miss Merna Robison in a personal interview in Morenci, May 15, 1954.

39. Graham County Bulletin, February 28, 1890.

40. See picture of the town in 1892.

twenty-two thousand dollars.[41] The original building contained six separate rooms, an office, recitation room, and an apartment in the basement for the janitor. In this building both elementary and high school classes were conducted. Dr. James Douglas contributed the first library for the use of the Longfellow School. This building, which is commonly referred to as the "Brick Building," is still in use today as an elementary school. The first separate high school building operated in the present-day St. James Episcopal Church.

The schools were open to all the children, but for many years the Mexican children attended Mexican classes while the American children attended American classes. In 1907 it appeared that the Mexican children attended only the first three grades, as teachers were mentioned only for those grades.[42] In the same year the Mexican children had their closing exercises at the Morenci Club, which indicated that the two groups were not mixed.[43] Evidently the children also used different parts of the playground; at the time when the people returned to Morenci from the Duncan refugee camp, some Mexican agitators visited the "Mexican quarters at the school during recess," encouraging the children to call the children who had returned from the Duncan camp "scabs" and to throw rocks at them.[44] The following year the Mexican children caused some trouble in the school by refusing to salute the flag. Judge Lally, who was summoned, talked to

41. The Detroit Company paid two thirds of the cost and the Arizona Copper Company paid one third. Copper Era, June 13, 1901.

42. Morenci Leader, September 28, 1907.

43. Ibid., April 27, 1907.

44. Mining Journal, February 10, 1916.

them, warning them that anyone who did not obey the laws of the United States and who did not respect the flag would be deported. The children readily promised not to cause any more difficulty.[45] In the schools today, in 1955, children attend the same schools and classes, regardless of background. One section is maintained for those who, attending school for the first time, do not know the language. There is no evident feeling of discrimination between any groups attending the schools.

In the early years basic subjects were taught in the elementary grades. The first high school class, with one pupil enrolled, opened in 1902.[46] In 1908-09 the subjects offered in the high school were history, grammar, plane geometry, algebra, physical geography, domestic art, advanced algebra, literature, three years of Latin, solid geometry, study of the novel, physiology, and music.[47] In 1915 commercial subjects,[48] shop, and laboratory science were added to the curriculum. Today the schools offer the type of subjects found in the schools of the state of a similar size. Such subjects as woodworking, metal work, art, band, chorus, physical education, driver training, occupations, and journalism are included today to meet the needs of modern youth. A teacher for the homebound is employed at the present time, spending several hours a week with each pupil.

Some form of night school was in operation in 1906 and 1907. This

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45. Ibid., April 19, 1917.

46. The first graduate finished in the year 1906. Later she taught in Morenci and took her retirement from teaching in Morenci.

47. Seven students were enrolled in the high school in the school term of 1908-09.

48. In the summer of 1916 a summer school of commercial subjects was offered which included typing, stenography, and bookkeeping.

school provided classes for those who wanted to learn English, as well as for those who wanted to learn Spanish. One night class was organized for the study of mathematics, "for men only."[49] In 1916 the evening school offered English, Spanish, stenography, typing, mechanical drawing, bookkeeping, and penmanship,[50] to one hundred students.[51]

The responsibility for both the day and the night school was in the hands of the board of education. The board of education is composed of three people elected to that board by the qualified voters in District 18. D. M. Cansler served on the board for a longer period than any other board member.[52] The school administration is in the hands of the superintendent of schools. W. E. Lutz served as superintendent of schools for twenty-three years, resigning in the spring of 1939. Joseph H. Fairbanks, who was appointed at that time, still retains the position. The Morenci school district has a peculiar situation in regard to their bond elections. When money is to be voted for school improvements, less than a dozen people are qualified to vote. Morenci is a company town, and with a few exceptions all the property is owned by the company.

The schools are public tax-supported institutions operating under the laws of Arizona. The mining company has a close relationship to the schools because it does own nearly all the property in the town. Actually the mining company builds the schools because they pay most of the taxes in the district. The most recent construction includes a new elementary school in Plantsite and a new high school auditorium, both com-

49. Morenci Leader, October 5, 1907.

50. Copper Era, September 29, 1916.

51. Ibid., October 6, 1916.

52. Served from 1909 to 1939.

pleted in 1955. The financial problems are few in the schools in this community, again because of the close relationship of the mining company to the schools.

The schools in Morenci are situated in an unique location. All the schools in the town are built on the sides of the hills, one boasting a playground on the roof of the building. The site for the new high school was blasted from the side of the mountain and the mountainside sprayed with liquid cement to retain the hillside. Buildings used today other than the high school are: Longfellow or Brick Building, Fairplay or Frame Building, Coronado, Humboldt,[53] Band Building, and two elementary schools in Plantsite.[54]

At this writing, in 1955, children are transported from Plantsite by buses to the high school and the junior high school in Morenci. Grade children in Plantsite attend the elementary schools located there. The children in the Plantsite grade school are transported to their homes at noon for lunch, then returned to the school. The children in Stargo walk to school, with the exception of the children in the first three grades, who are transported by bus to school in Morenci. In the Morenci schools a hot lunch program is maintained for the benefit of the students. At the present time, in the school year of 1955-56, the Morenci school

53. Named for mining claims. Longfellow, Fairplay, and the Band Building were the first schools built in the order named.

54. The first school in Plantsite was known as the Plantsite School, and the new school is called East Plantsite School. The new East Plantsite school of the Morenci district has eight class rooms and accommodates grades one through six for children living in East Plantsite. In addition to the eight class rooms there is a small administrative unit which contains a room for music for all classes and other indoor activities. The architects for the building were Edward L. Varney, Associates. The cost of the building was $209,043. Copper Era, August 19, 1955.

district has on its staff ninety-one teachers and administrators.

The company is equally responsible for the governing of the town as well as sharing responsibility for the schools. Town government as such does not exist in Morenci, for the town is administrated by company officials. Law and order is maintained by deputies appointed by the sheriff and by a local justice of the peace. Political elections are held as in other places, although the only local candidates are those for justice of the peace, supervisor and representative for the legislature. At the present time two polling places are used for elections. Both the fire department and the sanitation department are maintained by the company. The company also builds and maintains the streets.[55] The town does afford an antiquated building called the Morenci Courthouse, which houses a jail. The jail is used only in emergencies because prisoners are usually taken to Clifton to the jail at the county courthouse.

Jails have an interesting place in the history of the town. The first jail used was a tunnel in the rocks. Here prisoners were dropped into the tunnel, making it almost impossible to escape. The tunnel, without any conveniences, was most unsanitary. When a new jail was built and occupied in 1908, the officers went to the tunnel, made the twenty-one prisoners take a bath, disinfected them, and marched them to the new jail.[56] Friends of prisoners in this jail often climbed from the hillside onto the roof of the jail to pour liquor through a hose to the prisoners. The people who occupied this jail left a variety of crimes in

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55. In the spring of 1955 the Square was completely resurfaced by the road crew. At the same time a new road was constructed in Morenci Canyon in front of the high school. This new road required a great amount of blasting and excavation.

