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Michigan to Minnesota: The Early Development of the Mesabi Range

By Paul Lubotina

During the nineteenth century, the opening of large copper and iron ore fields would have a major impact on regional economic development in not only Michigan, but Minnesota as well. The Keweenaw and Marquette mining regions attracted large numbers of engineering specialists who played a role in the development of the larger ore deposits located on Minnesota's Mesabi Iron Range. Additionally, the large numbers of Cornish, Swedish, Finnish, Italian, and Slovenian immigrants, who had found lucrative positions in the copper and iron mines of Michigan's Upper Peninsula, provided the manual labor and mining experience needed in Minnesota. As a result, the mining regions of Michigan eventually provided the skilled workers needed to open the much larger ore fields of the Mesabi Range.

The origins of Mesabi Iron Range began in the 1860s after a short but unproductive gold rush led to the first geological surveys of Minnesota's Saint Louis County. Geologists concluded that large deposits of iron ore existed along the Mesabi Range. The field extended for nearly one hundred miles in length but only four to ten miles in width across the Northeastern tip of Minnesota. Nearly eighty miles of forests, swamps, and lakes separated the range from the ports in Duluth on Lake Superior, making ore transportation costs through the inhospitable tract of land prohibitively costly. In early 1873, Charlemagne Tower, a Philadelphia financier who gained his wealth from coal mining, became interested in the Mesabi Range and sent geology Professor A. H. Chester of Hamilton College to obtain precise information on the region's ore deposits. As part of the expedition, Chester outfitted a local prospector from Duluth, George R. Stuntz, to explore the eastern portion of the range near Lake Vermilion. In 1874 Stuntz located

an outcropping of nearly pure hard hematite ore and reported his findings to both Chester and Tower.¹

While Tower knew a major ore deposit existed near Lake Vermilion, he needed to acquire the land and solve transportation problems before mining operations could begin. Between 1874 and 1883 he acquired land through the Homestead Act and then gained permission to build a railroad across Saint Louis County. In 1883 Tower incorporated the Minnesota Iron Company and financed construction of the Duluth & Iron Range Railroad to connect the Lake Vermilion mines with the ports on Lake Superior. Completed in 1884, the railroad handled steady shipments of ore; Tower recovered his investment costs rapidly. The wealth generated by mining attracted new explorers and investors to the region and drew the attention of the state government, which sought increased tax revenues from the Mesabi Range.

The possibility of taxing nearly one million acres of iron-bearing lands in Saint Louis County caused the Minnesota state legislature to enact a series of laws in 1889 to stimulate mineral exploration and excavation.² State land commissioners executed leases and contracts for mining ore on state lands at the rate of twenty-five dollars per quarter section of land a year; for an additional hundred dollars the lease could be extended for fifty years. The state levied an additional twenty-five cent tax per ton of ore extracted.³ By 1901 the state had issued 3,272 one-year prospecting leases and 550 fifty-year mining leases that collected nearly eleven million dollars in revenue from the forty-three million tons of ore shipped from the region.⁴ During the next two decades, the Mesabi mining companies increased production and contributed nearly one hundred million dollars to the state's coffers each year.⁵

The opening of the Lake Vermilion mines in 1884 also led to another surge of exploration on the central portion of the Mesabi Range. Lewis H. Merritt, a wealthy lumber

baron and one of the founders of Duluth, combined timber cruising with ore surveying in the hope of finding another major iron deposit in the region. His three sons, Leonidas, Alfred, and Cassius began exploration in 1885 but failed to find any appreciable iron for over five years. In November 1890, however, the brothers identified a new type of “soft ore” that resembled soil rather than the hard Hematite ore of the Vermillion mines. Their discovery led to the foundation of three new mining towns: Virginia, Mountain Iron, and Eveleth. After obtaining state leases for their mining operations, the Merritt’s established the Duluth, Missabe & Northern Railway Company (D, M&N) in 1892 to transport ore from Mountain Iron to Duluth. The railroad stimulated economic growth and also encouraged further exploration to the west.⁶

In 1892, Frank Dietrich von Ahlen found the largest of the three major iron deposits located on the Mesabi Range. Von Ahlen worked as a surveyor for the D, M&N Railroad and investigated the possibility of ore deposits even further west of Virginia. During his exploration of the Western Mesabi, nearby loggers from Grand Rapids dug a well for a new lumber camp and encountered a strange soil. Deciding the soil contained iron ore they called on von Ahlen to confirm their findings. Inspired by the discovery, von Ahlen led thirty men who dug test pits and found a huge deposit of ore.