56. Morenci Leader, June 27, 1908.

the annals of the town.

It seems that mining towns often acquire more law breakers than do more established communities. Morenci attained the reputation at one time of the second toughest town in the state. This reputation was not achieved without the aid of a large group of law breakers. Many of these law breakers came to Morenci when the situation was of a critical nature in another mining town.

One of the earliest crimes recorded was the murder of a Chinesenamed Kin Dip. According to the report a message came from Longfellow asking for a doctor, stating that Kin Dip had been shot near the Stone House, three miles above Clifton. Kin Dip, a gardener from beyond Oro,[56] had left Clifton shortly after noon with a load of vegetables. His destination was Longfellow. His cousin, Ueng Dong, stated that Kin Dip had about thirty dollars with him. When Dr. Miller arrived, Kin Dip, still able to speak, said that he was shot by an American.[57] Whether the murderer was apprehended is not known.

Twelve years later the murder of Pablo Salcido enraged the citizens of the town. Salcido, a prominent and respected citizen of Morenci, had served as recorder of Graham County from 1882 to 1885.[58] One night several men attempted to rob Mrs. L. L. McCormick's store. Paul Becker, business manager for Mrs. McCormick, returning to the store late that night, was confronted by the bandits. A scuffle ensued in which Becker was stabbed, but not fatally, and the robbers escaped. The following morning the investigating deputy found drops of blood and shoe tracks,

57. Clifton Clarion, September 26, 1883.

58. Graham County Bulletin, December 20, 1895.

which were traced to the house of Santiago Contreras. When the deputy neared the Contreras residence, shots were fired at him, causing him to return to town for aid. Everyone who could secure a gun returned with the deputy to the scene. During this interval the robbers retreated to a hill above the house. Three of the men from town rode up the Gold Gulch road to prevent the bandits from escaping. Two of the robbers were killed during the battle, while two escaped. When the deputy discovered Salcido going up the hill toward the remaining bandit, he insisted that Salcido stay below. Salcido replied: "Why, I know that man, he won't shoot me, for I have befriended him for years. I know he is my friend and I will go up and have him come down and surrender."[59] When Salcido was within fifty yards of the robber, the man shot Salcido, killing him. The battle continued until the robber was wounded when he was brought down and placed in the tunnel. The robber was recognized as Augustin Chacon.

Chacon was tried in the spring term of court in Solomonville in 1896 and given the death sentence. Just a matter of days before he was to be executed, he escaped to Mexico. There he remained for more than five years. While in Mexico he made many raids into Cochise and Graham counties.

Chacon was finally captured through the combined efforts of some law breakers and the law enforcement officers. The one person whom Chacon seemed to trust was Burt Alvord. Sheriff Jim Parks, of Graham County, arranged with Alvord and Billie Stiles, who were both wanted in Cochise County for train robbery, to try to get Chacon across the border on the pretext of stealing some horses. Captain Burton C. Mossman, of

59. Graham County Bulletin, December 20, 1895.

the Rangers, was to pretend to be a friend of Alvord and arrive on the scene, telling Alvord that he had just escaped from the Tombstone jail. All went according to plan, and Mossman met the other two in Sonora one night. During the night they sat around a fire waiting for the dawn, when Mossman and Alvord disarmed and handcuffed Chacon. They brought him to Benson, where Sheriff Parks met them. Chacon was hanged November 14, 1902.[60]

An official of the Mexican government came to Solomonville to investigate the case before Chacon was hanged, but was satisfied that he deserved hanging. The official stated that Chacon confessed to him that he had killed fifteen Americans and thirty-seven Mexicans.[61] To secure their guns and ammunition, Chacon and his gang had murdered, about a year before he killed Salcido, two clerks of the Detroit store who were on a hunting trip on Eagle Creek.

The two robbers who had escaped during the battle in Morenci, Simon Lopez and Santiago Contreras, were caught in Juarez, Mexico, where they were held. Sheriff Arthur Wight went to El Paso to get them, but could not get papers to extradite them; therefore they were not returned.[62]

Shooting was the more common method of killing, but dynamite was also used. An explosion at the home of Giovanni Peluso, in the Italian Quarter, killed Peluso but the others in the house escaped because a bed was thrown on top of them. The dynamite had been placed on a platform outside the house and ignited. The reason given was "probably revenge."[63]

60. Jennie Parks Ringgold, Frontier Days in the Southwest (San Antonio: The Naylor Company, 1952), p. 139

61. Copper Era, November 27, 1902.

62. Graham County Bulletin, February 7, 1896.

63. Copper Era, December 17, 1901.

Another dispute of a legal character but of a less violent nature involved the adoption of orphans. Father Peter Timmermans, the regular priest in Morenci and Clifton, left in the spring of 1904 to visit his old home in Belgium. While he was away a young priest by the name of Mandin was placed temporarily in charge of the parish.

This young priest, complying with the wishes of some of his parishioners, contracted with the New York Foundling Home to send a certain number of children to the district for adoption. The priest stated in his letter to the Home that the people desired only children of fair complexion. Forty children were sent under the supervision of Sister Anna Michella, two other sisters of charity, and an agent by the name of G. A. Swayne.[64]

On the evening of October 1, 1904, the children arrived by train in Clifton. The children had tags pinned to them assigning them to families whose names had been supplied by the priest. A number of curious Anglo women, who had come to the station expecting to see Mexican orphans given to the Mexican families, were amazed to see the fair skins of the children who were to be adopted by the Mexicans. The women, who were upset, caused so much disturbance that Swayne assured them that none of the children would be distributed until morning. He also told them that at that time the Anglos could make application for the children. When Sister Michella saw the nature of the situation, she too objected to the placement of the children. However, later that night some of the children were placed in

64. "Case of the New York Foundling Hospital vs. William Norton," Report of Cases Argued and Determined in the Supreme Court of the Territory During the Year 1905 (Criminal No. 209. Filed January 21, 1905). Vol. 9, p. 105. and 203 U.S. 429 (1906).

the assigned homes over the objections of Sister Michella. Evidence later produced in court showed that, with few exceptions, persons who originally received the children were unfit to have them.

The following day the priest and Swayne went to Morenci to distribute children there. People in Clifton, when they found that children had been placed the previous evening, met and chose a citizens' committee to go to Morenci to find the priest and Swayne. The Morenci citizens were as disturbed as those in Clifton over the distribution. The feeling ran so high in Morenci that the priest and Swayne feared for their lives.[65] While the committee was in Morenci, another group of citizens in Clifton went from house to house collecting the children and returning them to the hotel.[66] There the children were kept until suitable families took them.

When Swayne and the priest returned with the committee, Swayne declared that the children had been placed temporarily with the people to whom they had been assigned, with the understanding that the sisters were to remain for several weeks to check on the conditions of the homes. Swayne protested the taking of the children from these homes, but they were not released to Swayne or to the sisters. Most of the children remained in Clifton and Morenci; however, a few returned to New York with the sisters.

When the New York Foundling Hospital learned what had happened, they brought suit to recover the children. In the meantime those people who had taken the children had secured guardianship papers for the children

65. Statement made by Julian Chavez, Clifton, Arizona, in a personal interview, May 10, 1954. Mr. Chavez said that the crowd was anxious to lynch both of them in Morenci.

66. Many of the children were ill because of strange food.

they possessed. The case was first tried in the district court in Solomonville, where the court ruled that the American families in Clifton and Morenci who had the children were entitled to keep them. The case was then appealed to the Supreme Court of the Territory, where the decision of the district court was upheld. Then the Foundling Hospital took the case to the Supreme Court of the United States, which upheld the judgment of the Arizona courts; therefore, the children remained in the Clifton and Morenci homes of the people who had secured their guardianship.[67]

In addition to murders, dynamite and legal disputes, all of which contributed to the story of law and order in the community, bank robbery is included in the records. In September, 1910, the Gila Valley Bank was robbed by a lone bandit. The robber placed the manager and bookkeeper in the vault, agreeing not to lock the vault after the captives promised not to come out. The bandit took three thousand dollars. While he was mounting his horse, several shots were exchanged between the robber and some of the citizens. During the shooting he dropped two sacks that contained one hundred dollars each. Although deputies trailed the thief to the San Francisco River, he managed to escape.[68]

A few years later a sensational use of dynamite astounded the community. At midnight, July 10, 1913, the home of Father Alexis Colle, priest in the Catholic Church, was almost completely wrecked by an explosion of dynamite. Father Colle escaped with his life because he had that night changed his sleeping room to another part of the house.[69] After

67. New York Foundling Hospital v. United States, 203 U.S. 429 (1906).

68. Morenci Leader, September 9, 1910.

69. Copper Era, July 18, 1913.

this Father Colle had changed his sleeping quarters nightly in constant expectation of being killed. About two o'clock on the morning of August 1, when he was sleeping in the rear of the church in an ante room, the Catholic Church was dynamited. Again he escaped with his life. It was said that some people hated the priest because of the stand of the church in regard to anarchism.

The following week the congregation met, deciding to rebuild the damaged part of the church. In early September a number of arrests were made,[70] including members of prominent families in Morenci as well as a former priest in Morenci by the name of Camet. However, the arrests did not bring an end to the affair. Another attempt was made to completely destroy the church. At the time of the last explosion Father Peter was in charge of the church, as Father Colle had left on August 6.[71] After this attempt at destruction the affair died down, and there is no evidence that anyone was proved guilty or punished for the crime.[72]

Prohibition brought its trials to Morenci to further burden the law enforcement officers. The officers caught a group of Spaniards and Mexicans with a train of burros loaded with whiskey as they were packing it over the hills to Metcalf. The train had left Lordsburg the week before, traveling by night and hiding by day.[73] One raid made by Sheriff Arthur Slaughter in Newtown kept two trucks busy for two days bringing

70. Copper Era, September 12, 1913.

71. Ibid., September 19, 1913.

72. The name Camet is found in some accounts as Cannett and Kamet. He retired from the priesthood and located some mines in Sonora. Later he came out of Sonora, as he said some priests "made it too hot for him." Mining Journal, July 22, 1915.

73. Mining Journal, June 15, 1916.

between ten thousand dollars' to fifteen thousand dollars' worth of liquor to the courthouse.[74] In one such raid, when some of the confiscated liquor was poured into the street, "the gutter leading from the Morenci jail to the canyon flowed with the three barrels of confiscated wine which were emptied. Two Mexicans were caught around the curve sipping it up with their hands."[75]

Crime in recent years has tended to show a rise in juvenile delinquency. Robbery and destruction of property seems to be the more common type of law breaking. In the spring of 1955 boys were placed on probation for bringing liquor across the line from Agua Prieta, Sonora, and giving it to a minor. At about the same time several other young men who robbed a drug store in Clifton were placed on probation. Crime and vice, as in all places, still exists in the town. However, there are not so many serious crimes today, probably because of a better educated population and a higher standard of living.

The most recent event which affected the entire town as well as most of the county was the strike called by the International Mine, Mill and Smelter Workers Union on July 1, 1955. Negotiations, which had seemingly progressed for some time, finally broke down. Phelps Dodge issued the following statement in the last week of July: "An offer by the Phelps Dodge Corporation which adds up to a package of fifteen cents per hour per employee has been rejected by the bargaining committee of the International Union of Mine, Mill and Smelter Workers. All that we can say is that the end or continuation of the present strike is now entirely up

74. Ibid., January 18, 1917.

75. Ibid., March 22, 1917.

to our employees. Phelps Dodge has gone as far as it intends to go."[76] The strike caused hardship in the surrounding communities as well as in Morenci. The president of the Greenlee County Chamber of Commerce sent a telegram to President Eisenhower requesting that he invoke the sixty-day cooling off period provision of the Taft-Hartley law.[77]

Finally an agreement was reached between the company and the union on August 1, 1955. The new contract provided for wage increases from $13.12 and $19.04 a day to $14.04 and $20.44 a day. The main issue which held up an agreement regarded the health and welfare plan. The new plan provided for: (1) hospital and surgical care and medicine for employees and their dependents at home as well as away from home and (2) increased weekly allowance for employees out of work because of accident or injury not covered by workmen's compensation.[78] The mine and smelter are again at work, and families have a feeling of security for the present.

Many changes have taken place since the four original claims were established in 1870. Shifts in leadership brought about many of these changes. The history of Morenci is a result of the hardships suffered by the brave men who helped create a great copper town: Yankie, Metcalf, Swisshelm, Bullard, Lesinsky, Church, Douglas, Mills and Ricketts, as well as others too numerous to mention.

People who came to Morenci many years ago remember it as a very small town. Its growth has been gradual. The depression, in the 1930's, found the town virtually deserted, with little hope of survival. Late in the 1930's the activity in the pit mine started, and since that time

76. Copper Era, July 29, 1955.

77. Ibid.

78. Copper Era, August 5, 1955.

there has been steady progress.[79] The usual cycle in a mining town is discovery of a metal, a boom period, and finally the ghost town. Although Morenci has covered all three cycles, it has begun a new cycle which promises many more years of prosperity for the community.

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79. The population of Morenci according to the reports of the U.S. Bureau of Census was as follows:

1910	5010
1920	7501
1930	5108
1940	Not listed
1950	6541

APPENDIX A

MINERS FORM OF NOTICE FOR LOCATION[1]

We hereby give notice that we have this _____ day of _____ A.D., 187___, located this, the ("Centennial") lode. We claim 1,500 feet in and along the vein, linear and horizontal measurement.

We claim 1,200 feet along the vein, running in a northwesterly course from the discovery shaft, and 300 feet running along the vein southeasterly from the discovery shaft. We also claim 150 feet on each side of the vein from center of crevice as surface ground.

W. _____ M. _____

H. _____ C. _____ Locators

1. Richard J. Hinton, Handbook to Arizona, Its Resources, History, Towns, Mines, Ruins and Scenery (San Francisco: Pagot, Upham and Company, 1878), Appendix III.