When von Ahlen incorporated Hibbing in 1893, the village comprised only a few rough log huts, but within a few years several hotels and dozens of saloons supported the burgeoning population. What Hibbing lacked in amenities it made up for in size, as the town initially covered 2,740 acres and had approximately one thousand residents. By 1915 the village expanded four-fold to 7,871 acres and the population increased to sixteen thousand people.⁷ Within the village boundaries, existed several different mining operations that included the extremely productive

Hull-Rust mine along with the smaller Longyear, Mahoning, Penobscot, Laura, Morris, Webb, Philbin, Susquehanna, and Boeing excavations.⁸

Three separate rail lines connected Hibbing to Duluth, St. Paul, and the other towns of the Mesabi Range. The Duluth, Missabe and Iron Range Railway (D, M&IR) carried the bulk of the iron ore to the ports on Lake Superior for shipment to the large steel works in Michigan and Pennsylvania. On the western side of Hibbing, The Great Northern Railway connected the town to the lumber mills in Grand Rapids and then turned south where they supported farming communities in central Minnesota and brought their produce to the grain exchange in St. Paul. Finally, in 1910, the Mesabi Range communities developed the Inter-urban Electric Streetcar Line to connect all the major towns of the region.⁹

Along with ore and lumber, the rail lines also conveyed Hibbing's large immigrant population who comprised the majority of the town's population. The high concentration of immigrants became apparent in 1893, at Hibbing's incorporation ceremony when only 176 out of 1,000 residents were able to vote.¹⁰ Throughout the first four decades of the community's life migrants made up more than three-fourths of the population. The majority of the population came from Finland, Sweden, Slovenia, and Italy. Additionally, significant numbers of Cornish and Irish came from Great Britain, Norwegians from Scandinavia, and Serbs, Montenegrins, and Croats from the Balkans. A 1905 Hibbing census placed the foreign-born population at 3,537 persons, including 516 Swedes, 314 Norwegians, 1,169 Finns, 498 Irish, 78 English, and 323 Slovenes and Croats from Austria.¹¹ The ethnic makeup changed throughout the early part of the decade as unskilled laborers from Finland, Italy, and the Balkans poured in to replace the disgruntled hard rock miners from Great Britain who left for more lucrative jobs in the west. By 1920 Hibbing's population stagnated at 15,000 residents, and included approximately 3,300

native-born, or naturalized Americans, 5,500 Northern Europeans, and 6,150 Southern Europeans.¹²

As Hibbing's population grew and mining operations expanded, one of the nearby communities increased in size and importance. The town of Chisholm, located approximately eight miles Northeast of Hibbing, incorporated in 1901 under the leadership of the banker, Archibald Chisholm. The town supported forty-eight separate mining operations with Oliver Mining controlling only two, while the Great Northern Mining Company, a subsidiary of the Great Northern Railway Company, operated the majority of the mines. Immigrants also dominated Chisholm's population with the majority coming from the Balkans and Italy. The proximity of Hibbing and Chisholm led to close ties forming between the towns' population as the communities developed together.

Hibbing and Chisholm's Swedish community arose through the assistance of mining and railroad corporations. Edmund J. Longyear, the inventor of the diamond-tipped drill bit, played a leading role in transporting skilled workers from Michigan to Minnesota. In the 1890s, he established the Longyear Mine near Hibbing, as well as the Pillsbury Mine in Chisholm. Longyear, brought the initial group of Swedish immigrants from Marquette, Michigan mining operations and played an instrumental role in the exploration of the Western Mesabi Range. The Swedes operated diamond-tipped drills that quickly cut through rock and allowed surveyors to map the boundaries of ore fields.¹³ As experienced surveyors and miners they soon found themselves in supervisory roles over the new immigrant populations that arrived in the region.¹⁴ Additionally James J. Hill, who owned the Great Northern Railway and Great Northern Mining Company, had an affinity for Swedes who he personally considered were diligent and trustworthy employees. He advertised in both the United States and Europe for Swedish and

other Scandinavians to work directly for the Great Northern Company and populate the areas surrounding his rail-lines.¹⁵ As the railroad stretched north out of St. Paul to Hibbing, immigrants had corporate encouragement to take the lucrative mining jobs on the Mesabi Iron Range.