APPENDIX B

LETTER FROM MRS. MAUD METCALF JAMES[1] TO ROBERTA WATT

My Father went to California in 1849, and in traveling through Arizona he noticed the copper stains on the mountains. He went on to California and Oregon, and then later on came back East and served in the army of the Confederacy. When the war was over he went to New Mexico in 1870 where there was much excitement over the discovery of silver. When he reached the mines he found six to ten men all in high spirits over their find. He remained there two weeks prospecting. He made two or three locations, but none of much value.

He then organized a company of fifty men to work some gold placer mines in Arizona. To reach these mines was difficult, on account of the ruggedness of the country and the Apache Indians, who were on the war path. They failed to find as rich a strike as reported and returned to New Mexico. On this trip he did not find much gold, but did find mountains of copper. He took samples of the copper ore, and told his companions that this copper would one day be valuable. He was laughed at and told that he would never live to see the day when a pound of copper could be taken out from where they were for less than double what it was worth.

The nearest railroad was 1200 miles away. Father said he knew he was right as this was the only pass through which a railroad could go to

1. Letter from Mrs. Maud Metcalf James to Roberta Watt, October 7, 1954.

California and sooner or later it must come near these great mountains of copper. On his return to the settlement, he and his brother and another man quietly left at midnight to locate these great copper mines in eastern Arizona. Father built the first house in Clifton and named the town. He also named Globe, Arizona and Silver City, New Mexico.

He had located these properties but did not have money enough to work them, so he decided to take in some partners. This he did to his sorrow, as they proved to be unscrupulous and caused him much trouble. His mines were Longfellow, Little Annie, Fair Play, Metcalf, Black Hawk and several others. These afterwards formed the great Arizona Copper Co. which was later sold to Phelps Dodge.

The following is copied from an article in the Copper Era of Oct. 24th, 1901. Written by my cousin Charles Metcalf Shannon, who came west to join his uncle (My Father), in 1871.

"In 1870 a party of prospectors from Silver City, New Mexico, sojourned in the Clifton district and took up claims.

"Copper was not much considered in those days, however, and little was done toward calling public attention to the district. In 1872 some of the locators returned and made good their holdings of what are now some of the most valuable mines in the district. Among these Robert B. Metcalf proved to be the moving spirit, and he is entitled to rank as the real discoverer of the district. He interested the Lesinsky Brothers, a wealthy firm of Las Cruces, New Mexico, in the enterprise. A partnership development was jointly undertaken in 1873.

"Stone and mud ovens, after the Mexican style were built for smelting the ore. The blast was supplied by an ordinary blacksmith's bellows worked by hand. This work, which proved very exhausting, was performed

by relays of Mexicans, who worked in shifts of one hour each. In this way the first copper ever smelted in Arizona was produced in 1873. This is a point in the history of the Territory worth remembering. The pioneer ingot came from the Longfellow Mine. This was probably selected because its ore was easily smelted and it could be reduced at a moderate expenditure of effort, being very high grade copper. The Longfellow mine was ranked as one of the best in Arizona, one of the most profitable, in fact, in the United States.

"The pioneer developers worked with varying success from 1873 to 1882, overcoming difficulties that would have discouraged any but the stoutest hearts. The country was frequently over run by hostile Apaches, who attacked freighting teams, killed the men and ran off the stock. All supplies had to be transported with teams from Kit Carson, Colorado, a distance of 800 miles and the copper produced was hauled over the same road."

APPENDIX C

STOCKHOLDERS IN THE DETROIT COPPER MINING COMPANY[1]

STOCKHOLDERS	ADDRESS	NO. OF SHARES
Eben B. Ward	Detroit, Michigan	3658
David M. Richardson	Detroit, Michigan	1829
Wm. H. Bronson	Detroit, Michigan	458
Wm. H. Zabruski	Detroit, Michigan	457
C. C. Blodgett	Detroit, Michigan	457
David Gallgher	Detroit, Michigan	457
Milton D. Ward	Detroit, Michigan	457
Henry S. Ward	Detroit, Michigan	457
H. C. Hodges	Detroit, Michigan	457
Ira C. Lillibridge	Detroit, Michigan	457
Daniel Quirk	Detroit, Michigan	457
Addison P. Cook	Brooklyn, Michigan	457
Allen G. Cameron	Detroit, Michigan	457
Robert L. Montgomery	Detroit, Michigan	457
Orrin W. Potter	Chicago, Illinois	457
John W. Reed	Silver City, New Mexico	1225
Wm. L. Ryerson	Silver City, New Mexico	1224
Joseph T. Yankie	Silver City, New Mexico	1224
James B. Bullard	Silver City, New Mexico	1224
J. H. Stone	Silver City, New Mexico	1224
Edwin M. Pearce	Silver City, New Mexico	1224
John Swisshelm	Silver City, New Mexico	1224

1. From the articles of incorporation of the Detroit Copper Mining Company, which are on file in the Office of the Corporation Commission in Phoenix, Arizona.

APPENDIX D

CONCENTRATION AND SMELTING OF COPPER[1]

When the ore comes from the mine it is placed in storage bins. The ore ranges in size from about a foot and a half in diameter to fine dust. The ore goes from the storage bins through large crushers which smash the large pieces. In the process of breaking up the ore, the ore goes over screens that segregate all pieces between certain sizes. A two inch piece is the largest that is allowed to go through the concentration process and the smallest is fine dust.

The Hartz jig is the machine that accomplishes the first separation of heavy copper-rich material from the light and more barren rock. The jig produces upward pulsations of water which allows heavy valuable pieces to go to the bottom and the less rich material stays on top. The concentrate or rich ore passes out of the lower end of the jig through a shot discharge and the lighter material goes over the top. The concentrate is rich enough to be sent directly to the furnaces to be smelted. The rejected material is called "middling" and it is now crushed even finer and enters the Evans jig, similar to the Hartz, but adapted to handle ores from three-eighths of an inch to one-sixteenth of an inch. The same separation is again made and the concentrate in this case is sent to the bins that feed the roasting furnace. The middlings go to another crusher that prepares them for the Wilfley tables and added to these is the

1. Watson Davis, The Story of Copper (New York: Century Company, 1924), pp. 107-109.

original part of the ore that was finer than one-sixteenth of an inch. This makes a slime when added to water. To separate this from the coarser material, a cone like apparatus is used, and the slime that issues from the top is sent directly to the flotation process.

The coarser material goes to the Wilfley tables, here the heavier ore is divided from the middlings by a peculiar jerk imparted by the driving mechanism and a shaking action. This action loosens the bed of ore so that the concentrate settles below the middling. The wash water, flowing across the table at right angles to the direction of the jerking action and motion, carries the middling over the lower edge of the table while riffles guide the concentrate to the end of the table. The rich concentrate is added to the supply for the roasting furnace.