The Swedish population in Hibbing soon built both a Lutheran and Methodist church, along with the Söner af Wasa (Sons of Vasa) Temperance Hall.¹⁶ The churches and temperance movement served as forces of political conservatism that also sought to preserve Swedish heritage in Hibbing. Additionally, the organizations settled local disputes among individuals or political and religious factions. With few major problems encountered within the enclave, the community developed into a stable, middle-class minority group that supported both the Republican Party and local temperance movements. At the state level, a series of Scandinavian-born governors led Minnesota's progressive era reform movement. Between 1899 and 1918, Governors Lind, Johnson, Eberhart, and Burnquist, transformed the state through a series of insurance, conservation, anti-corruption, and labor reforms. While not always successful in their endeavors, the governors set the tone of Minnesota's century-long course toward a liberal state government.

Like the Swedes, the Finnish population also started in Northern Michigan, moved to the Mesabi Range, and eventually comprised nearly half of Hibbing's immigrant population. Unlike the Swedish population, the Finnish immigrants arrived in Hibbing divided by two ethnic factions, one Finnish-speaking (*Fennomen*), the other Swedish-speaking (*Svencomen*). Neither group initially worked with the other as each set up separate social organizations and religious institutions. *Svencomen* attended the Swedish Lutheran Church in Hibbing and built a separate Sons of Vasa Temperance Hall with the help of the local Swedish population.¹⁷ Similarly, *Fennomen* constructed a Finnish Lutheran Church, two temperance halls, and the Workers' Hall

for Socialists. Thus, the Finnish population that moved to Hibbing comprised two separate groups, each with its own agenda, and limited cooperation between them.

The first Italian immigrants arrived in Duluth during 1869 from Lombardy via Winnipeg. Between 1875 and 1881 the number of miners from Northern Italy quadrupled. Most went to work on the Mesabi Range.¹⁸ The Northern Italians, called Austrians by local newspapers, came from Piedemonte, Lombardy, Venice and Tyrol. The central Italians originated in Emilia-Romagna, the Marches, and Umbria. Both the Northern and Central Italians arrived first and dominated the Vermilion area that needed experienced underground miners. Meanwhile, Southern Italians from Abruzzi-Molise, Campania, Calabria, and Sicily found unskilled labor positions in the open-pit mines around Hibbing and Chisholm.¹⁹ Thus, the Northern and Southern Italians separated geographically in a similar fashion to the conditions in Italy. Southern Italians dominated the southwest end of the Mesabi Range while the Northern and Central Italians controlled the northeast portion. The dominance of two thousand unskilled Italian laborers around Hibbing led to a large militant population ready to embrace radical methods and organizations.²⁰ They supported the Western Federation of Miners and the Industrial Workers of the World. Both unions contained a large number Italians who contributed leaders and demonstrators to the three major strikes on the Mesabi Range. As a result, the Southern Italians encountered opposition from the few Northern Italians in Hibbing and earned a reputation as radicals among the other immigrant groups, especially the Finns and Slovenians.

Slovenian missionaries led the South Slavic movement to the Great Lakes region. The migration started in the early nineteenth century when Bishop Frederic Baraga from Ljubljana began missionary work among Native-Americans in Michigan, Minnesota, and Wisconsin.²¹ Approximately three thousand Slovenians followed Catholic leaders to the Mesabi Range after

reading about their experiences in local publications. The Slovenes initially settled near Michigan's Upper Peninsula copper mines but moved to Minnesota to explore and map iron ore deposits on the Mesabi Range. They helped to open the initial underground shafts near Tower and Sudan. Then, as the western mining districts around Hibbing and Virginia opened, the unskilled labor positions attracted over ten thousand Slovenian, Croatian, and Serbian workers.²²

Following the example set by the Slovene population from Michigan, more Slavic immigrants followed James J. Hill's Great Northern Railway as it moved north out of Minneapolis and Saint Cloud. Another Slovenian priest, Fr. Buh, had been leading missionaries from Saint Cloud before expanding his work to Duluth and Saint Louis County.²³ In 1892 Fr. Buh arrived in Tower to begin a Catholic mission among miners in the Mesabi Range. After building the first rectory in Tower he started nine missions in Ely, Two Harbors, Biawabik, Hibbing, Virginia, Mountain Iron, McKinley, Eveleth, and the Vermilion Indian Reserve²⁴ He also opened the first Catholic Church in Hibbing and led the Slovenian Catholic movement on the Mesabi Range.