The ore that is rejected by the tables is sent to large revolving Hardinge mills in which balls pound it into powder about as fine as cement. The finely divided ore is now ready to enter upon its final step in the wet concentrating process, that of filtration. The slime coming from the cones is mixed with the middling finely ground in the large ball mills. When the combination flows into the flotation machine, it is mixed with a surprisingly small amount of certain kinds of oil, and then the whole is beaten into a froth by vigorous agitation. The metallic mineral particles stick to the oil, while the non-metallic minerals cannot. The millions of bubbles of the froth act as tiny balloons - after the process of aeration has continued for some time each air bubble is ready to carry off a minute particle of valuable ore. Though each one may not succeed in doing so enough rich ore is carried by the froth to make the process ninety-five per cent efficient. Flotation is the first in the process that finally condemns a portion of the ore to the waste

piles. The portions of the ore not chosen by the froth are too poor for further use and are called tailings and carried to the dump. The froth goes to the roasting furnaces.

The smelting process involves three steps: roasting, smelting, and converting. In the roasting process a part of the sulphur is driven off resulting in a partly oxidized ore. In the smelting process the gangue minerals and more of the sulphur is eliminated. The converting and last process takes the rest of the sulphur and leaves the crude copper. When rich chunks of ore are treated in the blast furnace, this furnace performs the first two steps at one time. If fine concentrates from the tables and the flotation process are treated, roasting and then smelting produces the combination of copper, iron, and sulphur that is called matte.

To roast a copper sulphide ore it is heated and more of the sulphur is eliminated in the slag. In smelting the roasted ore which consists of a mixture of sulphides of copper and iron, iron oxide, and metallic copper, together with silica and alumina which are all left in because of their aid in the smelting process. This mixture is put into the hearth of the reverberatory smelter and bombarded by heat. The result is a formation of matte, slag and gases that are given off; the matte being the heavier goes to the bottom and the slag floats on top. The slag is sent to the dump, and when enough matte has accumulated in the bottom of the furnace, it is tapped, and the liquid is taken to the converter. In the converter the copper is separated from the sulphur and the iron by the use of air pressure. It takes about five hours for the converter to change the matte into copper. The slag from the converter is so rich that it is not taken to the dump. Converters have been used only since 1878.

APPENDIX E

CHARLES E. MILLS

Mills was largely responsible for the rebuilding of Morenci. Ernest Hopkins called him the "Silent Czar of Morenci." The Mexican miners called him "El Indio." The nickname was said to be fitting because of his powerful physique, gloomy moods, and monosyllabic speech.

Mills was educated at the Iowa School of Mines[1] and later attended Harvard. He did not like Harvard and simply disappeared from his classrooms and eventually turned up in Bisbee, Arizona, as a laborer on a construction crew. Dr. Douglas noticed him and made him a mine superintendent in the Phelps Dodge mines in Yavapai County.

When Mills was thirty he was placed in charge of the Morenci mines. In 1898 he disappeared from Morenci and young Walter Douglas took over his job. Later they learned that Mills had enlisted as a private in Company A of the Rough Riders. He fought in Cuba and returned as unexpectedly as he had left.[2]

In Morenci he converted a typical "rawhide" mining camp into a town

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1. "In 1894 legislation by the General Assembly of Iowa, relative to the College included the creation and establishment of a school of mines, the granting of some additional authority to the Trustees in protecting the land interests, and the voting of appropriations." Clarence Ray Aurner, History of Education in Iowa, Vol. 4, p. 264. Published by the State Historical Society of Iowa, 1916. Originally the school was the State College of Agriculture and Mechanical Arts at Ames, Iowa. Today it is called Iowa State College.

2. Ernest Hopkins, Financing the Frontier, p. 57.

unexcelled in any mining community in the Southwest. Some of his accomplishments were: a new store, general office, hotel, new school system, up-to-date water system with water coming into it from Eagle Creek (a drainage of the White Mountains). He was a force in the founding of the Gila Valley Bank and started the Apache Powder Company.[3]

The one man that Mills looked up to was Dr. Louis D. Ricketts. Ricketts was Arizona's finest mining engineer and one of the most beloved citizens; he was commonly known as "Ricketts of Arizona." He received his education at Princeton and was offered a position on the faculty, but refused and spent years prospecting and surveying in the Rocky Mountains. In the 1890's he and Dr. Douglas worked together in Arizona and Sonora. In 1897 Ricketts built a model mill in Nacozari for low grade ore. In 1899 he constructed a larger mill for the same purpose in Morenci.

It was the friendship of these two men, "El Indio" and "El Poco Seco"[4] that helped to produce a greater Morenci.[5]

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3. Arizona Historical Review, "Arizona Builder Taken by Death," April, 1929, p. 7.

4. The Mexicans named Ricketts "El Poco Seco" which means Dry Stick.

5. Hopkins, op. cit., p. 60.

APPENDIX F

THE ARIZONA RANGERS[1]

In March, 1901, the Arizona Territorial Legislature passed a bill giving the governor of the territory authority to create a body of men to bring law back to the border. The Rangers started with Burton C. Mossiman of Bisbee as Captain and with one sergeant and twelve privates. The organization could be increased to twenty-five if needed. Mossiman had his headquarters in Bisbee located in Brewery Gulch. Later Thomas H. Rynning relieved Mossiman as Captain and moved the headquarters to Douglas.

In the Governor's Report in 1904 several items of interest concerning the Rangers were mentioned. During the year 1904, four hundred and fifty-three arrests were made by the Rangers; five were for murder, one hundred fifty-five felonies; and two hundred ninety-three for misdemeanors. One man in this group was killed resisting arrest. In 1904 the group was under the command of Captain Rynning and Lieutenant John J. Brooks. The personnel of the Arizona Rangers was not known to the general public as secrecy was required in order for the work to be effective. The principal work of the Rangers was in connection with livestock interests. It was reported that each member rode on an average of three hundred and ninety miles a month horseback.

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1. Arizona Historical Review, October, 1931, p. 39.

APPENDIX G

PROPERTIES OF THE DETROIT COPPER MINING COMPANY OF ARIZONA THAT WERE TRANSFERRED TO THE PHELPS DODGE CORPORATION MARCH 23, 1917[1]

Copper Mountain
Arizona Central
Montezuma
Yankie
Chalkos
Hudson
Eccentric
Lone Star
Butler
London
Hoodoo
Kupfer
Annie Ryerson
Producer
Cobre
Buckhorn
Oneida
Lancaster
Fairbanks
Arthur
General Miles
Morenci
Pelican
Dives
Wellington
Montana
Colorado
Thomson
Crescent
Crown
Nevada
Oregon
Johannah
Summit
S L C L
Charlton
Micawber
Regulus
Look Out
La Esperanza
Eighty Nine
Montezuma Annex
Mascot
Gran Tezaro
Isabella
Providencia
Nugget
Dictator
Mysie
Daisy
Beauty
Gem
Good Luck
William Tell
Dad Wright
Grant
Sherman
Sheridan
Santa Rosa
San Tanton
Woodpecker
New Orleans
Adile
San Pedro
Tanner No. 1
Rincon
Meade
Oro
Chalkos Extension
Pelican Extension
Maximiliano
Foxey
Rough Rider
Maud S.

1. Mining Deeds, Book 2, Greenlee County Records, Greenlee County Courthouse, Clifton, Arizona, pp. 162-184.

Boss
Lady Washington
January
Big Mike
Tough Nut
Organ
Norway
Gold Bar
North Star
Banshee
Little Lacey
Saint Patrick
Eighty Seven
Globe
Cannon
El Capitan
La Maria
Parker
Missing Link
Wren
Wedge
Monte Cristo
Monte Cristo No. 2
Jupiter
Southern Belle
Axtel
New Century
Carlota
Jessie L.
First Chance
Denver
Last Chance
Terapin Jack
Copper Plate No. 1
Copper Plate No. 2
Copper Plate No. 3
Copper Plate No. 4
Copper Plate No. 5
Copper Plate No. 6
Copper Plate No. 7
Maud C.
Donna C.
Glory Quayle
Imperial
Sun
Sky
San Raphel
"97"
Llave
Grisley
Number Five
Alhambra
Alvarado

Keystone
Desprecio
Bahama
Balboa
Barcelona
Cadiz
Caloocan
Constellation
Cracker Jack
Cuba
Dooley
Dorcas
Hernando
Iron Queen
King George
King Edward
Lackawanna
Lion
Minnesota
Moor
Pilot
Pizaro
Republic
Santiago
Santiago Extension
Schlatterer
Sonora
Stamboul
Sunset
Toledo
Washington
West End
W. J. Bryan
Wyoming
Missouri
Mohawk
Mohican
North Dakota
Owl
Porto Rico
Prescott
Prescott Extension
Prescott Second Extension
Protector
Raven
Seneca
South Dakota
Three Loop
Tioga
Ute
Triangle Trapezoid
Apache
Armada

Armada 2nd Extension
Idaho
Great Northern
Bunker Hill
Cortez
Cuba Extension
Dewey
Dos Cunas
Granada
Irquois
June[2]
Armada Extension
California
Bell
Cayuga
Cordova
De Soto
Diamond
Ella Belle
Two Triangles
Irving

Patented Mining Claims

Last Chance No. 1706 U. S. Mineral Survey
Copper Cross and Chambon No. 1512
Comstock No. 2339
Bear, Sultana and Orion claims No. 2962

Millsite Claims in Copper Mountain Mining District

Copper Mountain
Number One
Number Two
Number Three
Number Four
Number Five

Claims in Greenlee Gold Mountain Mining District

Maine
Olivet
Maine Fraction
Tony
Fraction
Missing Link
Alice Winifred
Cambridge
Copper Verde
Monte Carlo
Brat
Guigante
Rosswell
November
Regulation
November No. 2
Mabel
Hazel
American
Katy D
Yosemite
Solid Copper
Famous
Medler
Indiana
Copper
Republic
Buckeye
Sharpshooter
Leo C.
Antietam
Blue Jay
Standard
Heckscher
Good Boy
Paramour
Last Spike
Nellie
New England
Martha
Floradora
Club

2. All these claims were in the Copper Mountain Mining District.

Mack and Jack
San Jose
Fire Fly
Adrienne
Out Let
Deep Down
Copper Center
True Center
Lucky Number
Figure Seven
Great Center
Bon Ton
Nellie Fraction
Erskine
Los Angeles
Santa Maria
San Lorenzo
Graham No. 1
Graham No. 2
Black Mastodon
Boston No. 1
Boston No. 2
Boston No. 3
Boston No. 4
Boston No. 5
Boston No. 6
Boston No. 7
Boston No. 8
Boston No. 9
Central
Companion No. 1
Companion No. 2
Defiance No. 2
Defiance No. 3
Defiance No. 4
Euclaire
Eagle
Golden Gate
Green Tree
Hidden View
High Roller
High View
Mt. Vernon No. 2
Mansfield No. 2
Mansfield No. 3
Nevada
North Field
North Star
New Jersey
New York
Rich Hill
Summitt No. 1
Summitt No. 2
Summitt No. 3
Top Notch
Tom H.
Consolidate No. 1
Consolidate No. 2
Consolidate No. 3
Consolidate No. 4
Copper Chief
Defiance
Eclipse
Evolutor
Mansfield
Mount Vernon No. 1
Royal C
Virginia Queen
Rye
Bourbon
Triangulate No. 1
Buffer
Defiance No. 1
Mansfield No. 1
Central
Anaconda

In January, 1923, the Arizona Copper Company, Limited, existing under the laws of the United Kingdom of Great Britain and Ireland, incorporated in Scotland, sold to the Phelps Dodge the following claims:

Garnet
Garnet No. 2
Sapphire
Ruby
Emerald
Emerald No. 2
Javen
Burke
Hennessey
Sophie
Judge
Little Joe
Little Mittie
New Year No. 2
Old Year
Butter Fly

Hideout
Copper Cliff
Topas
Humpty Dumpty
Gilles No. 2
Isma

Shoo Fly
R. A. M.
Holiday
Pacific
Alaska
Arctic

APPENDIX H

PORTION TAKEN FROM A LETTER WRITTEN BY JOHN M. BOUTWELL, GEOLOGIST FOR THE UNITED STATES GEOLOGICAL SURVEY AND LATER GEOLOGIST FOR PHELPS DODGE[1]

.....

You see Morenci as I recall it was the Morenci of about forty years ago - a crude Spanish speaking community - with two Mexican settlements - with few whites, the one big company store - the only level stretch where boy and girl could go walking was a short piece of railroad grade leading to the cemetary - and the white Spaniards bought a keg of wine - laid it across the railroad track and rolled it on the track around the spurs to their shacks. Before that - in the ten years preceding 1900 - Morenci and Tombstone were called the toughest wildest mining camps in the west - and it was said one could step out any morning and see a corpse down at the foot of the dump. Even while I was there - shootings, knifings, and brawls were common occurrences. Some of my experiences may interest you when we get together sometime - such as about the drunk who fell against my wood pile and knocked it over only - when he woke up - to walk along the track to a tunnel - lie down and go sound asleep - and have both feet cut off by the railroad ore train - and the clerks in the company store camping one weekend over at Eagle Creek - sitting around their camp fire one evening - were all stabbed to death from behind - and other similar experiences - so you may understand my relief on learning that you had

1. Letter is in the possession of Mrs. Russell (Gretchen) Jones, 6231 E. 16th St., Tucson, Arizona.

inspected the place and found it quite to your liking.

I went to Morenci in 1901 to assist Mr. Lindgren in making a geological examination of the whole area - as far south as Clifton - and north beyond Metcalf - and detailed reports on every mine - for the United States Geological Survey. In 1908 I resigned from the U. S. Geological Survey and was engaged by the Phelps Dodge Corp. to take charge of the company's mining geological work, to study the ore deposits of each camp and organized a geological department at each camp - including Bisbee, Morenci, Globe, Nacozari and Cananea - doing one camp a year. It is a long story about my work for the company for years - but when I got around to making my report on Morenci - for the company conditions were looking up - and I found the country unique - the ore deposits most interesting and the Phelps Dodge officials and the Arizona Copper Company (Scotch Co.) most able and cooperative - though the country was still rather wild - and to the north required a pack team to reach and study it - one important block of ground was the "Clay" property - opened only by tunnels - which I studied and reported showed a large body of very low grade ore which I believed could be worked at a profit. Later the ground was drilled - sampled and assayed - an operation planned - the surface capping of quartzite entirely stripped off - and the present great open cut mine was developed.