The Slovenes, Serbs, and Croats dominated the "locations," or company towns, between Hibbing and Chisholm. Hibbing's Slovenian population worked closely with Croatian immigrants and the two of them founded St. Joseph's Catholic Church in the nearby town of Chisholm. The Serbs also founded their own Orthodox Church in Chisholm. The Catholic and Orthodox congregations remained at odds, discouraging interfaith marriages and maintaining minimal contacts with each other. The situation further declined after 1907 when the Slovenians supported radical Italians in a strike that the Oliver Mining Company broke through the importation of Montenegrin Serbs. The Serbs remained in Hibbing until the First World War when many returned home to protect their families from the invading Austro-Hungarian armies.

The remaining Serbs finally began to cooperate with the other Slavs in the local Yugoslav Movement (United Slav) that arrived in America after the 1919, foundation of the Yugoslavian state in Europe. The Slovenians then played prominent roles in Hibbing and Chisholm as doctors, merchants, and politicians.

After the first shipments of Mesabi ore, America's leading industrialists became interested in the region. In the late nineteenth century millionaires such as John D. Rockefeller, Andrew Carnegie, Henry Oliver, and James J. Hill invested in Mesabi mining operations. They all shared a common goal: the "vertical integration" of Mesabi ore into their economic holdings. If a single company acquired the Mesabi ore fields, had the ability to transport the raw materials to the steel towns of Illinois, Indiana, Ohio, and Pennsylvania, and possessed enough manufacturing capacity, they would control America's steel market.²⁵ Each industrialist acquired land throughout Saint Louis County and vied with other investors to control the region. In 1892, Charlemagne Tower, Frank Dietrich von Ahlen, and the Merritts controlled most of the mining operations, but the situation soon changed.

The 1893 Depression permanently altered the economic structure of the Mesabi Range. Initially, the Merritts merged their Mountain Iron holdings with von Ahlen's mines in Hibbing in order to increase their control over all operations on the Mesabi Range. When the Merritts attempted to buy out their business partners in 1893 they overextended their finances and were unable to continue operations in Mountain Iron without new investors. The Merritts turned to John D. Rockefeller, Sr. for financial assistance. As founder of the Standard Oil Company and the architect of American financial trusts, Rockefeller had the funds to assist the Merritts even while the country suffered from an economic depression.²⁶ He bought \$400,000 in bonds from the Merritts to improve their railroad connections and docks in Duluth. Rockefeller then formed

the Lake Superior Consolidated Iron Mines Company, which merged six of his mining and iron companies with the Merritt's holdings and provided them with an additional half-million dollars. By 1894, renewed financial difficulty caused by the deepening depression forced the Merritts to ask Rockefeller for more aid. This allowed Rockefeller to gain a controlling interest in the company but he promised to sell the stocks back to the family the following year. When the Merritts failed to buy back or renew their options in 1895, Rockefeller gained control of the Lake Superior Consolidated Iron Mine Company's operations in Mountain Iron and Hibbing.

Rockefeller then moved to take over mining operations around Lake Vermilion. The process was relatively easy because Charlemagne Tower wanted to sell both the Minnesota Iron Company and the Duluth & Iron Range Railroad so that he could retire. Rockefeller bought the companies along with additional mines and property. He then concentrated on organizing all the new operations and improving the transportation of ore from Minnesota, across the Great Lakes, to the steel mills.

While Rockefeller was busy acquiring locally owned mines, Henry E. Oliver began an independent operation to supply his steelworks with Mesabi ore. In the 1880s, Oliver who had become wealthy from manufacturing farm machinery, switched his interests to railroad building and smelting steel. He first visited Minnesota in 1892 to learn more about the Mesabi Range. Once convinced of the viability of Mesabi ore he formed the Oliver Iron Mining Company. He then obtained leases near Mountain Iron and Virginia to consolidate his hold on ore shipments, which ensured a constant supply to his Michigan and Pennsylvania mills.