Dr. James Douglas was president of Phelps Dodge, Cleveland Dodge treasurer and his son "Cleve" Dodge was my assistant two summers - now he is vice president. Cleve's Aunt Grace Dodge was the founder of the Y.W.C.A. and Cleve's father was instrumental in founding Y.M.C.A. All were and always have been kind to me - Phelps Dodge is in the mining world - what General Electric is in the electrical world - fine characters

of high principles, doing much fine philanthropy and leaders in scientific research. Phelps Dodge present Harry Lavander was a chum at Golden Mining School, Colo. - of Mearle Hertzman the present manager of operations for the Silver King Mine at Park City, Utah and they were both on the Golden football team.

The Dodges have always favored building good schools, hospitals, churches and gymnasiums by the company - and maintaining as clean and decent a community as possible.

APPENDIX I

THE CASE OF THE NEW YORK FOUNDLING HOSPITAL VS. WILLIAM NORTON, IN THE CUSTODY OF JOHN C. GATTI[1]

The testimony and evidence show the following facts:

The New York Foundling Hospital is a corporation organized and existing under the laws of the state of New York, for the purpose of caring for abandoned and deserted infants found in the city of New York, and such as may be voluntarily surrendered to it, of the age of two years or under; the act amending its charter providing that it should be under the care, management and control of the religious order known as the "Sisters of Charity." While the act amending the charter of the hospital does not in terms authorize the institution to do so, it is shown that it has been, from the organization of the hospital, the practice of its managers, to place infants of a suitable age in homes within and without the state of New York, to be cared for, reared, supported, and educated in such homes by the persons to whom they are given, and that it so places some four hundred and fifty children each year, and that the hospital authorities retain the right to visit such homes and to maintain a supervision over said children until they become of age. The evidence does not disclose the nature or extent of this supervision, nor the method by which it is exercised.

1. Arizona Reports, Reports of Cases Argued and Determined in the Supreme Court of the Territory of Arizona, From 1904 to 1906 Inclusive, E. W. Lewis, Reporter, Vol. 9 (San Francisco: Bancroft-Whitney Co., 1908), pp. 105-121.

During the summer of 1904 the hospital authorities received a letter from a priest temporarily in charge of the parish of Clifton and Morenci, requesting that a certain number of children be sent from the institution to Clifton and Morenci, to be placed within the homes of certain of his parishioners, who were represented by said priest to be of the Spanish race, but to be persons who spoke the English language; that it was the desire of these people that only children of fair complexion be sent. In response to the application, and upon the representations made by the priest, forty children were sent by the petitioner, under the charge of Sister Anna Michella and two other sisters of charity, and an agent by the name of Swayne, consigned to the persons whose names had been previously supplied by the priest. These children were of the Caucasian race, and, as requested by the said priest, chosen from among those in the institution who were fairest and lightest in complexion. They were all children of unusual beauty and attractiveness. Their ages were from eighteen months to five years. To the clothing of each child was attached a tag, giving the band number of each child, the name of the person to whom consigned, and the name and date of birth of the child. To each person to whom a child was consigned was sent a letter, signed by the sister superior, requesting that the consignee, within a week after the reception of the child, fill out a blank which was inclosed, containing the name of the child, the name of the foster parents in full, the business occupations and post office address of such foster parents, and forward the same to the hospital authorities. The letter also requested that the person to whom each child was assigned should write yearly, about the first of May, how the child was progressing, and giving other items of interest. On the evening of October 1, 1904, the children in charge of

the sisters and agent arrived in Clifton in a special car. It having become a matter of notoriety in Clifton that a number of children were to arrive to be distributed to Mexican families, a crowd of Mexicans gathered at the station on the arrival of the train, together with a few American women of good families; the latter being attracted by curiosity and a desire to see the children, who, they supposed, were Mexicans. The children consigned to the persons in Clifton were taken from the car by those in charge of them, the Americans present assisting in taking them out. The latter were told by the agent that no disposition of the children to the Mexican families would be made that night, and, on being asked by one of the American women, he added that in the morning an opportunity would be given her to make an application for one of the children. Upon the arrival of the train, the priest came into the car, and Sister Anna Michella then asked him what sort of people they were to whom the children were to be allotted. He thereon said that they were all good American citizens, moral, and had no children of their own, and that the homes were all that could be wished for. Having noticed that some of the people were not as fair in color as she had hoped for and expected, the sister asked him if there would be any half-breeds among them, and he said, "No." She asked him how the people lived, and he replied that they lived in frame houses. She then stated to him that it was a rule of the home that the children were only placed out on trial until such time as the homes could be visited by the sisters, and that, if it were found that any of the homes were not as expected, the children would be removed. The children to be left at Clifton were taken to the priest's house, and fifteen of them, under the supervision of the priest, were turned over that night to the persons to whom they were consigned. No visit to or examination of the homes of these people

was made at any time, either by the agent, Swayne, the sisters in charge, or any one, on behalf of the petitioner. They relied entirely upon the statement of the priest.

The evidence establishes, without contradiction, that the persons to whom the children were given, as assigned, both in Clifton and Morenci, were wholly unfit to be intrusted with them; that they were, with possibly one or two exceptions, of the lowest class of half-breed Mexican Indians; that they were impecunious, illiterate, unacquainted with the English language, vicious, and, in several instances, prostitutes and persons of notoriously bad character; that their homes were of the crudest sort, being for the most part built of adobe, with dirt floors and roofs; that many of them had children of their own, whom they were unable properly to support. Sister Anna Michella, who was intrusted with the matter of carrying out the instructions of the hospital authorities, was so struck by the unfitness of these people that in three instances she refused to allow the children to be delivered, and in other instances, as testified to by a witness, gave them up "with tears streaming from her eyes"; and from her own testimony it appears that she was not satisfied with the people to whom they were to be delivered, but that she felt she could not override the authority of the priest.