Oliver had to formulate a safe manufacturing process for the Mesabi's soft ore because it exploded in furnaces built for hard hematite ores. Lacking adequate finances for the project, he contacted Andrew Carnegie for technical and financial assistance. After introducing the

Bessemer Furnace to America in 1873, Carnegie already controlled most American steel manufacturing.²⁷ In order to gain Carnegie's cooperation in the joint venture, Oliver gave Carnegie half of his mining stocks in 1893 and eventually turned over control of the Oliver Mining Company to the steel making giant. By 1897 Carnegie and Oliver had pioneered a new smelting procedure that enabled them to use the cheaper soft ore and undercut the steel prices of those still relying on hard ores.²⁸

As the only manufacturers capable of processing soft ore, Carnegie and Oliver leased property from other investors in the region. In order to obtain additional supplies, they leased Rockefeller's Mesabi mines near Mountain Iron and paid him royalties on all ore shipments. They also turned to James J. Hill, leader of the Great Northern Railroad, and leased his railroad property that ran through Saint Louis County. Hill later formed the Great Northern Mining Trust and regained control of his mining property on the Mesabi Range, thus transforming the mining operations near Chisholm into the only major competition to Oliver Mining Company.²⁹ With a major hold on the Mesabi region, Carnegie and Oliver discounted the price of their ore from four dollars a ton to two dollars and fifty cents.³⁰ When the new price forced many smaller companies out of business, Carnegie and Oliver bought the companies and gained a firmer financial hold on the region.

The consolidation process culminated in 1901 with the formation of America's first billion-dollar business, the United States Steel Company (USSC). J. Pierpont Morgan sought to unite sixty percent of the United States' steel-making capacity under his control by purchasing Carnegie Steel and merging his Federal Steel Company with Rockefeller's Lake Superior Consolidated Iron Mines.³¹ As the owner of America's wealthiest investment firm and with close financial ties to the federal government, Morgan had the financial capability for the buyout and

merger.³² Carnegie wanted to retire from the steel business to pursue a philanthropic career and he asked Charles Schwab, President of Carnegie Steel, to broker the financial transaction.

Carnegie sold his holdings to Morgan, who in turn merged with Rockefeller and formed the United States Steel Corporation. Oliver Mining became a subsidiary of the new corporation and the leading corporate entity on the Mesabi Range. The move brought 41 mines, 1,000 miles of track, and a fleet of 112 ships under the direct control of Henry Oliver, who then used his new holdings to take control of more leases and competing businesses. By 1907 the Oliver Mining Company controlled 913 million tons of ore out the region's total of 1.2 billion.³³

As the dominant economic power in St. Louis County, Oliver Mining began to exert increased control over the region. What had once been a series of independent mining operations now came under the centralized control of Henry Oliver. In order to speed up production and ore shipment Oliver standardized hours and wages across the Mesabi region. Whereas workers previously left low-paying or dangerous work, they now found similarly poor conditions at all the Oliver mines. If the laborers protested against their working conditions or joined a strike, they soon found themselves "blackballed" from any of the mines run by the Oliver Company. To stop attempts at unionization Oliver mining employed mass layoffs, imported new ethnic groups that increased racial tensions among miners and hired spies to identify union leaders.

By 1907, Oliver Mining Company's firm control of the Mesabi Range, combined with the establishment of the ethnic enclaves, set the stage for a decade of conflict that united Michigan and Minnesota mining communities. The millions of dollars' worth of ore located in Marquette and Calumet, along with Hibbing and Mountain Iron, made the cities particularly valuable to the mining companies. Additionally, both city and state officials desired a share of the wealth generated by taxation. Along with mining and political officials vying for funds, the

underpaid miners wanted a greater share of the wealth to feed their families. As a result of the substantial financial windfall, all four parties sought radical solutions to preserve their share of the profits. Both states witnessed massive strikes, that included mass arrests, murder, and the violent repression of miners and their unions. As a result, the discontented immigrant miners would move between the two regions, in search of peace and prosperity that they never really achieved. Nevertheless, the 1907, 1913, and 1916 strikes helped to connect the two regions and populations as they endured similar events.

¹ Frank A. King, *The Missabe Road: The Duluth, Missabe and Iron Range Railway* (Minneapolis: University of Minnesota Press, 1972), 11-12.

² Henry Oliver Evans, *Iron Pioneer: Henry W. Oliver, 1840-1904* (New York: E. P. Dutton & Co., 1942), 185.

³ John Syramaki, "Iron Range Communities" (PhD diss.: Yale University, 1940), 40.

⁴ John Syramaki, 41.

⁵ Francis M. Carroll, *The Minnesota Arrowhead Country* (St. Paul: Minnesota Historical Society Press, 1988), 18.

⁶ "Mountain Iron Lays Claim to the Title of 'Birthplace to the Mesabi Range,'" *Mesabi Daily News*, July 28, 1958.

⁷ "Brief History of the Attempt to Break Hibbing," *The Mesaba Ore and Hibbing News*, July 31, 1915.

⁸ Oliver mining controlled the Hull-Rust, Morris, and Mahoning Mines.

⁹ Marvin G. Lamppa, *Minnesota's Iron Country: Rich Ore, Rich Lives* (Duluth: Lake Superior Port Cities, 2004), 198-199.

¹⁰ Samuel J. Guello, *Hibbing: The Man and the Village* (Hibbing: Hibbing Historical Society, 1957), 14-15.

¹¹ Syramaki, 118.

¹² Syramaki, 125.

¹³ Grace Lee Nute ed., *Mesabi Pioneer: Reminiscences of Edmund Longyear* (St. Paul: Minnesota Historical Society Press, 1951) 23-37.

¹⁴ Edmond J. Longyear and Walter R. Eastman, *Longyear: The Mesabi and Beyond* (Gilbert: Iron Range Historical Society, 1984) 79-82.

¹⁵ Albro Martin, *James J. Hill and the Opening of the Northwest* (New York: Oxford University Press, 1976) 471-472.

¹⁶ *Svensk-Finska Nykterhets-Forbundet af America* (Rock Island: Svensk-Finska Nykterhets-Forbundet af America, 1908)74-75.

¹⁷ First Emmanuel Lutheran Church, Parishioner Book, Hibbing, Augustan College, Swenson Swedish Immigration Center film E-123.

¹⁸ Andrew Rolle, *Westward the Immigrants: Italian Adventurers and Colonists in an Expanding America* (Niwat: University Press of Colorado, 1999), 66.

¹⁹ Rudolph J. Vecoli, "Italians on Minnesota's Iron Range," in Rudolph J. Vecoli Ed., *Italian Immigrants in Rural and Small Town America* (Staten Island: The American Italian Historical Association, 1987), 180-182.

²⁰ Vecoli, 456.

²¹ Darko Friš, "A Brief Survey of the Activities of the Catholic Church among Slovenian Immigrants in the U.S.A., 1871-1941," in *Slovene Studies* (New York: New York, Vol. 14, No. 2, 1992), 206-207.

²² Gerald Gilbert Govorchin, *Americans from Yugoslavia* (Gainesville: University of Florida Press, 1961), 9.

²³ Sister Bernard Coleman O.S.B. and Sister Verona LaBud O.S.B., *Masinaigans: The Little Book* (Saint Paul: North Central Publishing Co., 1972), 97-107, 146.

²⁴ Coleman, 170.

²⁵ Thomas J. Misa, *A Nation of Steel: The Making of Modern America, 1865-1925* (Baltimore and London: The Johns Hopkins University Press, 1995), 155-157.

²⁶ For biographical information on Rockefeller and details on his financial dealings see Ron Chernow's, *Titan: The Life of John D. Rockefeller Sr.* (New York: Random House, 1998) or David Freeman Hawke's, *John D.: The Founding Father of the Rockefellers* (New York: Harper & Row, 1980).

²⁷ For biographical information on Andrew Carnegie see Peter Krass, *Carnegie* (New York: John Wiley & Sons, 2002), Harold C. Livesay and Oscar Handlin, *Andrew Carnegie & the Rise of Big Business* (New York: Longman, 2000), and Joseph Frazier Wall *Andrew Carnegie* (Pittsburg: University of Pittsburg Press, 1989).

²⁸ Evans, 222.

²⁹ For biographical information on James J. Hill see Duncan J. Karr, *The Story of the Great Northern Railway Company and James J. Hill* (Princeton: Princeton University Press, 1939), Michael P. Malone, *James J. Hill: Empire Builder of the Northwest* (Norman: University of Oklahoma Press, 1996), and Albro Martin, *James J. Hill and the Opening of the Northwest* (New York: Oxford University Press, 1976).

³⁰ Syramaki, 53-55.

³¹ Misa, 164-171.

³² See Jean Strouse, *Morgan: American Financier* (New York: Random House, 1999), for a review of Morgan's wealth and buying potential.

³³ Syramaki, 56.