On the morning of October 2nd, it became generally known to the American residents of Clifton that the children had been distributed the night before to the people. Much indignation was immediately aroused and an informal conference of citizens was held to discuss the matter of the distribution of the children which had been made. A committee was appointed to go to Morenci and ascertain from the priest and the agent, Swayne, their purposes, and to inform them as to the feeling excited among the

Americans over the distribution of these white children to these half-breed families. This committee was composed of one Jeff Dunagan, a deputy sheriff, and one Thomas Simpson. The committee left Clifton about one o'clock in the afternoon and arrived in Morenci shortly after two o'clock in the afternoon. They immediately went to see Mr. Mills, the superintendent of the copper company operating at that place - one of the leading citizens of the town - and, in company with him, went in search of the agent, Swayne, whom they found at the hotel. Dunagan then stated to the agent the feeling which had been aroused in Clifton, their purpose in visiting in Morenci, and asked him what he would do in the matter. Both Dunagan and Simpson testified that in response to their inquiries the agent, Swayne, said that he knew his business, and did not propose to be dictated to by the people; that the children "had been placed, and would stay placed." The testimony of Swayne qualifies the statements of Dunagan and Simpson as to what was said by him on that occasion. But whatever may have been the precise reply made by Swayne, it is not disputed that Dunagan and Simpson telephoned the information to the people in Clifton that they had seen Swayne, and that his reply was that he would not do anything; that the children had been placed, and would stay placed. Upon the receipt in Clifton of this information so telephoned, a meeting of the citizens was held, and a committee of twenty-five persons was named to collect the children from the people to whom they had been consigned, and to bring them to the principal hotel of the place. The members of the committee then visited the various homes of the persons having possession of the children and stated to the latter that they had been sent by the American residents to take the children from their possession. In each instance the children, without protest, were voluntarily surrendered, and

were thereupon taken to the hotel.

Upon the arrival of the train in Clifton, all the children were neatly clad, cleanly in appearance, and gave every evidence of careful nursing and proper attention. When the children were obtained from these people, they were in a filthy condition, covered with vermin, and, with two or three exceptions, ill and nauseated from the effects of coarse Mexican beans, chilis, watermelons, and other improper food which had been fed them, and in some instances from the effects of beer and whiskey that had been given them to drink. Upon the arrival of the children at the hotel, certain good women of the place took charge of them, nursed them, and secured medical care and attention for them. On the next day the children were given to the several respondents in these cases, who have since had them in their care, custody and control.

The agent, Swayne, and the priest on the night of October 2nd, returned with Dunagan and Simpson to Clifton, arriving there in the early morning. Citizens to the number of two or three hundred had assembled, and were waiting for their return. At this meeting much excitement was manifested, but no act of violence was done at that or any other time. Some threats, however, of a general character, were made by certain persons against the agent, Swayne. Both the agent and the priest made a statement of their position at this meeting. Swayne at this time was apprehensive that he might receive bodily harm. In his statement at the meeting he said that the children were placed temporarily in charge of the people to whom they had been consigned, but the understanding was that the sisters were to remain for a matter of two or three weeks, and, if it were found by them that any of the children were placed in improper homes they would be taken from such homes and replaced. He protested against the

taking of the children by the American residents, and neither by his consent, nor that of the sisters, were the children either taken from the homes in which they had been placed or given to the respondents. On the next day other meetings were held, at which both the priest and Swayne were present. The Clifton children were not given up to the sisters or the agent by the people who had taken them in charge, for the reason that they feared, if so returned, the children might again be placed in equally unfit homes of Mexican Indians elsewhere. In Morenci, after the distribution of the children, and after the facts became known, the same indignation was aroused among the American citizens, and much the same course was pursued as in Clifton. Mr. Mills, in company with others, called upon the sisters and upon the agent, Swayne, and remonstrated with them against permitting the children to remain with the people to whom they had been distributed. As a result of these remonstrances, and a statement by Mr. Mills, that the American residents of Morenci would not suffer the children so to remain, the priest and the agent, Swayne, visited the homes of the Mexicans having the children, and obtained a surrender of them, and brought them to the hotel; and these children, with the exception of three, who were turned over, at the request of Dunagan to be distributed among the American residents, were subsequently taken back by the sisters and the agent to the East, and there placed in homes. It is shown by the testimony of Sister Anna and the agent, Swayne, that they would not have given the three Morenci children to Dunagan, except that they then believed that the people of Morenci would not permit any of the children to be taken away by them.

It is clearly established by the proof in the case, and it is not disputed, that each of the respondents is a fit and proper person to have the

care, custody and control of the children; that they are people of sufficient means properly to care for and educate the children, and that they are fit persons, by reason of their character, standing and age, to have and maintain such care, custody and control; that without exception they have become attached to the children and the children have become attached to them; and that each desires to retain the particular child which he has, in order that he may rear the same as one of his own household.

On the 16th of October, applications were made by the respondents to the probate court of Graham County, Arizona, for letters of guardianship of the person of the child which each possessed. Hearings were had, at which this petitioner was represented by counsel, and in each instance letters of guardianship were granted in accordance with said application, and each of said respondents duly qualified as such guardian. Thereupon this petitioner took an appeal from the order granting said letters of guardianship in each case to the district court of Graham County. Pending said appeals these petitions were filed, and in response to the writs the children were brought before this court.

Kent, C. J. (after stating the facts as above)

"We hold, therefore, that, under the facts as we find them, neither the petitioner nor the respondents have any such legal claim as authorizes us for that reason to award to either of the parties the care and the custody of the children. We have, then, to decide what disposition must be made of the children, to subserve best their welfare. The petitioner has frankly conceded that a great blunder was committed in the consignment and delivery of the children to these degraded half-breed Indians. The evidence satisfies us that it was an unintentional blunder on the part of the insti-

tution, and was caused by misleading and inaccurate reports of the local priest, who was not connected with the institution, and was a foreigner and unacquainted with existing conditions; that such blunder was not remedied at the time because of the tactless stubbornness of the agent, and the feeling of the sister in charge that she must bow to the authority of the priest, who insisted upon such disposition. We recognize the desire of the institution to right now, and to right itself, the wrong done these children and to secure for them now suitable homes to be chosen by it, and, with the record of its great service to humanity in the past, we have no doubt of its purpose and ability to do so; but as, in the full light of the history of this transaction, shown by the evidence adduced at the trial, of which the institution so far away can hitherto have had but partial knowledge, it appears that the mistake, as originally made, was made by one not connected with the petitioner, and that the ultimate purpose of the institution - that of finding suitable homes for their children - has in this instance already been accomplished, we do not believe that the best interests of these children will be promoted by allowing the petitioner to adopt the course which it desires.

"The counsel for petitioner has eloquently argued to us that the interests of these children will best be subserved by allowing this institution to take them to the East, and there place them in homes far removed from the knowledge of their antecedents, which by reason of the recent events has become so general where the respondents live. This argument would have great weight if we could be led to believe that a mere change of foster parentage would insure a condition of ignorance of the circumstances of their birth and desertion, or in the friends and families of their adoption. There can be, at most, but a chance that such would be

the result. As it is, these present foster parents - persons of some means and education - from the day when with humanitarian impulse, and actuated by motives of sympathy for their pitiful condition, they assisted in the rescue of these little children from the evil into which they had fallen, down to the time of their attendance at this trial, at cost of much time and money, in their loving care and attention, have shown that more than ordinary ties of affection bind them to these children, and that in no other homes that can be found for them are they so likely to fare as well. We feel that it is for their best interests that no change be made in their custody, and that, if anywhere, here in the changing West, the land of opportunity and hope, these children, as they grow to manhood and womanhood, will have the fullest opportunity that it is possible for them to have to be judged, not upon the unfortunate condition of birth, but upon the record they themselves shall make, and the character they shall develop."

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